

RESEARCH REVIEW

The Academic Research Issue

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(An International Multidisciplinary Journal)

Special Issue

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For

ONE DAY NATIONAL CONFERENCE

On

RESEARCH AND PRACTICES IN COMMERCE, ACCOUNTANCY,
MANAGEMENT, HUMANITIES AND IT FOR SUSTAINABLE DEVELOPMENT

Jointly Organized

by

CITY C. U. SHAH COMMERCE COLLEGE

&

GUJARAT UNIVERSITY AREA ACCOUNTANCY TEACHERS' ASSOCIATION

AHMEDABAD - GUJARAT (INDIA)

(REG. NO.- F/636, DATED-29/10/1977)

Theme

MISCELLANEOUS: COMMERCE & MANAGEMENT, HUMANITIES &
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on

Research and Practices in Commerce, Accountancy, Management,
Humanities and IT for Sustainable Development

Jointly Organized

by

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&

Gujarat University Area Accountancy Teachers' Association, Ahmedabad
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**One Day National Conference
(Offline Mode)**

On

**Research and Practices in Commerce, Accountancy,
Management, Humanities and IT for
Sustainable Development**

Jointly Organized by

City C.U. Shah Commerce College

&

**Gujarat University Area Accountancy Teachers' Association
Ahmedabad**

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RESEARCH REVIEW

The Academic Research Issue

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Special Issue

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About Journal

This Refereed & Peer-Reviewed International Research Journal - Research Review - The Academic Research Issue is owned by Shree Vishat Krupa Education and Charitable Trust, Jaliyala, Ta : Limbdi, Dist: Surendranagar (Gujarat-India). Dr. D. M. Domadiya, Associate Professor & Head, Department of Hindi, M.B. Arts & Commerce College, Gondal, District: Rajkot (Gujarat-India) is the chief editor of the journal which has been given required sanction and approval by the *National Institute of Science Communication and Information Recourses (NISCAIR), New Delhi*, on 7th June 2013, with their letter vide NSL/ISSN/INF/2013./1279 ISSN: 2321-4708 on the name of Research Review – the Academic Research Issue.

This is an International Refereed Monthly research journal which regularly appears in the every month. This multidisciplinary journal publishes research article on vast spectrum of areas including all the major subjects of Humanities, Commerce and Science.

The Research scholars are requested to send only the soft copy of their research papers specified as per the guidelines and specifications of research methodologies in their respective disciplines. There is a panel of subject experts which ensures the quality measures of the journal. Only genuinely researched and original articles / research papers would be considered for publication. The publishers reserve all the rights not to consider the paper for publication if they deem it unworthy of publication.

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Domadiya

About the Conference

The conference on “Research Practices in Commerce, Management, Humanities and Information Technology for Sustainable Development” basically focuses on addressing global sustainable challenges by integrating insights from these disciplines. It emphasizes the importance of ethical business practices, corporate social responsibilities and efficient resource management to ensure financial stability, while also protecting the environment. Humanities contribute by promoting critical thinking, cultural awareness and moral responsibility, providing a foundation for sustainable effort. Information technology drives innovation through tools for resource management, data -driven decisions and green technologies. The present conference invites scholars, practitioners and policy makers to share their strategies and insights aiming to achieve a balance between economic growth, environmental conservation and social equity.

About GLS

Founded in 1927, Gujarat Law Society (GLS) is one of the most prominent and long-standing educational institutions in Gujarat. It was established by distinguished figures including Shri Sardar Vallabhbhai Patel, Shri Ganesh Mavlankar, the nation's first Speaker, and Shri I.M. Nanavati, with a commitment to educational excellence. GLS has been a trailblazer from the start, offering a diverse range of programs in fields such as Business Management, Computer Science, Engineering, and Applications, Commerce, Business Administration, Education, Law, and Humanities. The courses provided by GLS are highly regarded, both among students and within the corporate sector.

About the College

City Commerce College affiliated to Gujarat University, was founded in 1966. The college was given its name, City C.U. Shah Commerce College on the name of the donar Shri Chimanlal Ujamshibhai Shah in 1970. Since 2010, the College is known as CITY C.U.SHAH COMMERCE COLLEGE. We provide quality education to the students of middle class who choose the best education. The college with morning classes proves to be a real boon for the working class students.

About Gujarat University Area Accountancy Teachers' Association

GUAATA is registered association and is formed by the experts of the accountancy field 45 years back. The objective of the Association is exclusively confined to academic activities in the field of Taxation and Accountancy. This association has membership of more than 1000 members. The territory of members is spread out from Kutch district to Dahod district and from Ahmedabad district to Banaskantha district. The role of association is to form informal syllabus for university in the subjects of Taxation and Accountancy, to organise workshops for training of new syllabus formed, to organise state level, National level and International level Seminars and Conferences. In past quality based good numbers of seminars, Conferences and Workshops are organised by the association. This association has its own journal “Communique” where research papers of young and senior professors are published and best papers are awarded prize.

Themes & Sub-themes

Theme 1: Trends and Challenges in Business Accounting Frameworks

- Corporate Governance and Sustainability
- Digital Transformation in Accounting
- Cyber Security in Financial Reporting
- Risk Management and Reporting
- Reforms in Direct and Indirect Taxation
- Sustainable Supply Chain Accounting
- Cloud Accounting
- Environmental Accounting and Reporting
- Carbon Accounting and Reporting
- Forensic Accounting and Fraud Detection
- Sustainable Financial Instruments

Theme 2: Innovative Approaches to Sustainable Economic Administration

- Public-Private Partnerships for Sustainability
- Digital Transformation for Sustainable Economic Practice
- Climate Change Adaptation in Economic Policy
- Green Finance and Investment Strategies
- Sustainable Debt Financing and Green Bonds
- Development and Challenges of the GIG economy
- Sustainable Public Finance and Fiscal Policy

Theme 3: Innovations and Challenges in Business and Management for Sustainable Development

- Corporate Social Responsibility (CSR)
- Resilience in Business Management
- Sustainable Supply Chain Management
- Green Innovation and Technology
- Employee Engagement in Sustainability
- Green Human Resource Management
- Sustainable Business Models and Value Creation
- Hospitality Management Practices
- Sustainable Leadership
- Resilience in Business Management
- MSME and Start-up Environment
- Challenges for Businesses in Implementing Sustainable Supply Chains

Theme 4: Trends and Challenges in Humanities for Sustainable Development

- Cultural Heritage and Sustainability
- Environmental Ethics and Philosophy
- Language, Communication, and Sustainability

- Art, Aesthetics, and Ecological Consciousness
- Education for Sustainable Development
- Human Rights and Environmental Justice
- Narratives of Climate Change
- Urban Humanities and Sustainable Cities
- Globalization, Migration, and Sustainability
- Peace, Conflict Resolution, and Sustainable Development
- Digital Humanities and Environmental Change
- Religion, Spirituality, and Sustainability
- Public Policy, Governance, and Humanities

Theme 5: IT Practices and Challenges for Sustainable Development

- Green Fintech
- Cyber Security for Sustainable Innovations
- E-Governance for Sustainable Development
- Artificial Intelligence for Sustainable Decision-Making
- Tech-Enabled Circular Economy
- Block chain for Supply Chain Transparency
- Cloud Computing for Sustainability
- Internet for things (IOT) for smart management
- Big Data Analytics for Sustainable Business Practices
- Cyber Security for Data Protection and Privacy
- Challenges in Promoting Digital education and training for Sustainable IT Practices

Theme 6: NEP 2020 and its relevance, challenges and remedies for commerce education

- A comparative study of different state universities on curriculum of commerce faculty
- A comparative study of different private universities on curriculum of commerce faculty
- A comparative study of state and private universities on curriculum of commerce faculty
- Role of Gujarat Government and its agencies on curriculum of commerce faculty
- Futuristic approach of research work in commerce faculty
- A critical analysis on UG and PG structure of commerce faculty
- An evaluative study on implementation of NEP in commerce faculty by universities
- Role of universities for successful implementation of NEP in commerce faculty
- NEP and Skill development in Commerce education: Opportunities, challenges and remedies
- NEP and Multidisciplinary Education in Commerce: Opportunities, challenges and remedies

MESSAGE

It is a matter of great pleasure and pride for me to learn that City C. U. Shah Commerce College, one of our premiere colleges in the city area, is organizing a National Conference on “Research & Practices in Commerce, Management, Humanities, and Information Technology for Sustainable Development” on the 01st of March, 2025. Just as the world has been gifted with nine gems from Samudramanathan, I wish in the same way new directions and vistas of knowledge are opened from this national conference.

I wish all the very best to Dr. Prashant Jariwala, Administrative-in-Charge, and the entire team for the success of the conference.

Gujarat Law society has always encouraged and supported such academic endeavours in the past and will continue to support in future also.

Blessings,



Dr. Sudhir Nanavati
Executive Vice President
Gujarat Law Society, Ahmedabad

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ANALYZING THE RELATIONSHIP BETWEEN URBANIZATION AND CLIMATE CHANGE USING TIME SERIES DATA

By
Dr. Janhvi Upadhyay
Professor
Silver Oak University, Ahmedabad, Gujarat

Abstract

Urbanization has significantly influenced climate change through increased energy consumption, greenhouse gas emissions, and alterations in land use patterns. This research examines the statistical relationship between urban expansion and climate change indicators using time series data. By analyzing trends over several decades, we explore the impact of population density, industrialization, and deforestation on temperature fluctuations, air quality, and extreme weather events. Utilizing statistical methods such as regression analysis and machine learning models, this study provides insights into how urbanization contributes to climate change and suggests data-driven policies for sustainable urban development. The findings underscore the necessity of integrating climate adaptation strategies into urban planning to mitigate environmental degradation. This study aims to contribute to a better understanding of urban sustainability through a quantitative lens.

Keywords: Urbanization, Climate Change, Time Series Analysis, Sustainable Development, Environmental Impact

Introduction

Urbanization has accelerated over the past century, leading to significant environmental changes. As cities expand, alterations in land use, deforestation, and increased industrial activity contribute to rising global temperatures and extreme weather patterns. The rapid growth of urban centers has led to increased demand for infrastructure, energy, and resources, further exacerbating environmental issues. This study explores the statistical relationship between urban growth and climate change indicators using time series data, highlighting trends, causes, and potential mitigation strategies. Understanding these relationships is crucial for developing sustainable policies that balance economic growth with environmental conservation.

The interaction between urbanization and climate change is multifaceted, involving socioeconomic, environmental, and technological factors. Urban regions, particularly in developing nations, face challenges such as pollution, inadequate waste management, and resource depletion, all of which significantly contribute to climate degradation. Urbanization has been linked to an increase in land



surface temperatures due to the heat island effect, where built-up areas retain more heat compared to rural surroundings. Moreover, the expansion of cities often comes at the expense of forests and green spaces, reducing the planet's capacity to absorb carbon emissions.

This paper delves into these complex relationships by examining historical trends and forecasting future scenarios. It aims to provide empirical evidence supporting policy recommendations that enhance urban sustainability.

Literature Review

- Previous studies have linked urbanization to climate change, focusing on energy consumption, greenhouse gas emissions, and land surface temperature variations.
- There is a gap in long-term quantitative analyses using time series methodologies to understand these links.
- Urbanization affects various climate variables, such as temperature rise, precipitation changes, and ecosystem disruption.
- This paper builds on existing research by applying advanced statistical techniques to evaluate climate trends in urban areas.
- The urban heat island (UHI) effect, where urban areas are warmer than surrounding rural zones, has been well-documented.
- Oke (1982) demonstrated that urban areas have higher temperatures due to increased artificial surfaces and reduced vegetation.
- Seto et al. (2012) forecasted significant biodiversity loss and higher carbon emissions by 2030 due to urban expansion.
- Recent IPCC studies highlight that urban emissions significantly contribute to global warming and call for mitigation strategies.
- Despite these findings, comprehensive analyses that integrate economic, social, and environmental factors are still needed.
- This research aims to fill this gap using machine learning models and statistical tools to uncover patterns in urbanization-climate relationships.

Objectives

- To identify key factors such as population density, industrialization, and deforestation that influence climate variables.



- To assess the impact of urban expansion on temperature fluctuations, air quality, and extreme weather events.
- To utilize statistical methods like regression analysis and machine learning models for trend identification.
- To forecast future climate trends based on urbanization patterns.
- To propose data-driven policies for sustainable urban development and climate adaptation.
- To provide insights for policymakers to balance economic growth with environmental conservation.

Methodology

This study utilizes time series data from climate databases, including temperature, carbon emissions, and urban expansion rates from the past five decades. Statistical techniques such as autoregressive integrated moving average (ARIMA) models, regression analysis, and machine learning-based forecasting methods are employed to identify patterns and relationships. Data is collected from global climate organizations, government agencies, and research institutions to ensure accuracy and reliability.

Advanced modeling techniques allow for predictions and scenario analysis under different urbanization trends. The integration of machine learning provides further precision in identifying complex, non-linear relationships between urbanization and climate change.

Research Methodology Steps

1. **Data Collection:** Historical data on urban expansion, temperature rise, air pollution, and deforestation are compiled from authoritative sources.
2. **Data Pre-processing:** Cleaning and normalizing datasets to ensure consistency and remove outliers.
3. **Statistical Analysis:** Application of regression models and time series analysis to establish correlations.
4. **Machine Learning Modelling:** Training predictive models to forecast future urbanization impacts.
5. **Scenario Analysis:** Evaluating potential outcomes based on varying urban growth rates and policy implementations.
6. **Case Studies:** Analyzing specific cities across different regions to assess the effectiveness of urban policies on climate change mitigation.



Results and Discussion Urbanization and Temperature Rise

Statistical analysis confirms that urban areas experience significantly higher temperature increases compared to rural regions. The UHI effect intensifies this warming, leading to increased energy demand for cooling systems, thereby further increasing emissions.

Carbon Emissions and Industrialization

Industrial activities in urban areas are the largest contributors to carbon emissions. Regression models indicate a near-linear relationship between urban industrial growth and carbon output. Case studies of cities such as Beijing, New York, and Mumbai highlight differences in regulatory approaches and emission reduction effectiveness.

Air Quality and Public Health

Air pollution, primarily from vehicular emissions and industrial processes, has deteriorated urban air quality, contributing to respiratory diseases and cardiovascular conditions. Statistical data from the World Health Organization (WHO) indicate that cities with weak environmental regulations experience significantly higher health risks.

Transportation and Carbon Footprint

Urban sprawl and inadequate public transportation systems lead to higher dependence on private vehicles, exacerbating carbon emissions. Comparative analysis suggests that cities investing in efficient public transit systems, such as Tokyo and Copenhagen, show lower per capita emissions.

Green Infrastructure and Mitigation Strategies

The implementation of green infrastructure, including urban forests and vertical gardens, has proven effective in reducing temperature anomalies and improving air quality. Smart city initiatives leveraging technology-driven solutions further enhance sustainability efforts.

Conclusion and Recommendations

This study confirms that urbanization plays a significant role in climate change, as evidenced by time series analysis. Policy recommendations include integrating green infrastructure, improving urban planning strategies, and implementing stricter environmental regulations to curb emissions and promote sustainability. Urban policymakers should focus on adopting renewable energy sources, enhancing public transportation, and enforcing land use policies that promote sustainable development.



Future research should focus on localized case studies and incorporate additional climate variables for a more comprehensive analysis. Investigating regional variations in urbanization and climate change relationships can aid in designing tailored policy responses. Encouraging interdisciplinary collaboration between urban planners, environmental scientists, and policymakers will be critical in fostering sustainable urban development and climate resilience.

References

- Seto, K.C., Güneralp, B., & Hutyra, L. R. (2012). Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools. *Proceedings of the National Academy of Sciences*, 109(40), 16083–16088. <https://doi.org/10.1073/pnas.1211658109>
- Oke, T. R. (1982). The energetic basis of the urban heat island. *Quarterly Journal of the Royal Meteorological Society*, 108(455), 1–24. <https://doi.org/10.1002/qj.49710845502>
- United Nations. (2021). *World Urbanization Prospects*.
- Intergovernmental Panel on Climate Change (IPCC). (2021). *Climate Change 2021: The Physical Science Basis*.

**THE BEHAVIOR OF WOMEN HOUSEHOLD INVESTORS**

By

Bharadia Mital**Research Scholar**

&

Ca. Dr. Rajan Parikh**Research Supervisor****J.G. University, Ahmedabad, Gujarat****Abstract**

This study is focused on understanding the behavior of women households as investors in various financial instruments which are traded in markets regulated by SEBI and other instruments also. As investors, the households evaluate a variety of options available to them including those traded in formal markets under regulation. To this extent, the study has looked at a range of financial saving instruments. The study is based on random sampling of 100 household respondents of Rajkot city. It is estimated that there are 24.5 million investors in India. The study points to the relatively low rates of participation by the households in the securities market, though there has been growth in the investor population over the past 10 years. In this study there is deeper analysis of the economic well-being of the Indian population flowing through socio-economic and demographic indicators at the level of the household (e.g. rural-urban, sector of employment, major source of income, state of residence, social group), and chief earners (their occupation, education and age, etc.). These have significant bearing on earning, spending and saving.

Keywords: Investment behavior, decision factors, and investment performance

Introduction:

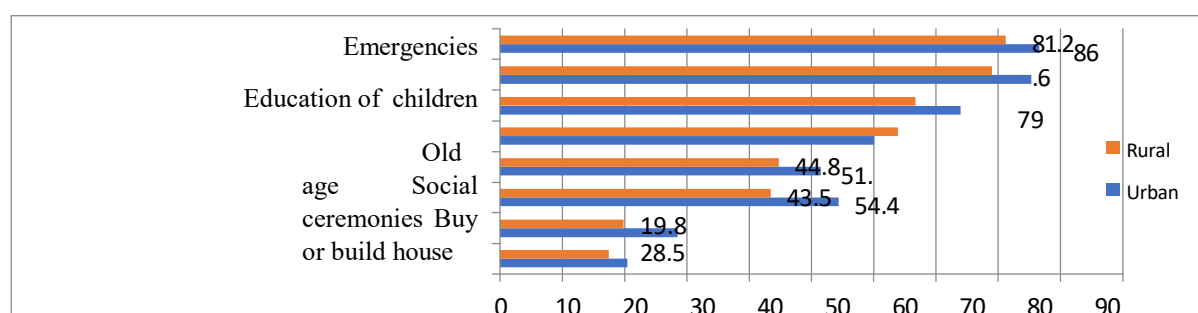
Indian households save for a variety of reasons. Most households prefer to have an easily accessible corpus for emergencies, marriages and social occasions, children's education and gifting. Though India does not have a social security scheme, saving for old age is still not a priority for its households.

In India, household savings play a crucial role in the economic fabric of society, often driven by culturally rooted priorities such as marriage, education, health emergencies, and social obligations. Despite the absence of a comprehensive social security system, long-term financial planning for retirement or old age is not a major concern for many Indian households. Within this context, women as financial decision-makers in households are gradually emerging as significant participants in the investment ecosystem. This study explores the investment behavior of women households in Rajkot city,



focusing on their engagement with financial instruments regulated SEby BI and others. It aims to understand their preferences, decision-making factors, and the extent of participation in formal financial markets. The analysis also considers the broader socio-economic and demographic indicators influencing their financial behavior. Given the low participation in securities markets, the study sheds light on potential areas for financial inclusion and investor awareness among women.

Figure 1.1 : Motivation to Save for Future



Source : NSHIE 2004–05 data: NCAER–CMCR analysis.

Demographic Profile of Saving & Investment in India

The demographics of India are inclusive of the second most populous country in the world, with over 1.21 billion people (2011 census), more than a sixth of the world's population. Already containing 17.5% of the world's population, India is projected to be the world's most populous country by 2025, surpassing China, its population reaching 1.6 billion by 2050. Its population growth rate is 1.41%, ranking 102nd in the world in 2010. Indian population reached the billion mark in 2000.

Table 1.1: Estimates of Earning, Spending and Savings by Location

	Rural	Urban	All India
a. Household income (Rs/annum)	51,922	95,827	65,041
b. Household expenditure (Rs/annum)	40,124	68,352	48,558
c. Surplus income (Rs/annum)			
Financial investment*	1,217	3,857	2,003
Physical investments**	2,886	5,912	3,792
Saving in cash	7,694	17,706	10,688
Total	11,798	27,475	16,483
d. Share of surplus income to income (per cent)			
Financial investment	2.3	4.0	3.1
Physical investments	5.6	6.2	5.8
Saving in cash	14.8	18.5	16.4
Total	22.7	28.7	25.3

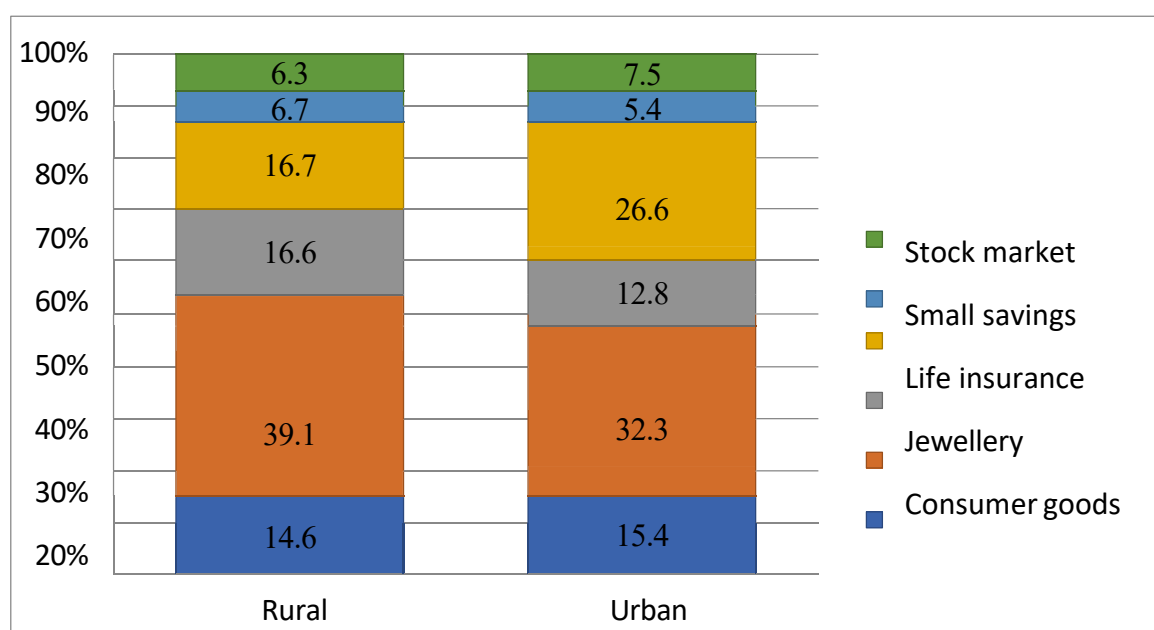
Source : NSHIE 2004–05 data : NCAER–CMCR analysis.



Notes: * Financial instruments include investment made in stock market, small savings and life insurance only for the year 2004–05.

** Physical instruments include investment made in jewellery, consumer durable and others only for the year 2004–05.

Figure 1.2 : Distribution of Investment by Location (Per Cent of Total Investment)



Source : NSHIE 2004–05 data : NCAER–CMCR analysis

Literature Review

Dr. Sushil kumar Mehta & Neha Aggarwal 2011 “The Effect of Demographics On Investment Choice : An Empirical Study Of Investors In Jammu”, Gordon J. Alexander, Jeffery U. Bailey (2003) wrote a book ‘Fundamental of Investments’ , ‘Investment Management’ (2008) by Dr. Preeti, Security Analysis and Portfolio Management (2009) written by S. Kevin, ‘Investment Analysis & Portfolio Management’ (Revised edition 2007) by Prassana Chandra,

Objectives of the Study

1. To analyze the Demographic & Social Economic profile of the respondents.
2. To analyze the respondents’ level of knowledge regarding various investments avenues.
3. To study the present investment practices of respondents in Ahmedabad city.
4. To study the important Sources of information that the respondents use to make their investment decisions.
5. To analyze the awareness and practices of investment.
6. To analyze the investment behaviors of the respondents. And To analyze the investor’s



Portfolio Management.

7. To analyze the objective of the investment of the respondents.
8. To analyze the relationship between demographic factors on investment choice of investors and savers in respondent.

Data Analysis

Analysis of Demographic Factors on Investment Choice

Table 1.2 Gender wise Distribution of Different Investment Avenues

Investment Avenues	Preferences	Gender		Total
		Male	Female	
Post Office	Most Preferred	29	24	53
	Moderately Preferred	14	11	25
	Least Preferred	15	7	22
Insurance	Most Preferred	29	19	48
	Moderately Preferred	18	14	32
	Least Preferred	11	9	20
Share & Debenture	Most Preferred	22	24	46
	Moderately Preferred	20	9	29
	Least Preferred	16	9	25
Jewellery (Gold & Silver)	Most Preferred	22	24	46
	Moderately Preferred	20	15	35
	Least Preferred	16	3	19
Provident Fund	Most Preferred	14	11	25
	Moderately Preferred	13	8	21
	Least Preferred	31	23	54
Fixed Deposits	Most Preferred	25	31	56
	Moderately Preferred	22	6	28
	Least Preferred	11	5	16
Mutual Funds	Most Preferred	12	4	16
	Moderately Preferred	16	15	31
	Least Preferred	30	23	53
Bonds	Most Preferred	5	5	10
	Moderately Preferred	17	12	29
	Least Preferred	36	25	61
Nidhis/Chit fund Etc.	Most Preferred	3	2	5
	Moderately Preferred	7	7	14
	Least Preferred	48	33	81



Other	Most Preferred	7	2	9
	Moderately Preferred	7	1	8
	Least Preferred	44	39	83
Total		58	42	100

Chi-Square Test

H0 - There is no relationship between the gender and investment choice made by the investors.

H1 - There is relationship between the gender and investment choice made by the investors.

Table 1.3: Chi-Square Test of Gender Wise Distribution with Different Investment Choice

Investment Avenues	Degree of Freedom	Level of Significance	Calculated Value	Table Value	Hypothesis Accepted
Post Office	2	5%	1.211	5.991	Null Hypothesis is Accepted
Insurance	2	5%	0.229	5.991	Null Hypothesis is Accepted
Share & Debenture	2	5%	3.755	5.991	Null Hypothesis is Accepted
Jewellery (Gold & Silver)	2	5%	7.323	5.991	Alternative Hypothesis is Accepted
Provident Fund	2	5%	0.180	5.991	Null Hypothesis is Accepted
Fixed Deposits	2	5%	9.724	5.991	Alternative Hypothesis is Accepted
Mutual Funds	2	5%	2.459	5.991	Null Hypothesis is Accepted
Bonds	2	5%	0.293	5.991	Null Hypothesis is Accepted
Nidhis/Chit fund Etc.	2	5%	0.429	5.991	Null Hypothesis is Accepted
Other	2	5%	5.150	5.991	Null Hypothesis is Accepted

The table value of chi-square is greater than the calculated value except Jewellery (Gold & Silver) and Fixed Deposits. Therefore, the Null Hypothesis that There is no relationship between the gender and investment choice made by the investors is Accepted except Jewellery (Gold & Silver) and Fixed Deposits.

At the same time the Alternate Hypothesis that There is relationship between the gender and investment choice made by the investors Rejected except Jewellery (Gold & Silver) and Fixed Deposits investment avenues.

Conclusion

Thus , majority of respondents are males i.e. 58% and female are 42% It suggested that males are dominant in investment and saving behavior. As males are predominate earnings and more knowledge about the investment and saving scheme.



Most of the 2 and 1 family members are dependent in the family. There is no relationship between the gender and investment choice made by the investors is Accepted except Jewellery (Gold & Silver) and Fixed Deposits. There is relationship between the gender and investment choice made by the investors is Accepted in Jewellery (Gold & Silver) and Fixed Deposits type investment avenues. There is no significant relationship between the marital status and investment choice made by the investors is accepted.

References

- Prasanna Chandra, "Investment Analysis and Portfolio Management", TMH Publication, New Delhi, Sixth Edition 2003.
- S.Kevin, "Security Analysis & Portfolio Management" Second Edition (Thirteenth Reprint 2009), PHI Learning Private Limited.
- V. A. Avadhani, "Investment and Securities Markets in India ", Himalaya publishing House, New Delhi, Sixth Revised Edition, 2003.
- "An Introduction to Investment Theory", William N. Goetzmann YALE School of Management
- S.Kevin, ' Portfolio Management' Second Edition (Thirteenth Reprint 2009), PHI Learning Private Limited
- Punithavathy Pandian, 'Security Analysis and Portfolio Management', Second Reprint (2009), Vikas Publishing House PVT. LTD.
- Dr. G.S.Gurusamy, "Indian Financial System", Tata McGraw Hill Companies New Delhi.
- Bharati V. Pathak. " The Indian Financial System Markets, Institutions and Services"
- C.R. Kothari, 'Research Methodology Methods and Techniques' second revised edition reprint 2010. New Age international publishers.
- J.K.Sachdeva, "Research Methodology",2011,Himalaya Publication
- E. Gordon Dr. K. Naterajan, 'Financial Markets and Services' (Revised edition 2007)

Websites

1. <http://www.sebi.gov.in>
2. <http://www.rbi.gov.in>
3. <http://www.ncaer.gov>
4. <http://www.censusofindia.gov>.
5. <http://www.indiapost.gov.in>
6. <http://www.amfi.in>



માનસિક પીડિતો ની આરોગ્ય સંભાળને લગતાં માનવ અધિકારોનો ગુજરાત રાજ્યના
સંદર્ભમાં કાનૂની અભ્યાસ

**A LEGAL STUDY OF HUMAN RIGHTS RELATED TO HEALTH CARE OF MENTAL
DISORDERED IN CONTEXT OF GUJARAT STATE**

By

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સારાંશ

માનવ અધિકાર એ મૂળભૂત અધિકારો અને સ્વતંત્રતાઓનો સંદર્ભ આપે છે જે દરેક વ્યક્તિ સ્વાભાવિક રીતે માનવ તરીકે ધરાવે છે, તેમની રાષ્ટ્રીયતા, વંશીયતા, લિંગ, ધર્મ અથવા અન્ય કોઈ દરજ્જાને ધ્યાનમાં લીધા વગર. આ અધિકારોને સાર્વત્રિક માનવામાં આવે છે અને તે તમામ લોકોને લાગુ પડે છે. માનવ અધિકારોનો ખ્યાલ એ માન્યતામાં રહેલો છે કે દરેક પીડિતો ને ગૌરવ, સમાનતા અને આદર સાથે વ્યવહાર કરવાનો અધિકાર છે. માનવ અધિકારોમાં જીવનનો અધિકાર, સ્વતંત્રતા અને સુરક્ષા જેવા સિદ્ધાંતો અને અધિકારોની વિશાળ શ્રેણીનો સમાવેશ થાય છે; યાતના અને ગુલામીમાંથી મુક્તિ; કામ કરવાનો અધિકાર, શિક્ષણ અને આરોગ્યસંભાળ; અભિવ્યક્તિની સ્વતંત્રતા, ધર્મ અને સંમેલન, અને સરકારમાં ભાગ લેવાનો અને સાંસ્કૃતિક અધિકારોનો આનંદ લેવાનો અધિકાર.

લોકોના માનવ અધિકારોના આદર દ્વારા સમાજના તમામ ક્ષેત્રોમાં સામાજિક પરિવર્તન અને વિકાસથી ઓછો નથી. આ ધ્યેય માટે સંમેલનનો હેતુ સ્પષ્ટ સામાજિક વિકાસ પરિમાણ સાથે માનવ અધિકારના સાધન તરીકે છે. તે પુનઃપુષ્ટિ કરે છે.



વર્તમાન પેપર માનવ અધિકાર આધારિત દ્રષ્ટિકોણથી માનસિક સ્વાસ્થ્યને સંદર્ભિત કરે છે. તે ભારતીય સંદર્ભમાં માનસિક બીમારી ધરાવતા પીડિતો ના માનવ અધિકારોની અનુભૂતિ માટેના વિવિધ પ્રયાસોને અનુસરે છે. માનસિક બીમારી ધરાવતા પીડિતો દ્વારા તેમના પરિવારો અને સમુદાયો દ્વારા સામનો કરવામાં આવતા કલંક અને બહિષ્કારનો ઉલ્લેખ કરીને, પેપરમાં તેમની સંભાળ અને આવશ્યક સારવાર/સેવાઓ અને ઉપલબ્ધ સહાય માટેના પડકારોની ચર્ચા કરવામાં આવી છે. આ પેપરમાં માનસિક બીમારી ધરાવતા પીડિતો ઓ માટે સક્ષમ અને સમાવિષ્ટ વાતાવરણ બનાવવા માટે કેટલીક સારગ્રાહી વ્યૂહરચનાઓ પણ સૂચવવામાં આવી છે.

પરિચય

મારાં ખ્યાલથી વિકસિત ભારત 2047 સુધીમાં જે રીતે અત્યારે લોકોની માનસિક અને શારીરિક સ્વાસ્થ્યની અવગણના જો આ જ રીતે ચાલુ રહેશે તો ખૂબ જ ગંભીર અને જટિલ સમસ્યા ઉત્પન્ન થશે. તો તેને અવગણના ન કરી અને સ્વાસ્થ્યને પ્રાધાન્ય આપી એ ખૂબ જ જરૂરી છે અને વિકસિત ભારત ની દિશામાં આપણે સાચું યોગદાન આપ્યું છે.તેવુ કહી શકીએ ભારત માં ભારત નાં અને ગુજરાતના સંદર્ભમાં કાનૂની વૈચારિક માળખા અંતર્ગત મારુ પેપર આ અનુસંધાનમાં આથી આ તબક્કે, મારું પેપર રજુ કરું છું.

માનસિક બીમારી એ એક મહત્વપૂર્ણ જાહેર આરોગ્ય સમસ્યા છે જે ભારતમાં લાખો લોકોને અસર કરે છે. આ સંશોધન પેપર ભારતીય સંદર્ભમાં માનસિક રીતે બીમાર વ્યક્તિઓની જરૂરિયાતોને સંબોધવા માટે કાનૂની અને માનવતાવાદી અભિગમોની શોધ કરે છે. આ અભ્યાસ ભારતમાં માનસિક સ્વાસ્થ્ય કાયદાના ઉત્ક્રાંતિ, વર્તમાન કાયદાકીય માળખું અને માનસિક સ્વાસ્થ્ય સંભાળ માટે માનવ અધિકાર આધારિત અભિગમોના અમલીકરણની તપાસ કરે છે. મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭ જેવા પ્રગતિશીલ કાયદા હોવા છતાં, માનસિક રીતે બીમાર પીડિતો ઓને પર્યાપ્ત સંભાળ, રક્ષણ અને સન્માન મળે તેની ખાતરી કરવામાં પડકારો રહે છે. આ પેપર માનસિક સ્વાસ્થ્ય કાયદાના ઐતિહાસિક વિકાસ, અધિકાર-આધારિત અભિગમોના વૈચારિક માળખું અને કાનૂની અને આરોગ્યસંભાળ પ્રણાલીઓમાં વર્તમાન અંતરનું વિશ્લેષણ પ્રદાન કરે છે. આ અભ્યાસ ભારતમાં માનસિક



રીતે બીમાર પીડિતો ઓની કાનૂની અને માનવતાવાદી સારવારમાં સુધારો કરવા માટેની ભલામણો સાથે સમાપ્ત થાય છે.

માનસિક બિમારી એ એક જટિલ સમસ્યા છે જેને તબીબી, કાનૂની અને સામાજિક પરિપ્રેક્ષ્યોને સમાવિષ્ટ કરીને બહુ-શાખાકીય અભિગમની જરૂર છે. ભારતમાં, માનસિક રીતે બીમાર પીડિતો ઓની સારવાર અને સંભાળ ઐતિહાસિક રીતે પડકારોથી ભરપૂર છે, જેમાં સામાજિક કલંક, અપૂરતી હેલ્થકેર ઈન્ફ્રાસ્ટ્રક્ચર અને અપૂરતી કાનૂની સુરક્ષાનો સમાવેશ થાય છે. મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭ ના આગમનથી, અધિકાર-આધારિત અભિગમ તરફ નોંધપાત્ર પરિવર્તન આવ્યું છે, જેનો ઉદ્દેશ્ય એ સુનિશ્ચિત કરવાનો છે કે માનસિક રીતે બીમાર પીડિતો સાથે સન્માન સાથે વ્યવહાર કરવામાં આવે અને તેમને જરૂરી સંભાળ અને રક્ષણ મળે.

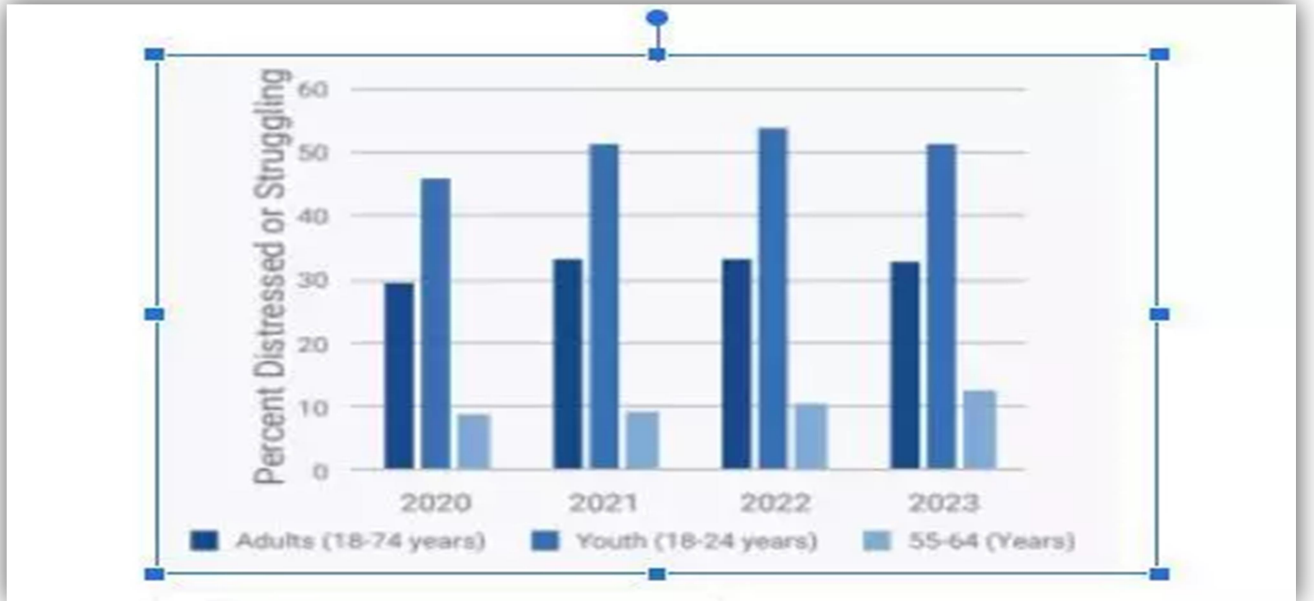
માનસિક સ્વાસ્થ્ય સેવાઓમાં નોંધપાત્ર રીતે વધુ રોકાણ કરવાની જરૂરિયાત અંગે હિતધારકો વચ્ચે ઉચ્ચ સ્તરની સમજૂતી છે. ટકાઉ વિકાસ લક્ષ્યાંકો અને એજન્ડા 2030 માં માનસિક સ્વાસ્થ્યને પ્રોત્સાહન અને નિવારણ વ્યૂહરચનાઓનો સમાવેશ થાય છે. આ સંબંધમાં માનસિક સ્વાસ્થ્ય સેવાઓ (પ્રોત્સાહન, નિવારણ, સારવાર, પુનઃપ્રાપ્તિ) ના તમામ ઘટકોમાં વધેલા રોકાણો "યથાવત્" માર્ગને અનુસરવા જોઈએ કે પછી કદાચ પરિવર્તનની જરૂર છે તે અંગે સમજૂતી સુધી પહોંચવું નિર્ણાયક છે. અને જો પરિવર્તનની જરૂર હોય તો-શું આ પરિવર્તન આદર્શ પરિવર્તનના સ્તર સુધી પહોંચવું જોઈએ.

માનસિક સ્વાસ્થ્યના હિમાયતીઓ આ પરિસ્થિતિઓની અસરના પ્રમાણમાં માનસિક સ્વાસ્થ્ય સંભાળના વાજબી ભંડોળ માટે હાકલ કરે છે, જેનો હેતુ માનસિક સ્વાસ્થ્યની સ્થિતિ ધરાવતા લોકો માટે સારવારમાં અંતર ઘટાડવાનો છે. પુરાવા આધારિત, સરળતાથી ઉપલબ્ધ અને સુલભ સારવારો તેમજ પુનઃપ્રાપ્તિ-લક્ષી સેવાઓ સહિત-માનસિક આરોગ્ય સેવા વિતરણ કેવું દેખાવું જોઈએ તેના મુખ્ય ભલામણ કરેલા ઘટકોની અંદર-માનવ અધિકારો એક કોસ-કટિંગ વિચારણા છે.



માનવ અધિકાર ધારકો તરીકે જીવતા અનુભવ ધરાવતા પીડિતો પ્રત્યે પૂર્વ-તાલીમ વલણની તપાસ કરવા માટેનો આ અભ્યાસ પ્રથમ અભ્યાસ હતો. એકંદરે, સહભાગીઓ બળજબરીના ઉપયોગ અને આવી શરતો ધરાવતા લોકો માટે કાનૂની ક્ષમતાના ઉપયોગ પર પ્રતિબંધો લાદવા સાથે સંમત થયા હતા. વલણ ઘણીવાર માનવ અધિકારના માળખાનું પાલન કરતું ન હતું. શૈક્ષણિક અનુભવ ધરાવતા સહભાગીઓ અને માનસિક સ્વાસ્થ્યની સ્થિતિનો વ્યક્તિગત અનુભવ ધરાવતા લોકો ઘણીવાર વધુ નકારાત્મક વલણ ધરાવતા હતા.

વય જૂથ ૧૮ વર્ષ થી ૭૪ વર્ષ સુધી ના માનસિક પીડિતો નુ સ્વાસ્થ્ય અંગે નો ગ્રાફિક ચાર્ટ :-



ઐતિહાસિક પૃષ્ઠભૂમિ:

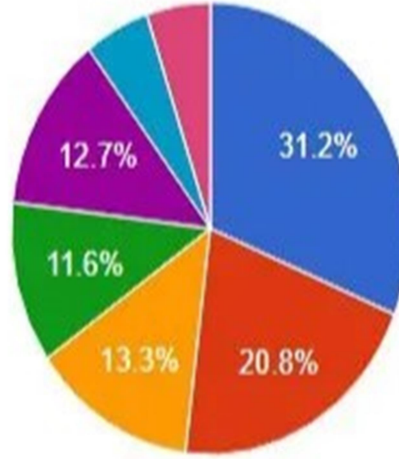
- ૧૮૫૮ અને ૧૯૧૨ ના લ્યુનેસી એક્ટ્સ, મુખ્યત્વે માનસિક રીતે બીમાર પીડિતો ની કસ્ટોડિયલ કેર પર ધ્યાન કેન્દ્રિત કરતા હતા
- વિશ્વ આરોગ્ય સંસ્થા (ડબલ્યુ. એચ. ઓ.) માનસિક સ્વાસ્થ્યની કલ્પના "સુખાકારીની એવી સ્થિતિ તરીકે કરે છે



- ડબ્લ્યુએચઓ માનવ અધિકારોનું રક્ષણ કરવા અને પ્રોત્સાહન આપવા, જીવંત અનુભવ ધરાવતા લોકોને સશક્ત બનાવવા અને બહુક્ષેત્રીય અને બહુ-હિતધારક અભિગમ સુનિશ્ચિત કરવા પર વિશેષ ભાર મૂકે છે.
- ૧૯૪૮ માં યુએન જનરલ એસેમ્બલી દ્વારા અપનાવવામાં આવેલ યુનિવર્સલ ડિક્લેરેશન ઓફ હ્યુમન રાઇટ્સ (યુડીએચઆર),
- ૧૯૮૭ ના માનસિક સ્વાસ્થ્ય અધિનિયમે વધુ માનવીય સારવાર તરફ પરિવર્તનની શરૂઆત કરી
- ૨૦૦૬ માં યુએન જનરલ એસેમ્બલી દ્વારા "વિકલાંગ પીડિતો ના અધિકારો પર સંમેલન"
- મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭ ના અમલ સાથે સૌથી નોંધપાત્ર કાનૂની સુધારો આવ્યો
- ૧૦ ડિસેમ્બર ૨૦૨૩ના રોજ ૭૫ વર્ષનો થાય છે,
- તમામ આંતરરાષ્ટ્રીય માનવાધિકાર કાયદાનો પાયો છે. તેના ૩૦ લેખો વર્તમાન અને ભાવિ માનવ અધિકાર સંમેલનો, સંધિઓ અને અન્ય કાનૂની સાધનોના સિદ્ધાંતો અને બિલ્ડિંગ બ્લોક્સ પ્રદાન કરે છે.
- રાષ્ટ્રીય અને આંતરરાષ્ટ્રીય માનવાધિકાર ચાર્ટર માનસિક સ્વાસ્થ્ય કાયદાઓમાં સુધારો કરવા માટે આરોગ્ય નીતિ ઘડવૈયાઓને નક્કર પાયો પૂરો પાડવા માટે છે.
- એક તુલનાત્મક અભ્યાસ" સેન્ટ્રલ ઇન્સ્ટિટ્યૂટ ઓફ સાઇકિયાટ્રી પુરુષ અને સ્ત્રી માનસિક સ્વાસ્થ્ય વ્યાવસાયિકોમાં માનસિક રીતે બીમાર પીડિતો ના માનવ અધિકારો વિશેની જાગૃતિની સરખામણી
- જુનિયર રેસિડન્ટ્સ, ક્લિનિકલ સાયકોલોજી સ્ટુડન્ટ્સ, નર્સિંગ ઓફ સેર, સાઇકિયાટ્રિક સોશિયલ વર્કર સ્ટુડન્ટ્સ વોર્ડ એટેન્ડન્ટ્સ અને નર્સિંગ સ્ટુડન્ટ્સ-૮૦ પુરુષ અને ૮૦ મહિલા માનસિક સ્વાસ્થ્ય વ્યાવસાયિકો નો પદ્ધતિઓ:-અભ્યાસ



ભારતમાં કિશોર આત્મહત્યા ના જોખમ નાં જે પરિબલો જે જવાબદાર છે.



CX માનસિક સ્વાસ્થ્ય ની સમસ્યા નીટકાવારી

DS નકારાત્મક અસરને આઘાત જનક અસરની ટકાવારી

ZX શૈક્ષણિક તણાવ ની અસરની ટકાવારી

CC સામાજિક અને જીવન શૈલીને અસર કરતા પરિબલો ની ટકાવારી

BB હિંસાત્મક અસર અંગેની જીવનશૈલી અંગેની ટકાવારી

CX આર્થિક સમસ્યા અંગેની અસર કરતી ટકાવારી

XZ સામાજિક સંબંધો અંગેની અસર કરતી ટકાવારી

ઉદ્દેશ્યો

- ભારતમાં માનસિક સ્વાસ્થ્ય સંભાળને સંચાલિત કરતા કાયદાકીય માળખાનું વિશ્લેષણ કરવા.
- ભારતમાં માનસિક સ્વાસ્થ્ય કાયદા અને નીતિઓના ઐતિહાસિક વિકાસની તપાસ કરવી.
- માનસિક રીતે બીમાર પીડિતો ના અધિકારો અને ગૌરવને સુનિશ્ચિત કરવા માટે, માનસિક સ્વાસ્થ્ય સંભાળ અધિનિયમ, ૨૦૧૭ ની અસરકારકતાનું મૂલ્યાંકન કરવું.



- ભારતમાં માનસિક સ્વાસ્થ્ય સંભાળ અને તેના અમલીકરણ માટેના માનવતાવાદી અભિગમોનું અન્વેષણ કરવું.
- ભારતમાં માનસિક રીતે બીમાર પીડિતો ના કાનૂની અને માનવતાવાદી સારવારમાં સુધારો કરવા માટે ભલામણો પ્રદાન કરવી.

ભારતના સંદર્ભમાં નવો માનસિક આરોગ્યનો કાયદો ૨૦૧૭ નો પ્રતિભાવ

- ૧૮૫૮ અને ૧૯૧૨ ના લ્યુનેસી એક્ટ્સ, મુખ્યત્વે માનસિક રીતે બીમાર પીડિતો ની કસ્ટોડિયલ કેર પર ધ્યાન કેન્દ્રિત કરતા હતા.
- ૧૯૮૭ ના માનસિક સ્વાસ્થ્ય અધિનિયમે વધુ માનવીય સારવાર તરફ પરિવર્તનની શરૂઆત કરી.
- ૨૦૦૬ના યુનાઇટેડ નેશન્સ કન્વેન્શન ઓન ધ રાઇટ્સ ઓફ પર્સન્સ વિથ ડિસેબિલિટીઝ (સીઆરપીડી) વિકલાંગ લોકો અને લાંબા ગાળાની માનસિક બીમારીથી વિકલાંગ લોકોની સ્થિતિ સુધારવા માટે એક વાસ્તવિક તક રજૂ કરે છે.
- ભારતના ૨૦૧૩ બિલની તર્જ પર કાયદો સંભાળના ધોરણો, અનૈચ્છિક પ્રવેશ માટેની સુધારેલી પ્રક્રિયાઓ અને માનસિક આરોગ્ય સેવાઓમાં ઉન્નત શાસનની દ્રષ્ટિએ ઘણું બધું સકારાત્મક અને પ્રગતિશીલ પ્રદાન કરે છે.
- મેન્ટલ હેલ્થ કેર બિલ ૨૦૧૩ ઓગસ્ટ ૨૦૧૩માં રાજ્યસભા ભારતના સંસદના ઉપલા ગૃહ માં રજૂ કરવામાં આવ્યું હતું.
- ૧૩૪ સત્તાવાર સુધારાઓને અનુસરીને ઓગસ્ટ ૨૦૧૬માં પસાર કરવામાં આવ્યું હતું.
- મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭ ના અમલ સાથે સૌથી નોંધપાત્ર કાનૂની સુધારો આવ્યો.

કાનૂની માનવતાવાદી અભિગમો ના અભ્યાસક્રમ નુ વૈચારિક માળખું અને આરોગ્યના સામાજિક નિર્ણાયક - શું છે

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ભારતમાં અને ગુજરાત રાજ્યના સંદર્ભમાં માનસિક રીતે બીમાર પીડિતો ની આરોગ્ય સંભાળને લગતા માનવ અધિકારો પર કાનૂની અભ્યાસ હાથ ધરવાનો હેતુ બહુપક્ષીય છે અને તેમાં કાનૂની અને આરોગ્ય સંભાળ પ્રણાલીમાં આ નબળા લોકોના અધિકારો, ગૌરવ અને સુખાકારીને પ્રોત્સાહન આપવાના હેતુથી કેટલાક વ્યાપક લક્ષ્યોને આવરી લેવામાં આવ્યા છે.

આ અભ્યાસનું કાનૂની વૈચારિક માળખું માનસિક સ્વાસ્થ્ય માટેના અધિકાર-આધારિત અભિગમ પર આધારિત છે, જે કાનૂની, નૈતિક અને માનવતાવાદી પરિપ્રેક્ષ્યોને એકીકૃત કરે છે. વિશ્લેષણ નીચેના ખ્યાલો પર દોરે છે:

- માનવ અધિકાર: માનસિક સ્વાસ્થ્ય સંભાળ માટેના અધિકાર-આધારિત અભિગમનું મૂળ માનસિક સ્વાસ્થ્ય સંભાળ અધિનિયમ, ૨૦૧૭ અને યુએનસીઆરપીડીમાં સમાવિષ્ટ છે તેમ, આંતરિક ગૌરવ અને અધિકારો ધરાવતા પીડિતો ઓ તરીકે માનસિક રીતે બીમાર વ્યક્તિઓની માન્યતામાં છે.
- કાનૂની સુરક્ષા: આ ખ્યાલ ભારતમાં માનસિક રીતે બીમાર પીડિતો ઓ માટે ઉપલબ્ધ કાનૂની જોગવાઈઓની શોધ કરે છે, જેમાં માનસિક સ્વાસ્થ્ય સંભાળને એક્સેસ કરવાનો અધિકાર, સારવાર વિશે નિર્ણય લેવાનો અધિકાર અને ભેદભાવ વિના સમુદાયમાં રહેવાના અધિકારનો સમાવેશ થાય છે.
- માનવતાવાદી અભિગમો: માનસિક સ્વાસ્થ્ય માટેના માનવતાવાદી અભિગમો સુલભતા અને પ્રતિષ્ઠાને સુનિશ્ચિત કરવા માટે કટુણાપૂર્ણ સંભાળ, બિન-જબરદસ્તી સારવાર અને માનસિક સ્વાસ્થ્ય સેવાઓના સામાન્ય આરોગ્યસંભાળ પ્રણાલીઓમાં એકીકરણના મહત્વ પર ભાર મૂકે છે.
- અમલીકરણમાં પડકારો: પ્રગતિશીલ કાનૂની માળખું હોવા છતાં, અમલીકરણમાં પડકારો, જેમ કે અપૂરતું માનસિક સ્વાસ્થ્ય ઈન્ફ્રાસ્ટ્રક્ચર, પ્રશિક્ષિત વ્યાવસાયિકોનો અભાવ અને સામાજિક કલંક, યથાવત છે. આ ખ્યાલ આ પડકારો અને તેમના કાનૂની રક્ષણની અસરકારકતા પર અસર.

મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭, વૈશ્વિક માનવાધિકાર ધોરણો સાથે સંરેખિત, ભારતમાં માનસિક રીતે બીમાર પીડિતો ઓના કાનૂની રક્ષણમાં નોંધપાત્ર પ્રગતિનું પ્રતિનિધિત્વ કરે છે. જો કે, અપૂરતી માનસિક



સ્વાસ્થ્ય ઈન્ફ્રાસ્ટ્રક્ચર, સામાજિક કલંક અને પ્રશિક્ષિત માનસિક સ્વાસ્થ્ય વ્યાવસાયિકોની અછતને કારણે આ કાનૂની રક્ષણોનો અમલ એક મોટો પડકાર છે. માનસિક સ્વાસ્થ્ય સંભાળ માટે માનવતાવાદી અભિગમ દયાળુ અને બિન-જબરદસ્તી સારવારની જરૂરિયાત પર ભાર મૂકે છે, પરંતુ આને હાંસલ કરવા માટે પ્રણાલીગત અવરોધોને દૂર કરવા માટે એક નક્કર પ્રયાસની જરૂર છે. માનસિક રીતે બીમાર પીડિતો ઓ સાથે સન્માનપૂર્વક સારવાર કરવામાં આવે અને તેઓને જરૂરી કાળજી મળે તેની ખાતરી કરવા માટે, માનસિક આરોગ્ય સંભાળ અધિનિયમની જોગવાઈઓને અમલમાં મૂકવા, જનજાગૃતિ વધારવા અને વ્યાપક આરોગ્યસંભાળ પ્રણાલીમાં માનસિક સ્વાસ્થ્ય સેવાઓને એકીકૃત કરવા પર વધુ ધ્યાન કેન્દ્રિત કરવું જોઈએ.

❖ આરોગ્યના સામાજિક નિર્ણાયક - શું છે !

- ખરાબ માનસિક સ્થિતિ અને તેના જોખમી તત્વો
- ગરીબી પડોશી કે બિલ્ટ પર્યાવરણની અસર
- નીચી શૈક્ષણિક સંભાવના નો અભાવ વ્યક્તિત્વનો વિકાસ અટકાવે છે
- બાહ્ય માધ્યમથી વ્યક્તિને સમાજથી અલગ રાખવું.
- ગરીબી કે ઓછી આવકની અસમાનતા
- બેરોજગારી કે અલ્પ બેરોજગારી
- પ્રતિકૂળ બાળકનાં અનુભવો
- આવક અને સામાજિક રક્ષણ
- આવાસ ની અસ્થિરતા
- ખાદ્ય અસુરક્ષા

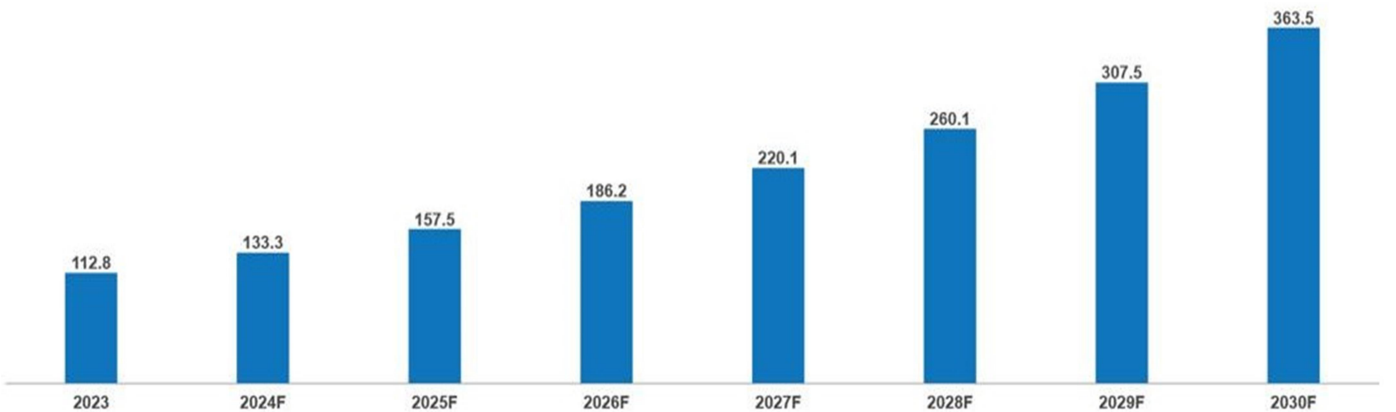
સમસ્યા કથનો

- માનસિક બીમારી એક મહત્વપૂર્ણ જાહેર આરોગ્ય સમસ્યા છે. જે ભારતમાં લાખો લોકોને અસર કરે છે



- ભારતીય સંદર્ભમાં માનસિક રીતે બીમારી પીડિતો ને જરૂરિયાતોને સંબોધવા માટે કાનૂની અને માનવતા વાદી અભિગમો ની શોધ આ પેપર ના અનુસંધાનમાં કરવામાં આવેલ છે
- માનસિક સ્વાસ્થ્ય કાયદાના ઉત્ક્રાંતિ, વર્તમાન કાયદાકીય માળખું અને માનસિક સ્વસ્થ્ય સંભાળ માટે કાનૂની માનવ અધિકાર
- કાનૂની માનવ અધિકારનો અમલીકરણ તેની તપાસ,
- મેન્ટલ હેલ્થ કેર ૨૦૧૭ પ્રગતિશીલ કાયદો હોવા છતાં અસરકારક નથી.
- પીડિત વ્યક્તિઓને પર્યાપ્ત રક્ષણ સંભાળ, સન્માન જનક પરિસ્થિતિ કે તેની ખાતરી તે એક પડકાર બની રહે છે
- આ સ્વસ્થ્ય ના કાયદાના ઐતિહાસિક વિકાસ આધારિત અભિગમો કાનૂની વૈચારી માળખું અને આરોગ્ય લક્ષી આરોગ્ય સંભાર પ્રણાલીઓ નું વર્તમાન નું આંતર વિશ્લેષણ કરવા નો એક આ આશ્રયસ્થાન બની રહેશે.
- નસિક સ્વાસ્થ્ય અને ભાવનાત્મક સુખાકારી માટે સહાયતા વર્ષ ૨૦૨૩ થી ૨૦૩૦ સુધીનો અંદાજિત ઉપલબ્ધ માહિતી અંગેનો સર્વે

Market forecast to grow at a CAGR of 18.2%



નાણાકીયસહાય અને પ્રાયોજકતા નીલ.
હિતોના સંઘર્ષો હિતોનો કોઈ સંઘર્ષ નથી



સંશોધનની મર્યાદાઓ

- અપૂર્ણ કાનૂની માળખું
- જાણકારીનો પ્રવેશ
- નમૂના પ્રતિનિધિપણું
- પૂર્વગ્રહ અને આધીનતા
- નૈતિક બાબતો
- સંદર્ભિત વિશિષ્ટતા

માનસિક રીતે બીમાર લોકો માટે ન્યાય માટે લડત –સાહિત્યનો નિષ્કર્ષ

- માનસિક અને શારીરિક સ્વાસ્થ્ય વચ્ચેની નીતિઓ અને પ્રથાઓ બંનેમાં ઐતિહાસિક વિભાજન રાજકીય, વ્યાવસાયિક અને ભૌગોલિક અલગતા, હાંસિયામાં ધકેલી દેવા અને માનસિક આરોગ્યસંભાળના કલંકમાં પરિણમ્યું હતું.
- માનસિક આરોગ્યસંભાળ જેવા ક્ષેત્રોમાં પરિવર્તન માટે શક્તિશાળી ઉત્પ્રેરક તરીકે કામ કરી શકે છે જે ઐતિહાસિક રીતે લાંછન, ભેદભાવ અને દર્દીઓની ગરિમાની ખોટથી પીડાય છે.
- પીએસડબ્લ્યુના વિદ્યાર્થીઓએ વ્યક્તિગત જરૂરિયાતો, સંદેશાવ્યવહાર, માનસિક રીતે બીમાર પીડિતો ના માનવ અધિકારોના નિર્ણય લેવા વિશે જાગૃતિ દર્શાવી.
- આજની તારીખે, વિશ્વભરમાં માનસિક રીતે બીમાર લોકોએ કેદ, બેઘરતા, સામાજિક બહિષ્કાર, સારવાર ન કરાવેલી બીમારી અને અધિકારોના અન્ય વિવિધ અસ્વીકારના દરમાં વધારો કર્યો છે.
- માનસિક સ્વાસ્થ્ય અને સામાજિક સેવાઓ, અદાલતો, જેલો સમગ્ર ભારત, બાકીના એશિયા અને વિશ્વભરના અન્ય સ્થળોએ લાગુ કરવામાં આવે. વૈશ્વિક સ્તરે, માનસિક રીતે બીમાર લોકોના અધિકારોની લાંબા સમયથી અવગણના કરવામાં આવી રહી છેઆને ઠીક કરવાનો સમય આવી ગયો છે.



બિંદુ ચર્ચા પર નિષ્કર્ષ: પર ભલામણો

- માનસિક સ્વાસ્થ્ય અધિનિયમ, 2019 ખૂબ જ પ્રગતિશીલ છે માનસિક સ્થિતિ ધરાવતા પીડિતો નું રક્ષણ કરતો કાયદો અદ્યતન છે સરકાર સકારાત્મક પગલાં લેવા તૈયાર છે. હિતધારકો માટે ફાયદાકારક છે
- જાહેર જનતા ના સભ્યોને મુખ્ય પરિસ્થિતિઓની ઊંડાણપૂર્વકની માનસિક આરોગ્ય અધિનિયમમાં સુધારો થવો જોઈએ.
- આરોગ્ય મંત્રાલય ની સમીક્ષા માનસિક સ્વાસ્થ્ય પડકારો વિનાના લોકો માટે હોસ્પિટલની અન્ય કામગીરીઓ સાથે તેમની સેવાઓને એકીકૃત કરવાના દૃષ્ટિકોણ
- માનસિક સ્વાસ્થ્ય સેવાઓનો અમલ ઓનલાઇન સેવાથી સરળ
- માનસિક દર્દીઓ સાથે ભેદભાવ ન થાય અને તેમને બાકાત ન રાખવામાં આવે તે માટે હાલની આરોગ્ય સ્થાઓમાં માનસિક આરોગ્ય સેવાઓનો સમાવેશ કરવામાં આવશે.
- માનસિક સ્વાસ્થ્ય સમસ્યાઓ ધરાવતા લોકો માટે માનસિક સ્વાસ્થ્ય અધિનિયમ 2019ને વધુ અસરકારક, મૈત્રીપૂર્ણ અને સુરક્ષાત્મક બનાવવા માટે તેમાં સુધારો કરવાની જરૂર છે.
- માનસિક સ્વાસ્થ્યના મહત્વને અવગણી શકાય નહીં તંદુરસ્ત મન ઉત્પાદકતામાં વધારો કરે છે સંશોધન માનસિક પરિસ્થિતિઓ સાથે જીવતા પીડિતો ને પૂરતી કાનૂની સગવડ મળે તે સુનિશ્ચિત કરવાના મહત્વ પર પ્રયાસ કરે છે.

પદ્ધતિ

આ સંશોધનમાં ઉપયોગમાં લેવાતી પદ્ધતિ ગુણાત્મક છે. આ અભ્યાસના પરિણામો ડેસ્કટોપ સંશોધન હાથ ધરીને પ્રાપ્ત થયા હતા. આ સંશોધનમાં ઉપયોગમાં લેવાતી માહિતી એકત્રિત કરવા માટે કેસ કાયદો, કાયદાઓ, સંબંધિત પુસ્તકો અને જર્નલ લેખો અને ઇન્ટરનેટ સ્ત્રોતોની વિશ્લેષણ અને સમીક્ષા કરવામાં આવી હતી.



સંદર્ભ

1. મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭.
2. યુનાઈટેડ નેશન્સ કન્વેન્શન ઓન ધ રાઈટ્સ ઓફ પર્સન્સ વિથ ડિસેબિલિટીઝ (UNCRPD), ૨૦૦૬.
3. કુમાર, એસ., અને કુમાર, એસ. (૨૦૧૯). ભારતમાં માનસિક સ્વાસ્થ્ય: ઐતિહાસિક વિકાસ અને આગળનો માર્ગ. ઇન્ડિયન જર્નલ ઓફ સાયકિયાટ્રી, ૬૧(૪), ૩૭૩-૩૮૦
4. ચેટર્જી, પી., અને ઘોષ, આર. (૨૦૨૦). ભારતમાં માનસિક સ્વાસ્થ્ય સંભાળ માટે અધિકારો આધારિત અભિગમો: એક કાનૂની પરિપ્રેક્ષ્ય. જર્નલ ઓફ હ્યુમન રાઈટ્સ, ૧૮(૨), ૨૦૫-૨૧૯.
5. દાસ, એ., અને ભટ્ટાચાર્ય, એસ.(૨૦૧૮). ભારતમાં મેન્ટલ હેલ્થકેર એક્ટ, ૨૦૧૭ના અમલીકરણના પડકારો. ઇન્ડિયન જર્નલ ઓફ સોશિયલ વર્ક, ૭૯(૨), ૧૪૫-૧૬૨.
6. વિશ્વ આરોગ્ય સંસ્થા.(૨૦૧૭). માનસિક સ્વાસ્થ્ય, માનવ અધિકાર અને કાયદો:વૈશ્વિક સમીક્ષા.
7. માનસિક સ્વાસ્થ્ય નો પુરુષ-સ્ત્રી માં વધતી ઉંમર સાથે થતી ઉણપ ની અસરો નો અભ્યાસ

**CHANGE MANAGEMENT**

By

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Abstract

Change management is a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment. In project management, change management refers to a project management process where changes to a project are formally introduced and approved.

Examples of Organizational Change:

1. Strategic changes
2. Technological changes
3. Structural changes
4. Changing the attitudes and behaviors of personnel

As a multidisciplinary practice, Organizational Change Management requires for example: creative marketing to enable communication between change audiences, but also deep social understanding about leadership's styles and group dynamics. As a visible track on transformation projects, Organizational Change Management aligns groups' expectations, communicates, integrates teams and manages people training. It makes use of metrics, such as leader's commitment, communication effectiveness, and the perceived need for change to design accurate strategies, in order to avoid change failures or solve troubled change projects. An effective change management plan needs to address all above mentioned dimensions of change. This can be achieved in following ways:

1. Putting in place an effective Communication strategy which would bridge any gap in the understanding of change benefits and its implementation strategy.
2. Devise an effective skill upgrading scheme for the organization. Overall these measures can counter resistance from the employees of companies and align them to overall strategic direction of the organization.
3. Personal counseling of staff members (if required) to alleviate any change related fears.

This paper is aimed to explain the change management which is one of the essential task for each and every business now a days. An organisation cannot sustain as well as it cannot maintain its position in the market unless it adopts the change in the right direction. So, in order to focus on it, this paper begins with



the explanation of change management, in the middle various points has been covered such as responsibility or change management, Steps for successful change management etc. It also discusses some illustration focusing on change Management.

Introduction

Change management is a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment. In project management, change management refers to a project management process where changes to a project are formally introduced and approved.

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Change Management:

Here are some rules for effective management of change. Managing organizational change will be more successful if you apply these simple principles. Achieving personal change will be more successful



too if you use the same approach where relevant. Change management entails thoughtful planning and sensitive implementation, and above all, consultation with, and involvement of, the people affected by the changes. If you force change on people normally problems arise. Change must be realistic, achievable and measurable. These aspects are especially relevant to managing personal change. Before starting organizational change, ask yourself: What do we want to achieve with this change, why, and how will we know that the change has been achieved? Who is affected by this change, and how will they react to it? How much of this change can we achieve ourselves, and what parts of the change do we need help with? These aspects also relate strongly to the management of personal as well as organizational change.

Do not 'sell' change to people as a way of accelerating 'agreement' and implementation. 'Selling' change to people is not a sustainable strategy for success, unless your aim is to be bitten on the bum at some time in the future when you least expect it. When people listen to a management high-up 'selling' them a change, decent diligent folk will generally smile and appear to accede, but quietly to themselves, they're thinking, "No bloody chance mate, if you think I'm standing for that load of old bollocks you've another think coming..." (And that's just the amenable types - the other more recalcitrant types will be well on the way to making their own particular transition from gamekeepers to poachers.)

Instead, change needs to be understood and managed in a way that people can cope effectively with it. Change can be unsettling, so the manager logically needs to be a settling influence.

Check that people affected by the change agree with, or at least understand, the need for change, and have a chance to decide how the change will be managed, and to be involved in the planning and implementation of the change. Use face-to-face communications to handle sensitive aspects of organisational change management. Encourage your managers to communicate face-to-face with their people too if they are helping you manage an organizational change. Email and written notices are extremely weak at conveying and developing understanding.

If you think that you need to make a change quickly, probe the reasons - is the urgency real? Will the effects of agreeing a more sensible time-frame really be more disastrous than presiding over a disastrous change? Quick change prevents proper consultation and involvement, which leads to difficulties that take time to resolve.

For complex changes, refer to the process of project management, and ensure that you augment this with consultative communications to agree and gain support for the reasons for the change. Involving and informing people also creates opportunities for others to participate in planning and implementing the changes, which lightens your burden, spreads the organizational load, and creates a sense of ownership and familiarity among the people affected.



See also the excellent free decision-making template, designed by Sharon Drew Morgen, with facilitative questions for personal and organizational innovation and change.

To understand more about people's personalities, and how different people react differently to change, see the personality styles section.

For organizational change that entails new actions, objectives and processes for a group or team of people, use workshops to achieve understanding, involvement, plans, measurable aims, actions and commitment. Encourage your management team to use workshops with their people too if they are helping you to manage the change.

You should even apply these principles to very tough change like making people redundant, closures and integrating merged or acquired organizations. Bad news needs even more careful management than routine change. Hiding behind memos and middle managers will make matters worse. Consulting with people, and helping them to understand does not weaken your position - it strengthens it. Leaders who fail to consult and involve their people in managing bad news are perceived as weak and lacking in integrity. Treat people with humanity and respect and they will reciprocate.

Be mindful that the chief insecurity of most staff is change itself. See the process of personal change theory to see how people react to change. Senior managers and directors responsible for managing organizational change do not, as a rule, fear change - they generally thrive on it. So remember that your people do not relish change, they find it deeply disturbing and threatening. Your people's fear of change is as great as your own fear of failure.

Review of Literatures

Edmonds (2011) note that organizational transformation is both a remarkable feature and an attractive aspect for companies. The authors also noted that systemic reform occurs in various dimensions, from minor administrative modifications in one unit to far-reaching adjustments. An organization that plans to reinvent itself is commonly used as an advancement strategy. Organizational shifts will, in the long term, impact the whole business and disrupt the working community.

Mengue et al (2010) too described organizational reform as a modification of a key feature of the activity of an organization. Structure, technology, philosophy, administration are some key aspects. It is not the extent of the transition that is significant but the impact it would have in the organization.

Smith et al. (2015) defined change management as a mechanism by which a company moves its current position to another favorable situation during a transitional phase. As such, change management is a method of continually renovating the course, function, and skills of an enterprise to address the constantly evolving demands of external and internal forces.



In Galloway (2017), the gap between change management and leadership was drawn. Dived et al. (2015) recommended a set of procedures, tools, and instruments designed to preserve under control the stages of transformation. These tools are designed to monitor employee responses and avoid superfluously large costs associated with a transition failure. Conversely, changing leading from their point of view is concerned about the talents, knowledge, and actions that a leader would effectively initiate, drive, and implement sustained improvement in an organization.

Responsibility For Managing Change

The employee does not have a responsibility to manage change - the employee's responsibility is no other than to do their best, which is different for every person and depends on a wide variety of factors (health, maturity, stability, experience, personality, motivation, etc). Responsibility for managing change is with management and executives of the organisation - they must manage the change in a way that employees can cope with it. The manager has a responsibility to facilitate and enable change, and all that is implied within that statement, especially to understand the situation from an objective standpoint (to 'step back', and be non-judgmental), and then to help people understand reasons, aims, and ways of responding positively according to employees' own situations and capabilities. Increasingly the manager's role is to interpret, communicate and enable - not to instruct and impose, which nobody really responds to well.

Change must involve the people - Change must not be imposed upon the people

Be wary of expressions like 'mindset change', and 'changing people's mindsets' or 'changing attitudes', because this language often indicates a tendency towards imposed or enforced change (theory x), and it implies strongly that the organization believes that its people currently have the 'wrong' mindset, which is never, ever, the case. If people are not approaching their tasks or the organization effectively, then the organization has the wrong mindset, not the people. Change such as new structures, policies, targets, acquisitions, disposals, re-locations, etc., all create new systems and environments, which need to be explained to people as early as possible, so that people's involvement in validating and refining the changes themselves can be obtained.

Whenever an organization imposes new things on people there will be difficulties. Participation, involvement and open, early, full communication are the important factors.

Workshops are very useful processes to develop collective understanding, approaches, policies, methods, systems, ideas, etc. See the section on workshops on the website.

Staff surveys are a helpful way to repair damage and mistrust among staff - provided you allow people to complete them anonymously, and provided you publish and act on the findings.



Management training, empathy and facilitative capability are priority areas - managers are crucial to the change process - they must enable and facilitate, not merely convey and implement policy from above, which does not work.

You cannot impose change - people and teams need to be empowered to find their own solutions and responses, with facilitation and support from managers, and tolerance and compassion from the leaders and executives. Management and leadership style and behavior are more important than clever process and policy. Employees need to be able to trust the organization.

The leader must agree and work with these ideas, or change is likely to be very painful, and the best people will be lost in the process.

Change Management Principles:

1. At all times involve and agree support from people within system (system = environment, processes, culture, relationships, behaviours, etc., whether personal or organisational).
2. Understand where you/the organisation is at the moment.
3. Understand where you want to be, when, why, and what the measures will be for having got there.
4. Plan development towards above No.3 in appropriate achievable measurable stages.
5. Communicate, involve, enable and facilitate involvement from people, as early and openly and as fully as is possible.

John P Kotter's eight steps to successful change

American John P Kotter (b 1947) is a Harvard Business School professor and leading thinker and author on organizational change management. Kotter's highly regarded books 'Leading Change' (1995) and the follow-up 'The Heart Of Change' (2002) describe a helpful model for understanding and managing change. Each stage acknowledges a key principle identified by Kotter relating to people's response and approach to change, in which people see, feel and then change.

Kotter's eight step change model can be summarised as:

1. **Increase urgency** - inspire people to move, make objectives real and relevant.
2. **Build the guiding team** - get the right people in place with the right emotional commitment, and the right mix of skills and levels.
3. **Get the vision right** - get the team to establish a simple vision and strategy, focus on emotional and creative aspects necessary to drive service and efficiency.



4. **Communicate for buy-in** - Involve as many people as possible, communicate the essentials, simply, and to appeal and respond to people's needs. De-clutter communications - make technology work for you rather than against.
5. **Empower action** - Remove obstacles, enable constructive feedback and lots of support from leaders - reward and recognise progress and achievements.
6. **Create short-term wins** - Set aims that are easy to achieve - in bite-size chunks. Manageable numbers of initiatives. Finish current stages before starting new ones.
7. **Don't let up** - Foster and encourage determination and persistence - ongoing change - encourage ongoing progress reporting - highlight achieved and future milestones.
8. **Make change stick** - Reinforce the value of successful change via recruitment, promotion, new change leaders. Weave change into culture.

Ideas on illustrating change management issues

When people are confronted with the need or opportunity to change, especially when it's 'enforced', as they see it, by the organization, they can become emotional. So can the managers who try to manage the change. Diffusing the emotional feelings, taking a step back, encouraging objectivity, are important to enabling sensible and constructive dialogue. To this end, managers and trainers can find it helpful to use analogies to assist themselves and other staff to look at change in a more detached way.

On this site there are several illustrations which can be used for this purpose, depending on the type of change faced, and the aspect that is to be addressed. Here are a few examples, useful for team meetings, presentations, one-to-one counselling or self-reminder, particularly to help empathise with others facing change:

On the Stories section look at 'Murphy's Plough' (negative thinking = obstacle to change) and 'We've always done it that way' (not questioning need for change). Both good aids for understanding and explaining why people - all of us - find it difficult to change assumptions, conditioned thinking, habit, routine, etc.

Look also at the Monkey Story, as to how policies, practices, attitudes and even cultures can become established, and how the tendency is to accept rather than question.

Just as the state of 'unconscious incompetence' needs to be developed into 'conscious competence' to provide a basis for training, so a person's subjective emotion needs to be developed into objectivity before beginning to help them handle change. None of us is immune from subjectivity, ignorance or denial. The lessons and reminders found in stories and analogies can help to show a new clear perspective.



The Ass and the Mule (agree to reasonable change now or you can risk far worse enforced change in the future)

Job reorganization, Task analysis, Job transfer due to IT Development or Outsourcing etc.

It's not always easy or perhaps even possible to consider matters at such depth, but try to if you can, or try to persuade others above in their ivory towers to think about the fundamental integrity of the situation, instead of short-term profit, or satisfying greedy shareholders.

There are various approaches to task analysis and job reorganization, whether prompted by outsourcing or IT development. Generally change process of this sort is pragmatic, and it's difficult to identify transferable processes, templates, etc. Examples of projects don't generally find their way into the public domain, although the likelihood is increasing of government project pdf's becoming available on the web as this sort of information is increasingly required to be available to the public. IT vendor case studies and trade journals of the IT and outsourcing sectors can also provide indicators of best practice or transferable processes. There are some useful software tools now available, which are helpful, especially if the change involves a high level of complexity and a large scale.

As a broad guide when managing this sort of change, these aspects are important for the process:

- Really understand and clarify mutual expectations about the level of detail and cost that the project requires. Sometimes it's possible to see it what you need on a table napkin. The organisational context, and other strategic drivers, personalities and politics are often more significant influences than the task analysis.
- If you are a consultant or project manager, agree expectations on a pragmatic basis. Agree the templates and systems to be used and the the level of report data required for the decisions to be made.
- Assume that the situation can be improved - it generally can be, so while it's essential to capture all activities based on current jobs, many of these can be absorbed, superseded, updated, etc., when you begin to look at the ideal situation ('blank sheet of paper') possibilities, so;
- A new overview analysis enables fresh unencumbered look at the whole, which suggests new and better ways of doing things. A flip chart and a few creative minds are the main pre-requisites. It makes a great workshop session and is good for creating ownership and buy-in for major change. It's a good process also to cascade down to departments to bring out ideas for improved processes and new ways of doing things.
- In terms of capturing all current processes and inputs, the individual job analysis templates need to enable jobs to be broken down into sub-tasks, and elements within sub-tasks.
- This is a tricky one, and not practicable in certain X-Theory cultures, nevertheless, be aware of the high probability of upsetting people whose jobs are threatened by change and try to develop a



way of anticipating and reducing damaging fall-out. Treat people at risk with the respect they deserve and avoid keeping them in the dark - involve threatened people wherever possible so they can see what's happening and why. If possible encourage the executive team to take the same humane approach, and try to establish counselling and support resources if none exist already.

- Analyses are more helpful if they identify critical vs essential task elements - this will help you to help the decision-makers to be more pragmatic (not least because by applying pressure to some of the 'essential' elements will reveal them to be habitual dispensable or traditional replaceable elements).
- Flow diagrams identify subtask linkage (inter and intra), variation and chronology.
- Behaviour needs identifying aside from processes.
- Standards, performance tolerance, % reliability, etc., should be indicated in task analysis as applicable to the sub-task or activity concerned.

Other points about people and change:

Strong resistance to change is often rooted in deeply conditioned or historically reinforced feelings. Patience and tolerance are required to help people in these situations to see things differently. Bit by bit.

Organizational change, Training and Learning

Here are some modern principles for organizational change management and effective employee training and development. These ideas will not appeal to old-style paternalistic X-Theory organizations and cultures, unless they want to change for the better. These principles are for forward-thinking emotionally-mature organizations, who value integrity above results, and people above profit.

It's the future. Triple Bottom Line (Profit People Planet), Corporate Responsibility, Fair Trade, Sustainability, etc - these are not just fancy words - they are increasingly and ever more transparently becoming the criteria against which modern successful organisations are assessed - by customers, employees, and the world at large.

This is not to say that results and profit don't matter, of course they do. The point is that when you value integrity and people, results and profit come quite naturally.

Organizational change, Training and Development, and Motivation

Conventional organizational change, which typically encompasses training and development, and 'motivation', mostly fails.

Why?



Are the people stupid? Can they not see the need for change? Do they not realise that if the organization cannot make these changes then we will become uncompetitive. We will lose market share. There will be job cuts. We will eventually go out of business. Can they not see it?

Actually probably not. Or more precisely, your people look at things in a different way.

Bosses and organizations still tend to think that people whom are managed and employed and paid to do a job should do what they're told to do. We are conditioned from an early age to believe that the way to teach and train, and to motivate people towards changing what they do, is to tell them, or persuade them. From our experiences at school we are conditioned to believe that skills, knowledge, and expectations are imposed on or 'put into' people by teachers, and later, by managers and bosses in the workplace.

But just because the boss says so, doesn't make it so. People today have a different perspective. And when you think about it, they're bound to.

Imposing new skills and change on people doesn't work because:

- It assumes that people's personal aims and wishes and needs are completely aligned with those of the organization, or that there is no need for such alignment, and
- It assumes that people want, and can assimilate into their lives, given all their other priorities, the type of development or change that the organization deems appropriate for them.

Instead, organizations, managers, bosses and business owners would do better to think first about exploring ways to align the aims of the business with the needs - total life needs - of their people. Most people who go to work are under no illusion that their main purpose is to do what their manager says, so that the organization can at the end of the year pay outrageously high rewards to greedy directors, and a big fat dividend to the shareholders. We (the workers) work so that other more gifted or fortunate or aggressive people can profit because of our efforts and god help you if you are running a management buyout company, intent on floating or selling out in the next two-to-five years, making the MBO equity-holders millionaires, and leaving the employees, on whose backs these scandalous gains have been made, up the creek without a paddle, at the mercy of the new owners.

How on earth do you expect decent hardworking people to align with those aims?

It's time for a radical re-think, before we all disappear up our own backsides...

Fact one:

People will never align with bad aims. Executive greed, exploitation, environmental damage, inequality, betrayal, false promises are transparent for all decent folk to see:



"Oh you want me to do this training, and adjust to your changes, so I can make more money for you and the parasites who feed off this corporation? Sorry, no can do. I've got my own life to lead thanks very much."

And that's if you are lucky. Most staff will simply nod and smile demurely as if in servile acceptance. If they still wore caps they'd doff them.

And then nothing happens. Of course nothing happens. The people can't be bothered.

"If the directors are too arrogant and stupid to understand why, then why should we tell them?"

Re-assess and re-align your organization's aims, beliefs, and integrity - all of it - with your people. Then they might begin to be interested in helping with new skills and change, etc.

Fact two:

People can't just drop everything and 'change', or learn new skills, just because you say so. Even if they want to change and learn new skills, they have a whole range of issues that keep them fully occupied for most of their waking hours - which were dumped on them by the organization in the first place.

So you want me to attend this training course, so you can earn more (etc, etc), and when I come back from two days away in some rotten hotel my personal pile of meaningless jobs will just have magically disappeared will it? And when I come to try to implement these new skills and make all these new things happen, everyone will be completely in step will they? Pull the other one. Again, no can do."

The reason why consulting with people is rather a good idea is that it saves you from yourself and your own wrong assumptions. Consulting with people does not mean that you hand over the organization to them - they wouldn't want the corporation if you paid them anyway. No, consulting with people gives you and them a chance to understand the implications and feasibility of what you think needs doing. And aside from this, consulting with people, and helping them to see things from both sides generally throws up some very good ideas for doing things better than you could have dreamt of by yourself. It helps you to see from both sides too.

Fact three:

Organizations commonly say they don't have time to re-assess and re-align their aims and values, etc., or don't have time to consult with people properly, because the organization is on the edge of a crisis.

Well whose fault is that? Organizations get into crisis because they ignore facts one and two. Ignoring these facts again will only deepen the crisis.



Crisis is no excuse for compromising integrity. Crisis is the best reason to re-align your aims and consult with people. Crisis is wake-up and change the organization and its purpose - not change the people. When an organization is in crisis, the people are almost always okay - it'll be the organizational purpose and aims that stink.

So, whatever way you look at organizational change, you are kidding yourself if you think you can come up with a plan for change and then simply tell or persuade your people to implement it. Instead, start by looking at your organization's aims and values and purposes. What does your organization actually seek to do? Whom does your organization benefit? And whom does it exploit? Who are the winners, and who are the losers? Does your organization have real integrity? Are you proud of the consequences and implications of what your organization does? Will you be remembered for the good that you did - in the widest possible sense of doing good - while you were in charge and in your position of responsibility?

References

- Rebert A. Paton & James Mccaman, "Change Management: A guide to Effective implementation", Himalaya Publishing Houses.
- John P. Kotter, "Leading Change", Taxmann Allied Services.
- Marshall Scott Poole & Andrew H. "Organizational Change & Innovation", Himalaya Publishing Houses.
- John Hayes," The theory and Practice of change management", Tata Mccraw Hill Publishing, 6th Edition, 2022.
- Peter F. Gallagher," Change management handbook: The Leadership of Change", Tata Mccraw Hill Publishing, Volume 3 , August 2019.



EVALUATION OF FINANCIAL PERFORMANCE OF PUBLIC SECTOR BANKS IN INDIA USING CAMEL MODEL (2019-2023)

By

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Abstract

This research evaluates the financial performance of public sector banks (PSBs) in India over the past five years using the CAMEL model, which assesses a bank's performance based on Capital Adequacy, Asset Quality, Management Quality, Earnings, and Liquidity. The study focuses on five major PSBs: State Bank of India (SBI), Punjab National Bank (PNB), Bank of Baroda (BOB), Canara Bank, and Union Bank of India. By analysing key financial ratios from 2019 to 2023, the research identifies trends, strengths, and weaknesses in their financial health. The findings underscore the importance of effective management, robust capital adequacy, and high asset quality in ensuring financial stability. The study offers insights for policymakers and financial strategists to enhance the resilience of the banking sector.

Keywords: Financial Performance, CAMEL Model, Public Sector Banks, Capital Adequacy, Non-Performing Assets (NPAs).

Introduction

Public sector banks (PSBs) are integral to India's financial system, providing essential banking services and supporting economic development. Given their pivotal role, evaluating their financial performance is essential to ensure they remain resilient in a dynamic economic environment. The CAMEL model is a well-established framework for assessing bank performance based on five key indicators: Capital Adequacy, Asset Quality, Management Quality, Earnings, and Liquidity. This research evaluates the financial health of five major PSBs—SBI, PNB, BOB, Canara Bank, and Union Bank of India—over the period 2019-2023 using relevant financial ratios.

The Indian banking sector has undergone significant transformations in recent years, including mergers, technological advancements, and regulatory changes. These developments have profound implications for the financial health of PSBs. Therefore, a comprehensive evaluation using the CAMEL model provides a nuanced understanding of their performance and areas requiring attention.



Literature Review

The CAMEL Model

Developed by U.S. banking regulators in the 1970s, the CAMEL model serves as a supervisory tool to assess the financial health of banks. Its five components are:

- **Capital Adequacy:** Measures a bank's ability to absorb potential losses and withstand financial stress. A strong capital base is essential for maintaining depositor confidence and complying with regulatory requirements.
- **Asset Quality:** Evaluates the risk associated with a bank's loan portfolio and the level of non-performing assets (NPAs). High asset quality indicates effective credit risk management and a lower likelihood of loan defaults.
- **Management Quality:** Assesses the effectiveness of a bank's management in implementing strategies, controlling risks, and achieving organizational goals. Strong management is crucial for operational efficiency and long-term sustainability.
- **Earnings:** Analyses a bank's profitability through key ratios such as Return on Assets (ROA) and Net Interest Margin (NIM). Consistent earnings are vital for growth, capital augmentation, and shareholder value.
- **Liquidity:** Evaluates a bank's ability to meet short-term obligations without compromising its financial position. Adequate liquidity ensures that a bank can handle unexpected withdrawals and financial emergencies.

Empirical Studies

Several studies have applied the CAMEL model to assess the financial performance of banks:

- **Choudhury (2017):** Investigated the impact of capital adequacy on the financial performance of Indian PSBs and found that higher capital adequacy ratios significantly enhance financial stability and performance.
- **Reddy and Chalam (2019):** Highlighted asset quality and earnings as critical factors for banking stability, emphasizing the need for effective NPA management and profitability enhancement strategies.
- **Gupta and Aggarwal (2020):** Concluded that management efficiency and liquidity are key predictors of profitability in Indian banking, suggesting that banks with efficient management practices and strong liquidity positions tend to perform better financially.

These studies underscore the importance of maintaining strong capital reserves, reducing NPAs, and improving management efficiency to ensure bank stability and profitability.



Objectives

1. To assess the financial performance of five selected PSBs from 2019 to 2023 using the CAMEL model.
2. To evaluate Capital Adequacy by analysing the Capital Adequacy Ratio (CAR).
3. To examine Asset Quality using NPA ratios and their impact on financial health.
4. To assess Management Quality through efficiency ratios and operational metrics.
5. To measure Earnings using ROA and NIM.
6. To analyse Liquidity positions through relevant liquidity ratios.
7. To provide recommendations for improving financial stability by enhancing asset quality, profitability, and liquidity.

Research Methodology

This study adopts a quantitative research methodology to analyse the financial performance of five public sector banks using the CAMEL model. The sample includes the following banks:

- State Bank of India (SBI)
- Punjab National Bank (PNB)
- Bank of Baroda (BOB)
- Canara Bank
- Union Bank of India

The duration of the study is five years, from 2019 to 2023. The study collects secondary data from the annual reports of these banks, financial statements, and public databases. The following CAMEL ratios will be used to assess the financial performance of the banks:

- **Capital Adequacy Ratio (CAR):** Measures the capital in relation to the bank's risk-weighted assets.
Formula: $CAR = (\text{Tier 1 Capital} + \text{Tier 2 Capital}) / \text{Risk-Weighted Assets}$
- **Non-Performing Assets (NPA) Ratio:** Measures the quality of assets by assessing the proportion of loans that are not performing.
Formula: $NPA \text{ Ratio} = (\text{Gross NPAs} / \text{Total Advances}) \times 100$
- **Return on Assets (ROA):** Indicates the bank's ability to generate profit from its assets.
Formula: $ROA = \text{Net Profit} / \text{Total Assets}$
- **Net Interest Margin (NIM):** Measures the difference between interest income and interest expense as a percentage of total assets.
Formula: $NIM = (\text{Interest Income} - \text{Interest Expense}) / \text{Average Total Assets}$



- **Liquidity Ratio:** Measures the bank's ability to meet short-term obligations.

Formula: $\text{Liquidity Ratio} = \frac{\text{Liquid Assets}}{\text{Total Assets}}$

Data from the last five years will be analysed using descriptive and inferential statistical tools.

Results

The results of the analysis are presented based on the calculated financial ratios of the five banks. A comparative analysis is performed to identify the performance trends over the last five years.

- **Capital Adequacy**

All five banks demonstrated a capital adequacy ratio above the minimum requirement of 9%, with SBI showing the highest ratio, indicating strong capital buffers.

- **Asset Quality**

The NPA ratio revealed that Union Bank of India and PNB had higher NPAs, indicating challenges in asset quality, while SBI and Canara Bank maintained relatively low NPAs.

- **Earnings**

ROA and NIM ratios indicated that SBI and Canara Bank had better earnings performance compared to the other banks, with Bank of Baroda showing a declining trend in these metrics.

- **Liquidity**

Liquidity ratios were stable for all banks, but SBI showed a slightly higher liquidity ratio, signifying its better preparedness to meet short-term obligations.

Discussion

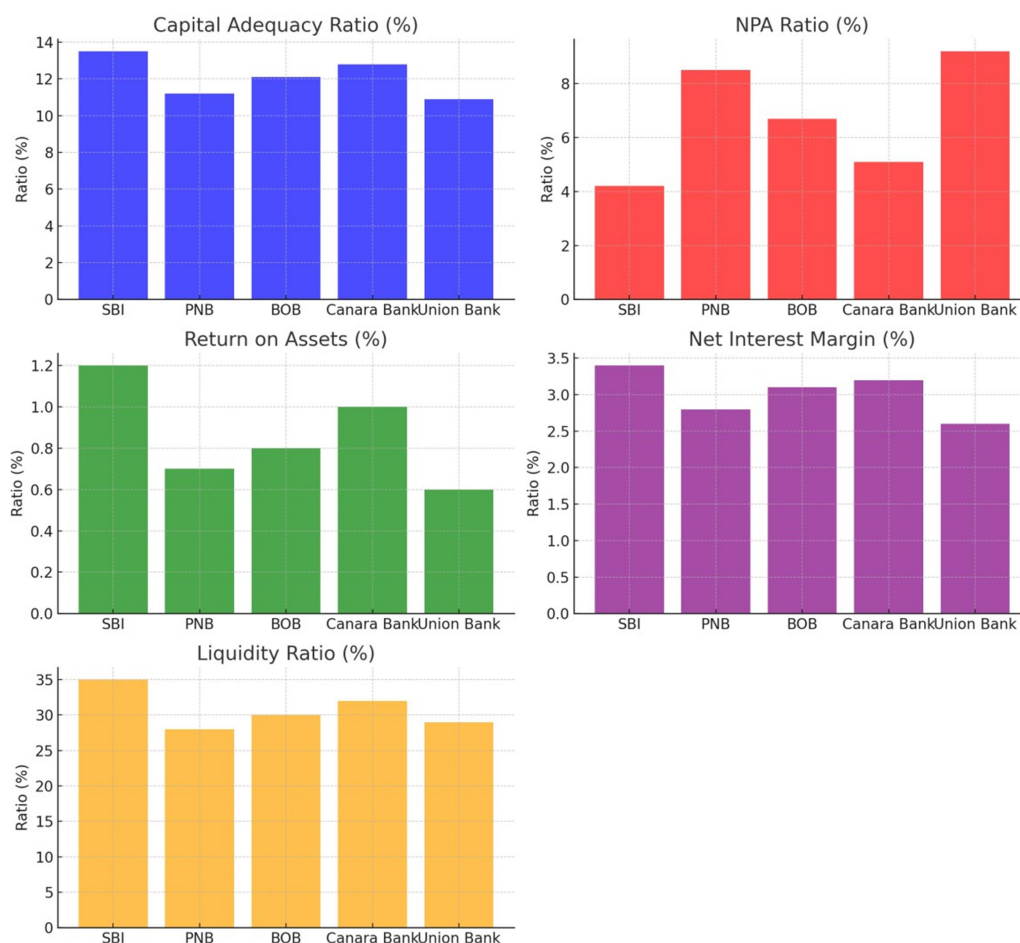
The study found that the financial performance of the five public sector banks varied significantly across the different components of the CAMEL model. Capital adequacy was strength for all banks, particularly SBI, which maintained the highest capital reserves. This reflects the robustness of these banks in terms of financial stability.

Asset quality, as indicated by the NPA ratio, was an area of concern, especially for Union Bank of India and PNB, which experienced higher levels of NPAs. These high NPAs can negatively impact the profitability and operational efficiency of these banks.

In terms of earnings, SBI and Canara Bank outperformed the others, as evidenced by their higher ROA and NIM. On the other hand, Bank of Baroda showed a decline in earnings, which could be attributed to higher operating costs or a decrease in the efficiency of asset utilization.



Financial Performance of Public Sector Banks (2019-2023)



Liquidity was satisfactory across all banks, but the higher liquidity ratio of SBI suggests it has better financial flexibility, which is crucial in times of economic uncertainty.

Conclusion

The evaluation of financial performance using the CAMEL model has provided valuable insights into the health of public sector banks in India. Among the five banks studied, State Bank of India emerged as the top performer, excelling in capital adequacy, earnings, and liquidity. However, the study also highlighted the challenges faced by banks such as PNB and Union Bank of India, particularly concerning asset quality and NPAs.

The findings underscore the importance of managing asset quality and maintaining adequate capital reserves to safeguard the banks' financial stability. Further research could explore the impact of regulatory changes on the financial performance of public sector banks and compare them with private sector banks.



References

- Choudhury, R. (2017). Impact of capital adequacy on PSBs in India. *Journal of Banking Studies*, 45(3), 101-120.
- Reddy, K., & Chalam, V. (2019). Asset quality and earnings in Indian banks. *Financial Research Quarterly*, 30(2), 58-74.
- Gupta, A., & Aggarwal, S. (2020). Management efficiency and liquidity in the Indian banking sector. *International Journal of Finance*, 38(4), 45-67.

**ANALYZING TRENDS IN TAX REFORMS OF INDIAN TAXATION SYSTEM**

By

Durga M. Ghanchi**Research Scholar****School of Commerce, Gujarat University, Gujarat, India****Abstract**

This paper analyses the impact of tax reforms on India's direct and indirect tax revenues from 2004-05 to 2023-24, focusing on the shift in the composition of indirect tax revenue. The study shows that direct taxes, especially corporate tax, have consistently outpaced indirect taxes, with GST becoming a major contributor to indirect tax revenue. The direct tax-to-GDP ratio has ranged from 2.5% to 6%, while the indirect tax-to-GDP ratio has fluctuated between 4.74% and 9.66%. The analysis of monthly GST collections from 2017-18 to 2024-25 identifies trends and the impact of the COVID-19 pandemic. India's tax growth pattern is characterized by both progressive and cyclical trends, influenced by economic reforms, policy changes, and the broader economic environment. The introduction of GST, digitization of tax collection, and increased compliance have played key roles in improving tax growth, although challenges remain in achieving consistent growth due to economic fluctuations. Overall, tax reforms have strengthened revenue generation, streamlined tax administration, and contributed to fiscal stability in India.

Keywords: - Direct Tax, Indirect Tax, GDP**Introduction**

Taxation plays a crucial role in a nation's economic framework, serving as both a primary revenue source and a key instrument for fiscal policy implementation. The classification of taxes into direct and indirect categories highlights their distinct economic functions, with direct taxes like income and corporate taxes promoting wealth redistribution, while indirect taxes such as the Goods and Services Tax (GST) ensure a stable revenue but are often regressive. The approach to tax reforms has evolved across nations and over time periods, as noted by Rao (2000), who stated that "the thrust of reforms has differed from time to time depending on the strategy of development and philosophy of the times." In India, the tax system has undergone significant transformations to enhance efficiency, equity, and economic stability. These reforms focus on reducing fiscal deficits through improved



expenditure management, broadening the tax base, modernizing administrative mechanisms, and strengthening Centre- State financial relations.

Significance of the study

This study explores the trends and structures of direct and indirect taxation in India, focusing on their impact on the economy and their evolution. By analysing the historical progression of tax policies, the research aims to provide insights into their effectiveness and equity. The findings are intended to assist policymakers, academicians, and stakeholders in optimizing India's tax framework for sustainable growth, greater equity, and improved compliance.

Literature Review

(Rao, 2000) analysed the evolution of India's tax system since the early 1990s, highlighting the introduction of new direct and indirect taxes and their implications on revenue and equity. Despite initial successes, the study concluded that significant challenges remained in improving the efficiency and effectiveness of the tax system. (Rani, 2014) further examined key tax reforms post-1991, noting that these reforms expanded the tax base, strengthened enforcement, and boosted government revenue. The proposed Direct Tax Code (DTC) aimed to simplify direct taxes and improve compliance. (Kanungo, 2019) explored tax reforms between 2013-14 and 2017-18, emphasizing that the full benefits of these reforms could only be realized with effective implementation, and highlighted the need to enhance the tax-to-GDP ratio for stronger economic development. (Samantara, 2021) focused on simplifying direct tax laws, addressing tax evasion, and rationalizing indirect taxes to strengthen domestic industries and expand the tax base. (Ghimire, 2020) conducted a comparative analysis of indirect tax collections from 2000-01 to 2019-20, revealing uneven growth rates, declines in certain years, and a decrease in the share of indirect taxes in gross tax revenue from 63% to 46%. The study found that despite reforms, revenue productivity remained stagnant, with the indirect tax-GDP ratio fluctuating between 3.5% and 5.5%.

In more recent studies, (Razzaque et al., 2024) examined the impact of indirect taxes on poverty, inequality, and economic growth. They found that countries more reliant on indirect taxes tend to have higher poverty rates and inequality. They stressed the need for a balanced tax approach to reduce poverty. (Swathy krishna & Shacheendran V, 2024) explored the relationship between GST revenue growth and India's economic growth using time-series data from 2017 to 2021, finding a significant positive impact of GST revenue growth on economic growth. (Abd Hakim et al., 2022) compared the impact of direct and indirect taxes on economic development in developed and



developing countries, concluding that direct taxes positively impact developed countries' economies but negatively affect those of developing countries. They emphasized that differences in tax structures and socio-political factors shape economic growth differently across countries.

Research Methodology

Research Objectives

1. To analyse the evolution and reforms of taxes in India.
2. To examine the trends and structure of direct and indirect taxation in India.
3. To analyse the effectiveness of tax reforms with the help of tax to GDP Ratio.
4. To evaluate the monthly GST collections from F.Y. 2017-18 to 2024-25 and identify significant trends or differences.

Research Design

This study adopts a descriptive and analytical approach to examine the evolution of Direct and Indirect Tax reforms in India and their contribution to the nation's GDP. The research relies exclusively on secondary data sourced from research publications, books, government reports, and reputable websites. To ensure clarity, the study employs percentage analysis, tables, and graphical representations for data visualization. Additionally, statistical tools such as one-way ANOVA, conducted using SPSS, are utilized to identify significant variations over time.

Analysis & Interpretation

This study analyses the evolution and reforms of India's taxation system, focusing on both direct and indirect taxes. The process of tax reforms began with the establishment of the Tax Reforms Committee, chaired by Raja J. Chelliah in 1991, which was tasked with reviewing and suggesting changes to India's tax structure. The journey of direct tax reforms continued with the Vijay Kelkar-led Task Force on Direct and Indirect Taxes in 2002, further shaping the country's fiscal framework. This research examines the structural changes and trends in taxation, highlighting key reforms like the introduction of GST and their impact on revenue generation. The effectiveness of these reforms will be assessed using the tax-to-GDP ratio to gauge fiscal efficiency. Additionally, the research evaluates monthly GST collections from FY 2017-18 to 2024-25, identifying significant trends and variations that reflect the performance and adaptability of the GST framework within India's broader economic context. By addressing these objectives, the study aims to provide a comprehensive understanding of



how tax reforms have influenced the fiscal structure, revenue patterns, and overall economic stability in India.

Table: - 1 Tax reforms over the times with challenges

Year	Reform	Key Points	Challenges Faced
Pre-Independence Era	Income Tax Act, 1860	Introduced for revenue generation.	Lack of awareness and compliance.
1922	Income Tax Act, 1922	Consolidation of earlier laws, systematic tax administration.	Complexity of rules, low compliance, limited tax base.
Post-Independence (1947-1961)	Various Amendments	Direct tax seen as a major revenue source.	High tax evasion due to limited enforcement mechanisms.
1961	Income Tax Act, 1961	Comprehensive framework replacing the 1922 Act.	Widespread tax evasion and loopholes.
1980	Reforms in Direct Taxation	Simplification of tax laws, introduction of PAN.	Resistance to PAN, lack of digital infrastructure.
1991	Economic Reforms	Reduction in tax rates, focus on voluntary compliance.	High levels of black money and tax evasion.
1996	Minimum Alternate Tax	Address tax avoidance by profitable companies.	Concerns among corporates about increased tax burden.
2000	Expansion of PAN usage	Linking PAN with financial transactions.	Resistance from taxpayers, limited digital awareness.
2000	Introduction of e-Filing	Digital filing of returns to enhance efficiency.	Lack of digital literacy, initial technical glitches.
2004-05	Securities Transaction Tax	Tax on sale of stocks/shares.	Opposition from market participants.
2005	VAT Implementation	Replaced state sales tax to eliminate cascading effect.	Resistance from states, lack of uniformity.
2009	Direct Tax Code (DTC) Proposal	Aimed at simplifying tax laws and reducing litigation.	Political resistance, delay in implementation.
2015	Corporate Tax Reforms	Reduced corporate tax for small companies to 25%.	Balancing fiscal deficit with reduced tax revenues.
2017	GST Implementation	Unified tax replacing multiple indirect taxes.	Initial compliance issues, resistance from businesses.
2020	Faceless Assessment	Technology-driven tax assessments to curb	Technological challenges, resistance from traditional



	Scheme	corruption.	systems.
2021	Introduction of AIS & TIS	New taxpayer reporting for enhanced transparency.	Concerns over data privacy and usability.
2022	Corporate Tax Rate Cuts	Lowered corporate tax rates for new manufacturing firms to 15%.	Impact on government revenue collection.
2022-2023	Rationalization of Personal Tax Slabs	Consideration of new income tax brackets.	Debate over effectiveness in improving tax compliance.
2022-2023	GST Refinements	Simplifying return filing and dispute resolution mechanisms.	Addressing classification disputes, reducing litigation.
2024	Income Tax Slab Adjustments	Revised income tax slabs under the new tax regime, effective from April 1, 2024.	Taxpayers needed to familiarize themselves with the new slabs and assess their tax liabilities
2025	Anticipated Reforms in Union Budget 2025	Upcoming budget expected to focus on measures to stimulate economic growth, including potential income tax cuts for individuals earning between Rs 1 million to Rs 2 million annually. Aims to boost consumer discretionary demand	Balancing fiscal deficit concerns with the need to stimulate economic growth

Table 2: - Trend and structure of Direct Tax in India

Fiscal Year	GDP (in Crore)	Total Direct Tax	Corporate Tax	Personal Income tax	Other Direct Taxes
2004-05	63,78,072	1,32,771	82,680	49,268	823
2005-06	73,60,316	1,65,216	1,01,277	63,689	250
2006-07	87,43,875	2,30,181	1,44,318	85,623	240
2007-08	1,05,16,261	3,14,330	1,93,561	1,20,429	340
2008-09	1,06,88,345	3,33,818	2,13,395	1,20,034	389
2009-10	1,23,32,705	3,78,063	2,44,725	1,32,833	505
2010-11	1,48,42,519	4,45,995	2,98,688	1,46,258	1,049



2011-12	1,57,72,882	4,93,987	3,22,816	1,70,181	990
2012-13	1,59,02,699	5,58,989	3,56,326	2,01,840	823
2013-14	1,64,86,880	6,38,596	3,94,678	2,42,888	1,030
2014-15	1,77,85,059	6,95,792	4,28,925	2,65,772	1,095
2015-16	1,85,85,604	7,41,945	4,53,228	2,87,637	1,079
2016-17	2,05,97,782	8,49,713	4,84,924	3,49,503	15,286
2017-18	2,30,42,686	10,02,738	5,71,202	4,20,084	11,452
2018-19	2,36,70,140	11,37,718	6,63,572	4,73,179	967
2019-20	2,42,11,048	10,50,681	5,56,876	4,92,717	1,088
2020-21	2,41,89,412	9,47,176	4,57,719	4,87,560	1,897
2021-22	2,78,24,314	14,12,422	7,12,037	6,96,604	3,781
2022-23	2,94,25,403	16,63,686	8,25,834	8,33,307	4,545
2023-24	3,09,83,218	19,60,166	9,11,055	10,45,139	3,972

(Source: - Department of Revenue)

Figure: 1 Percentage share of Direct taxes in GDP

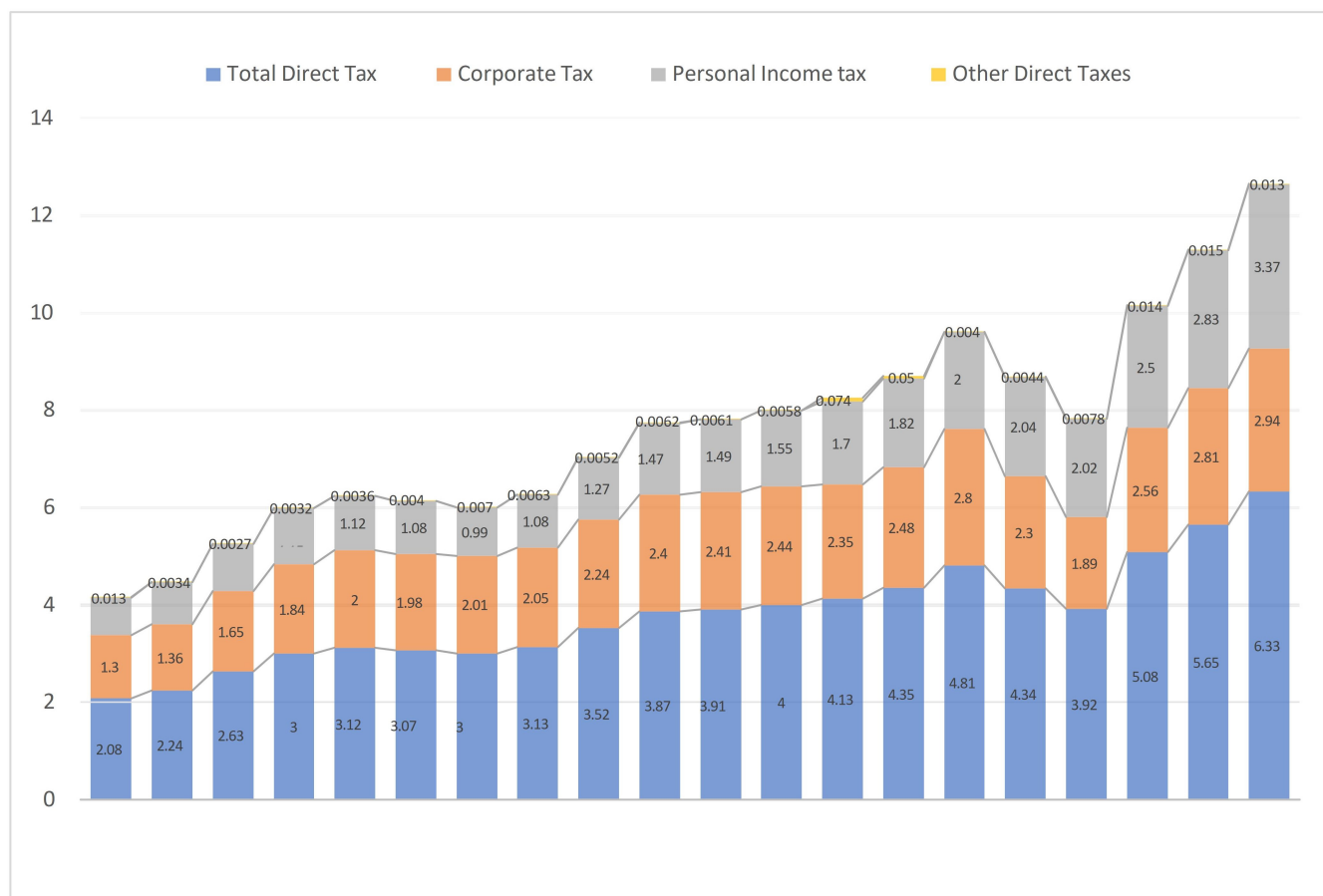




Table 1 and figure 1 shows a significant rise in direct tax collections in India as a percentage of GDP, increasing from around 4.16% in 2004-05 to approximately 6.32% in 2023-24. Total direct taxes grew from ₹1.32 lakh crore to ₹19.6 lakh crore during this period. Corporate tax, which contributed 2.84% of GDP in 2004-05, saw fluctuations and reached 2.94% in 2023-24, while personal income tax increased substantially from 1.55% to 3.37% of GDP, surpassing corporate tax in 2023-24. The 2008-09 financial crisis and the 2020-21 pandemic caused temporary dips, but the tax-to-GDP ratio rebounded, highlighting stronger compliance, economic growth, and tax reforms.

Table 3: - Trend and structure of Indirect Tax in India

Fiscal Year	GDP (in crore)	Total Indirect Tax	Customs	Union excise duty	Service Tax	Total GST
2004-05	6378072	171101	57566	99401	14134	-
2005-06	7360316	198767	65050	110665	23053	-
2006-07	8743875	240876	86304	117088	37484	-
2007-08	10516261	276696	102852	122711	51133	-
2008-09	10688345	264565	99708	104141	60716	-
2009-10	12332705	245367	83324	103621	58422	-
2010-11	14842519	345127	135813	138299	71016	-
2011-12	15772882	392444	149328	145607	97509	-
2012-13	15902699	474482	165346	176535	132601	-
2013-14	16486880	497060	172085	170197	154778	-
2014-15	17785059	544772	188016	188787	167996	-
2015-16	18585604	709825	210338	288073	211414	-
2016-17	20597782	861625	225370	381756	254499	-
2017-18	23042686	911653	129030	258834	81228	442561
2018-19	23670140	937321	117813	231045	6904	581559
2019-20	24211048	953513	109283	239452	6029	598749
2020-21	24189412	1074810	134750	389667	1615	548777
2021-22	27824314	1289662	199728	390808	1012	698114
2022-23	29425403	1381934	213371	319000	431	849132
2023-24	30983218	1495853	233067	305330	424	957032

(Source: - Department of Revenue)

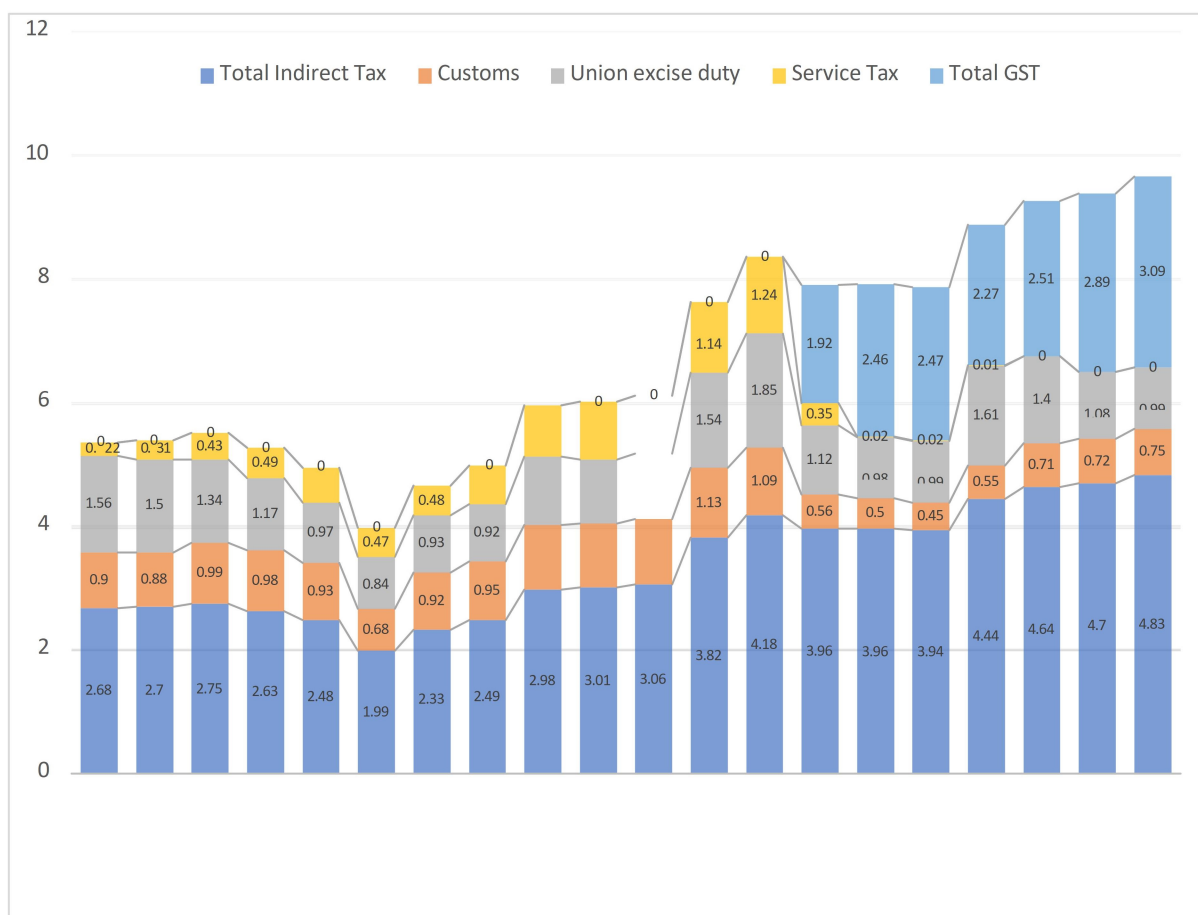


Figure: 2 Percentage share of Indirect taxes in GDP

Table 2 and Chart 2 provide a comprehensive overview of India's indirect tax-to-GDP ratio which increased from 4.74% in 2004-05 to 9.66% in 2023-24, reflecting significant policy changes. Before GST (2017-18), customs duties, excise duties, and service tax were key revenue sources, with notable growth between 2014-15 and 2016-17 due to fuel tax hikes and an expanding service sector. GST reform simplified taxation, improved compliance, and contributed 3.09% to GDP, though customs and excise revenues declined. Digital enforcement further strengthened collections. Despite disruptions from the 2008-09 financial crisis and 2020-21 pandemic, recoveries followed, highlighting the need to balance indirect and progressive direct taxes for equitable fiscal Policies.

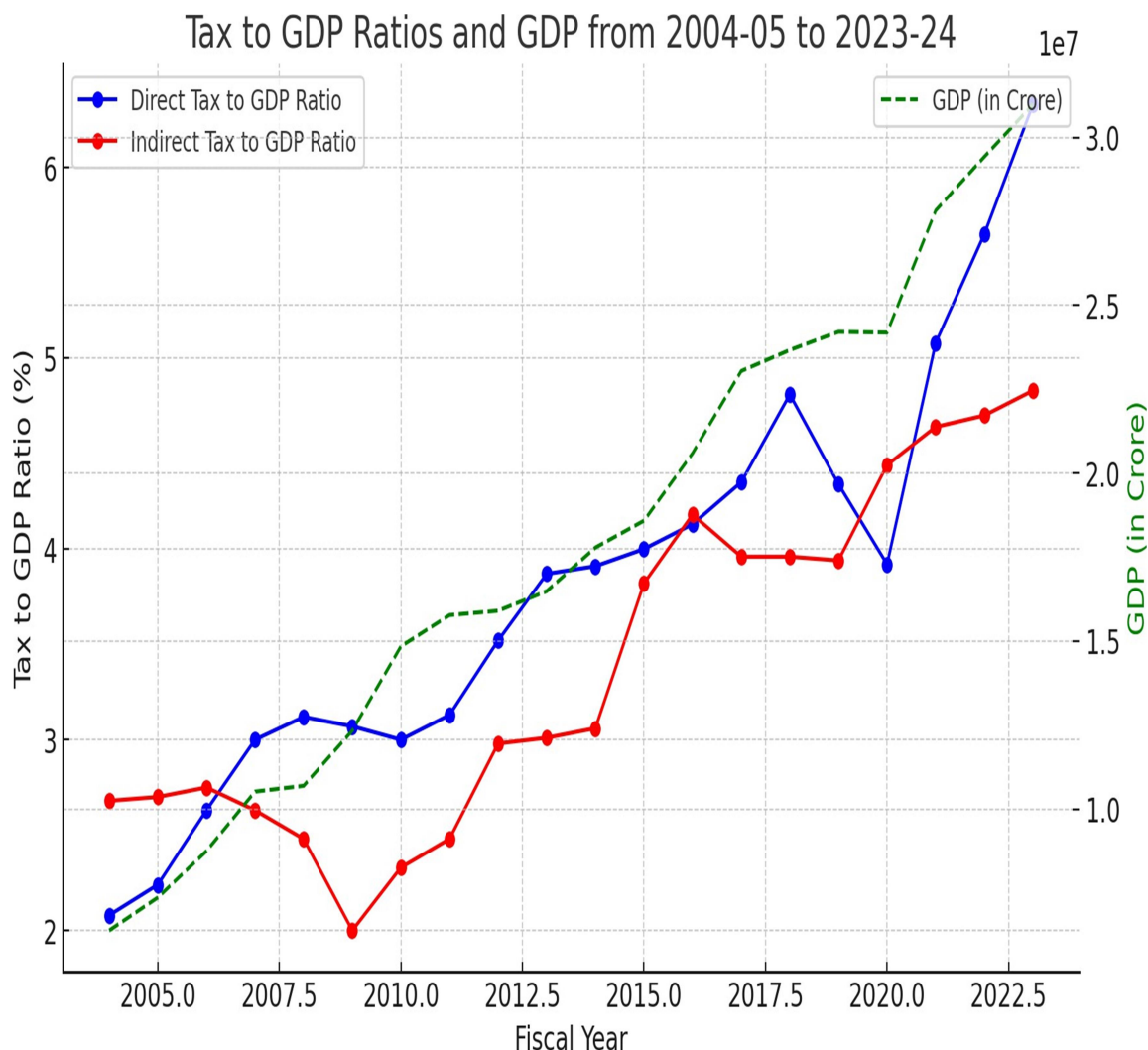


Table: - 4 Tax reforms with the help of tax to GDP Ratio

Fiscal Year	Total Direct Tax (in Crore)	Total Indirect Tax (in Crore)	GDP (in crore)	Tax to GDP ratio Direct Tax	Tax to GDP ratio Indirect Tax
2004-05	1,32,771	1,71,101	6378072	2.08	2.68
2005-06	1,65,216	1,98,767	7360316	2.24	2.70
2006-07	2,30,181	2,40,876	8743875	2.63	2.75
2007-08	3,14,330	2,76,696	10516261	3	2.63
2008-09	3,33,818	2,64,565	10688345	3.12	2.48
2009-10	3,78,063	2,45,367	12332705	3.07	2
2010-11	4,45,995	3,45,127	14842519	3	2.33
2011-12	4,93,987	3,92,444	15772882	3.13	2.48
2012-13	5,58,989	4,74,482	15902699	3.52	2.98
2013-14	6,38,596	4,97,060	16486880	3.87	3.01
2014-15	6,95,792	5,44,772	17785059	3.91	3.06
2015-16	7,41,945	7,09,825	18585604	4.00	3.82
2016-17	8,49,713	8,61,625	20597782	4.13	4.18
2017-18	10,02,738	9,11,653	23042686	4.35	3.96
2018-19	11,37,718	9,37,321	23670140	4.81	3.96
2019-20	10,50,681	9,53,513	24211048	4.34	3.94
2020-21	9,47,176	10,74,810	24189412	3.92	4.44
2021-22	14,12,422	12,89,662	27824314	5.08	4.64
2022-23	16,63,686	13,81,934	29425403	5.65	4.70
2023-24	19,60,166	14,95,853	30,98,3218	6.33	4.83



Figure 3: Trend line of Total Direct Tax and Indirect Tax



The provided table outlines India's Direct and Indirect Tax collections alongside GDP and the Tax- to-GDP ratios from 2004-05 to 2023-24. Over this period, both tax categories and GDP have shown consistent growth, but Direct Taxes have grown at a significantly faster rate, as reflected in the Tax-to-GDP ratio trends.

India's tax revenues have surged in recent years, with direct taxes outpacing indirect taxes due to economic growth, increased corporate profits, and rising personal incomes. Tax reforms, including simplified laws, lower tax rates, and digital compliance systems, have broadened the tax base and enhanced collections. Technology-driven administration and data analytics have improved tax tracking, reducing evasion. Additionally, a policy shift towards direct taxes—which are progressive and based on income—has further fueled their growth, while indirect taxes remain regressive and impact lower-income groups disproportionately.

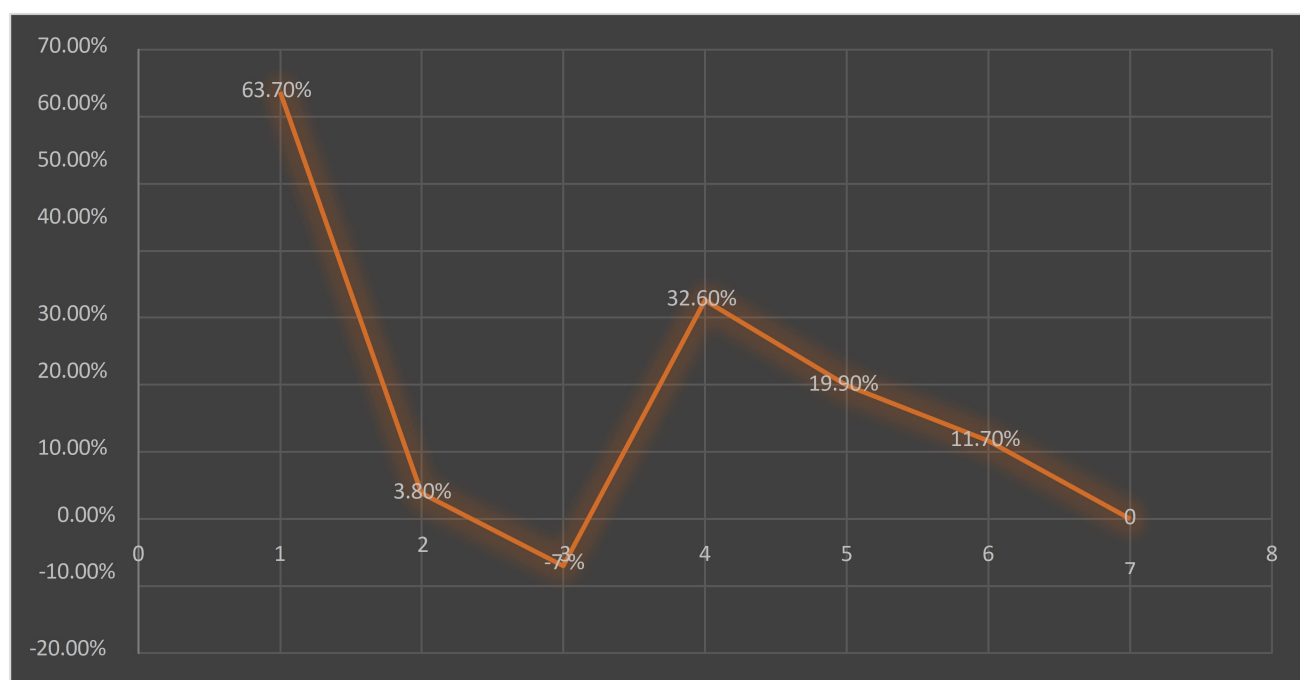


Table 4: Monthly GST Collection

Month/Year	2017-2018	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
April	-	1,03,459	1,13,865	32172	141384	1,67,540	1,87,035	210267
May	-	94,016	1,00,289	62151	102709	140885	1,57,090	172739
June	-	95,610	99,939	90917	92849	144616	1,61,497	173813
July	-	96,483	1,02,083	87422	116393	1,48,995	165105	182075
August	95,633	93,960	98,202	86449	112020	1,43,612	1,59,069	174962
September	94,064	94,442	91,916	95480	117010	1,47,686	1,62,712	173240
October	93,333	100,710	95,380	105155	130127	151718	1,72,003	1,87,346
November	83,780	97,637	1,03,492	104963	131526	1,45,867	1,67,929	1,82,269
December	84,314	94,726	1,03,184	115174	149507	1,49,507	1,64,882	1,76,857
January	89,825	1,02,503	1,10,818	119875	138394	1,55,922	174106	-
February	85,962	97,247	1,05,366	113143	133026	149577	168337	-
March	92,167	1,06,577	97,597	123902	142095	1,60,122	178484	-
Total	719,078	11,77,370	12,22,131	1136803	1507040	1806047	2018249	-
Y-O-Y Growth	-	63.70%	3.80%	-7%	32.60%	19.90%	11.70%	-

(Source : - <https://pib.gov.in/>)

Figure 4 Year on Year Growth of GST Collection





The table 4 and figure 4 presents monthly and yearly GST revenue data collection from 2017- 18 to 2024-25, showing an overall upward trend with fluctuations. A significant 63.7% growth was recorded in 2018-19, followed by a sharp slowdown in 2019-20 (3.8%) and a 7% decline in 2020-21, likely due to external disruptions such as the COVID-19 pandemic. A strong recovery occurred in 2021-22 (32.6%), followed by steady but slower growth in 2022-23 (19.9%) and 2023-24 (11.7%), indicating market stabilization. Monthly trends suggest higher performance in October to March, possibly due to seasonality. While 2024-25 shows continued improvement, full-year performance depends on the last quarter. The overall trend indicates resilience, with growth moderating after a strong post-pandemic rebound.

Significance difference between monthly GST Collection from F.Y. 2017-18 to 2024-25.

H0: -There is no Significance difference between monthly GST Collections

H1: - There is Significance difference between monthly GST Collections

Table 5: One-way ANOVA
ANOVA

Revenue	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.107E+10	6	1.518E+10	69.418	.000
Within Groups	1.793E+10	82	218646618.9		
Total	1.090E+11	88			

Table 5 reveals a highly statistically significant difference in monthly GST collections ($p < 0.00$), leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis. This indicates that the observed variation in GST collections is not due to random fluctuations but reflects significant underlying factors, including policy changes and economic shifts. The impact of the COVID-19 pandemic, while initially disruptive, further emphasizes GST's role in reshaping India's tax system. The statistical significance confirms the effectiveness of GST in improving tax revenue and streamlining India's taxation structure.

5. Findings & Conclusion

This paper highlights the significant impact of tax reforms on India's direct and indirect tax revenues from 2004-05 to 2023-24, with a marked shift in the composition of indirect tax revenue. The consistent growth of direct taxes, particularly corporate tax, outpaced indirect taxes, while the introduction of GST significantly improved indirect tax revenue, despite initial challenges. The analysis



shows a progressive shift in fiscal policy, with tax-to-GDP ratios reflecting the success of reforms in strengthening revenue generation and fiscal stability.

However, the regressive nature of indirect taxes requires a balanced approach for equity. The resilience of GST collections, especially post-pandemic, underscores the effectiveness of these reforms, yet continuous updates are essential to mitigate economic fluctuations and sustain growth.

References

- Hakim, T., Karia, A., David, J., Ginsad, R., Lokman, N., & Zolkafli, S. (2022). Impact Of Direct and Indirect Taxes on Economic Development: A Comparison Between Developed and Developing Countries, *Cogent Economics & Finance*. <https://doi.org/10.1080/23322039.2022.2141423>.
- Akhor, S. (2022). The Impact Of Tax Revenue On Economic Growth In Somalia. *Journal Of Economics And Sustainable Development*, November. <https://doi.org/10.7176/Jesd/13-2-07>
- Akhor, S. O., & Ekundayo, O. U. (2016). The Impact Of Indirect Tax Revenue On Economic Growth: The Nigeria Experience. *Igbinedion University Journal Of Accounting*,(2).
- Dhotre. A, Chinchodkar. K, Ghodake. A & Shinde.B. (2024).Contribution Of Goods And Services Tax (GST) Revenue: India's March Towards \$5 Trillion Economy. *Asian Journal Of Advanced Research And Reports*,18(8),45-53,Issn:2582-3248.
- Dangal, D., & Gajurel, R. (2019). Trends And Structures Of Direct Taxation And Its Share In Gross Domestic Product Of Nepal. *Economic Review Of Nepal*, 2(1).
- Ghimire, S. (2020). Implications Of Tax Reforms In Indirect Tax Collections Of The Government Of India During The Last Two Decades (2000-2020). *International Journal Of Engineering And Management Research*, 10(03), 18–30. <https://doi.org/10.31033/Ijemr.10.3.4>
- Hakim, T. A. (2020). Direct Versus Indirect Taxes: Impact On Economic Growth And Total Tax Revenue. *International Journal Of Financial Research*,11(2). <https://doi.org/10.5430/Ijfr.V11n2p146>
- Kadyan, J., Sobti, R., Jeneffa, L., & Naser, A. (2021). Analytical Review Of Direct Taxation In India. *International Research Journal Of Management Science & Technology*,12(09), ISSN: 2250 – 1959.
- Kanungo, E. (2019). An Empirical Study On The Journey Of Tax Reforms In India. *Commerce Today*, 13(01). <https://doi.org/10.29320/Inpgct.13.1.9>
- Rao. G & Rao. K. (2006). Trends and Issues In Tax Policy And Reform In India. *India Policy Forum*, 55–122.



- Rani, V. (2014). Tax Reforms In India Since 1991: An Overview. Vision : Journal Of Indian Taxation, 1(1), 36–54. <https://doi.org/10.17492/Vision.V1i1.2413>
- Rao, M. G. (2000). Tax Reform In India: Achievements And Challenges. Asia-Pacific Development Journal, 7(2).
- Rao, M. G. (2015). Tyranny Of The Status Quo: The Challenges Of Reforming The Indian Tax System. India Policy Forum, 47–102.
- Samantara, R. (2021). Tax Reforms In India: A Critical Analysis. International Journal In Management And Social Science, 09(1), ISSN: 2321-1784.
- Swathy Krishna & Shacheendran V. (2024). Impact Of Goods And Services Tax On The Economic Growth Of India. <https://doi.org/10.21648/Suei6723>

Websites

<https://www.worldbank.org/>
<https://pib.gov.in/>
<https://tutorial.gst.gov.in/>
<https://static.pib.gov.in/>
<https://economictimes.indiatimes.com/>
<https://www.elibrary.imf.org/>
<https://dea.gov.in/>
<https://cag.gov.in/>
<https://mospi.gov.in/>
<https://www.cbgaindia.org/>

**A STUDY OF DIGITAL PAYMENT METHODS IN INDIA**

By

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&

Dr. Ronak Rana**Professor****M.C. Shah Commerce College, Ahmedabad****Abstract**

This study examines the rise of digital payment methods in India, focusing on their technological, economic, and social impacts. It explores the factors driving adoption, such as government policies, advancements in technology, and shifting consumer and highlighting systems like UPI, mobile wallets, and QR codes. The research also show challenges including cyber security risks, digital literacy gaps, and infrastructure issues in rural areas. This research analyses the total usage of digital payment methods from 2017 to 2023 and compares the different methods uses between FY 2022-23 and FY 2023-24. Over this period, digital payment systems have seen significant growth, with UPI leading the way, recording a remarkable 54.35% Year-on-Year (YoY) growth. Other methods, like IMPS, NEFT, QR codes, and AePS, have also show solid growth. These trends highlight the increasing shift toward a cashless economy and greater financial inclusion, with digital payment methods becoming an integral part of the financial ecosystem in India.

Keyword: Digital payment methods, historical growth, impact, advantages and disadvantages, overall growth of digital payment method.

Introduction

Digital payments in India, supported by banks and connecting individuals and banks, have significantly transformed the country's financial landscape, changing how transactions are conducted for both businesses and individuals. India's digital payment drive began in 1991 with the RBI launching electronic funds transfer (EFT) systems for businesses and financial institutions. In 1998, the government established the National Payments Corporation of India, further modernizing India's financial infrastructure and creating a more inclusive digital payment system. In the early 2000s, credit and debit cards became popular in India, aligning with the global shift towards electronic transactions. This shift was further supported by the launch of the National Electronic Funds Transfer (NEFT) system in 2005, which allowed individuals to electronically transfer funds between banks. The introduction of these



systems marked a significant step in developing a digital payment infrastructure in India, laying the groundwork for the future growth of cashless transactions across the country.

In the early 2010s, mobile payments gained popularity in India with the rise of smartphones and digital financial services. In 2010, the NPCI introduced the National Electronic Toll Collection (NETC) system, allowing digital toll payments on highways and advancing the digitization of everyday transactions. By 2011, mobile banking and USSD-based payments enabled transactions without internet access. Mobile wallets like Airtel Money and Paytm evolved from recharge platforms to complete payment solutions, driving mobile payment adoption in India.

The launch of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014 laid the foundation by providing bank accounts to millions of unbanked citizens, followed by the introduction of the Aadhaar system, a unique identification mechanism that can be linked to various financial services. The government's Digital India campaign, launched in 2015, emphasized the importance of making India digitally empowered, enhancing access to government services, and fostering the growth of digital payment platforms.

The subsequent launch of the Unified Payments Interface (UPI) in 2016 revolutionized digital payments by allowing instant money transfers across different banks via smartphones, significantly simplifying and securing digital transactions. Mobile wallets like Paytm, PhonePe, and Google Pay boosted digital payments, while demonetization in 2016 accelerated adoption. Digital payment methods like UPI, e-wallets, POS systems, and QR codes offer seamless, secure money transfer options for consumers and businesses.

Literature Review

Dr. Ravi (2017) Examining Digital Payment Systems and Rural India: A Review of Transactions in a Cashless Economy. As two-thirds of India's population in rural areas, digital payment systems can drive economic growth. By 2020, rural areas are expected to have 50% of India's internet users. The government and the National Payments Corporation of India are working to raise awareness and make digital wallets accessible, even without internet, to help create a cashless economy.

Pavithra C B (2020) showed a study on factors influencing consumers' perception of digital payment systems. The research based on primary data found that employed respondents with moderate incomes prefer using mobile phones for digital transactions. They favour secure banking websites for online transactions. Card usage, online banking, and mobile payments are commonly chosen. The study reveals a positive bond between demographic factors and consumers' perceptions of digital payment systems.



Objective of the study

1. To explore the historical development and evolution of digital payment methods.
2. To examine the various types of digital payment systems currently used in India.
3. To evaluate the impact of digital payment systems on India's economy and society.
4. To assess the advantages and disadvantages associated with digital payment systems.
5. To analyse the growth of digital payment systems in India.

Research Methodology

This research is based on secondary data, including reports ,government publications, and previous studies.

Digital payment methods:

- UPI (Unified Payments Interface): UPI is a real-time payment system that enables users to transfer money between bank accounts instantly. It works on smartphones and supports peer-to-peer transactions, bill payments, and merchant payments. Apps: PhonePe, Google Pay, Paytm, BHIM, Amazon Pay, etc.
- Banking cards: Credit cards let users borrow money up to a set limit for purchases, with repayment over time, while debit cards are linked directly to a bank account and deduct payments immediately. Providers like Visa, MasterCard, American Express, and Discover offer these cards, which are commonly used for online, in-store purchases, subscriptions, and ATM withdrawals, providing a convenient way to manage finances.
- Wallets: Digital wallets allow users to store money digitally and use it to pay for goods and services both online and offline. These wallets can be topped up using debit/credit cards, bank transfers, or cash. Examples: Paytm, PhonePe, Free Charge, Airtel Money.
- Net Banking: Net banking enables users to transfer money, pay bills, and perform other banking activities online directly from their bank accounts. Examples: HDFC Bank NetBanking, SBI YONO, etc.
- Aadhaar Enabled Payment System: AEPS allows users to perform basic banking transactions using their Aadhaar number and fingerprint, like withdrawing cash, transferring funds, and checking balances. It's used mainly in rural and remote areas.
- Immediate Payment Service: IMPS is a real-time payment system that allows users to transfer funds instantly between bank accounts 24/7. It can be used for mobile and online banking.



- Rupay Card: India's indigenous payment system, which provides low-cost payment services for online and offline payments. It's widely used for ATM withdrawals, online shopping, and bill payments.
- Paytm Payments Bank: A digital payments platform that allows users to open a bank account and make payments, transfers, and bill payments using their Paytm app. Paytm also allows for UPI-based transactions.
- Bharat Bill Payment System : BBPS is a centralized bill payment system that allows customers to pay bills for services such as electricity, water, gas, and telecom. It is available through various apps and websites.
- Mobile Banking Apps: Mobile banking apps allow customers to perform banking activities such as transferring money, checking account balance, and paying bills using their smartphones.it include SBI YONO, HDFC Mobile Banking.
- QR Code Payments: QR codes are used for contactless payments where users scan a merchant's QR code to make payments using their digital wallets or UPI apps.
- Razorpay, PayU, and Other Payment Gateways: These are online payment gateways for merchants, enabling them to accept payments through credit/debit cards, UPI, wallets, and other digital payment methods.
- Bharat QR: A standard QR code-based payment method that allows customers to make payments through any UPI-enabled app (Google Pay,etc.) at joining traders locations.
- Cash-on-Delivery : Though not a traditional digital payment method, COD is a popular option for e-commerce purchases where customers pay in cash when goods are delivered.
- DTH and Mobile Recharge Services: Many digital payment platforms allow for quick online recharges for mobile phones, DTH services, and broadband.it include Paytm, Airtel Payments Bank.
- Digital Gold Payments: These platforms allow users to buy digital gold, which can be stored electronically and later converted into physical gold. Examples: PhonePe, Google Pay, Paytm.
- Blockchain and Cryptocurrency: Though not officially recognized for general transactions, some people use cryptocurrencies like Bitcoin and Ethereum in India for peer-to-peer transactions and investments.

Impact of digital payment system in India:

The impact of digital payment methods in India has been describe as under:



- Increased financial inclusion: Digital payment methods have boosted financial inclusion by connecting unbanked populations to the financial system. With mobile and internet access, especially in rural areas, individuals can now access services easily. Initiatives like Jan Dhan Yojana and Aadhaar-linked accounts have expanded banking access, increased account ownership, and enabled direct government transfers, empowering previously excluded groups.
- Boost of the economy: Digital payments have significantly boosted the economy by promoting transparency and efficiency in transactions, enhancing trade and benefiting small businesses. The adoption of digital payment systems also updated the application of the Goods and Services Tax (GST), as it minimized cash transactions, making it easier to track and manage.
- Reduced Corruption: digital payments has improved transparency and reduced corruption by making transactions traceable. The 2016 demonetization and the government's push for a cashless economy accelerated digital adoption, helping to curb black money and promote a more transparent financial system.
- Boost to E-commerce and Startups: The rise of digital payment methods in India has significantly boosted online businesses and e-commerce platforms like Flipkart, Amazon, and Paytm, enabling them to reach a wider customer base. This growth has also fueled fintech startups, which have introduced innovative solutions such as mobile wallets, UPI, and QR codes, further enhancing the digital payment ecosystem in the country.
- Consumer Convenience and Security: Digital payments have made transactions faster, easier, and more convenient by allowing payments directly from smartphones, eliminating the need for cash. Secure methods like Aadhaar-based biometric authentication, two-factor authentication, and encryption have improved transaction safety, ensuring a secure and smooth payment experience.
- Challenges Faced: Despite the benefits, digital payments face challenges like cybersecurity risks, fraud, and scams, though security efforts are improving. Digital literacy remains a barrier, particularly in rural areas, where limited skills and poor internet connectivity hinder widespread adoption.
- Government Initiatives: The Indian government has promoted digital payments through programs like Digital India, which aims to empower citizens through technology. Initiatives such as Bharat Interface for Money (BHIM), Unified Payments Interface (UPI), and Aadhaar-enabled Payment System (AePS) have been key drivers of this transformation.
- Consumer Behavior: Consumers are increasingly using digital payments for daily transactions like groceries, bills, and online shopping, driven by convenience and rewards. The COVID-19 pandemic accelerated this shift, as people preferred contactless options to avoid handling cash.



- Economic Growth: The shift to cashless transactions has boosted economic growth by promoting a more organized, tax-compliant, and transparent economy. It has also increased access to formal credit, loans, and investments, particularly benefiting the middle class.
- Future Potential: India is becoming a key market for digital payments, fuelled by increased smartphone use, internet access, and a tech-savvy population. The government's "Digital India" initiative, along with block chain and AI adoption, is set to drive further innovation.

Advantages of digital payment system

- Easy transactions: Digital payments are fast, convenient, and eliminate the need for physical cash. They save time for both buyers and sellers by avoiding check clearance and billing processes. With quicker transactions, the chances of late payments are reduced, making the process more efficient.
- Convenience: Digital payments allow you to pay anytime, anywhere, using just your smartphone. There's no need to carry cash or worry about theft or exact change. With a simple PIN, your transaction is complete in seconds.
- Penetrating international market: Online payment gateways enable businesses to reach a global audience, expanding their customer base and boosting sales by removing geographical limitations.
- Low transaction costs: Digital payments reduce cash handling costs by automating transactions, eliminating the need for front-desk staff or cashiers.
- Availability of more distribution channels: As a business, having online payment options can benefit your distribution channels a lot. If you are ready to accept online payments, you can enter the affiliate domain and branch out your sales by displaying your products or services on other websites. It is a great way to increase sales.
- Easy management: Online payments make it easier to manage and store your money and other financial data. For both vendors and customers, there are a lot of tools available on the internet that will help you with transactions. You don't have to keep track of your finances and let the tools do the job. It only gets easier since you don't have to carry cash or cards.
- Easy Recurring payment: Online payments automate subscription transaction, eliminating manual reminders and physical visit. this has made receiving and accepting payments easier for both the seller and the customer.

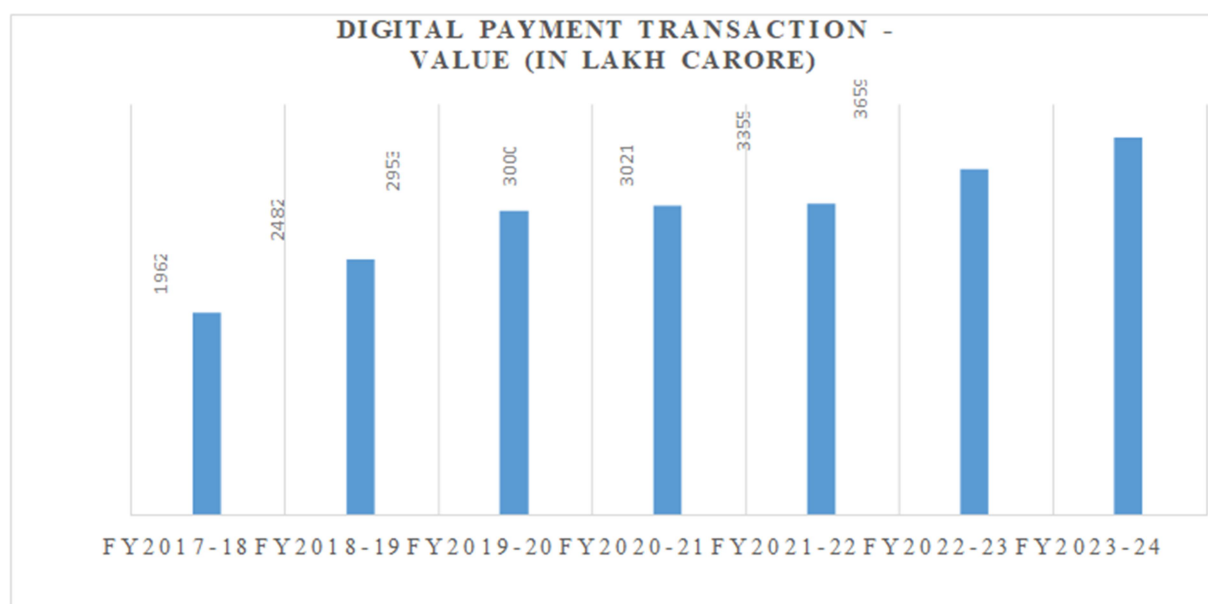


Disadvantages of Online Payments

- Technical problems: Online payments are subject to technical failures, just like any other software that is dependent on technology. Though tech maintenance operations are announced in advance and usually take place during the night, sometimes, it can cause frustration among online shoppers. Especially when it takes place without prior warning, a lot of businesses experience heavy bounce rates.
- Password threats: Frequent online payment users risk exposing personal and bank details to websites. While OTPs offer some security, password protection is crucial, especially for those using multiple banks, to prevent potential privacy breaches.
- Cost of fraud: As online payments rise, cybercrimes like ID theft, phishing, and database breaches. To combat these threats and enhance security, businesses invest heavily in payment-security software, leading to increased costs.
- Security risk: Security risks are a major concern with online payments. Without adequate security measures, fraudsters can hack sensitive financial data. The lack of advanced verification methods, such as facial recognition or biometrics, makes it easier for criminals to evade detection.
- Technological illiteracy: A major disadvantage of online payments is the lack of tech skills among many people, particularly the older generation. Due to limited knowledge of technology and smartphones, they avoid digital payment methods, fearing complexity and preferring traditional payment methods. This poses a significant challenge in developing countries like India.
- Amount and time limits: Banks may limit daily transactions and transfer amounts, while online payments often have time limits (like OTP expiration), which can be inconvenient for users.
- Loss of smart cards: Most online payments are done with the help of credit/debit cards, ATM cards, or identity cards. So if you lose any of these, automatically, your online payment accounts that are linked to your cards will be at risk too. Of course, you can block your cards after informing the bank, but the time between losing your card and blocking it may prove to be risky as many transactions by fraudsters can take place during that time period.

Growth uses of digital payment in India

Digital payments in India have grown significantly in recent year ,with the volume of transactions increased from 2,071cr in FY2017-18 to 18,737cr in FY2023-24 at compound annual growth rate (CAGR)of 44%.



Uses of Digital Payment Methods in last FY2022-23 AND 2023-24

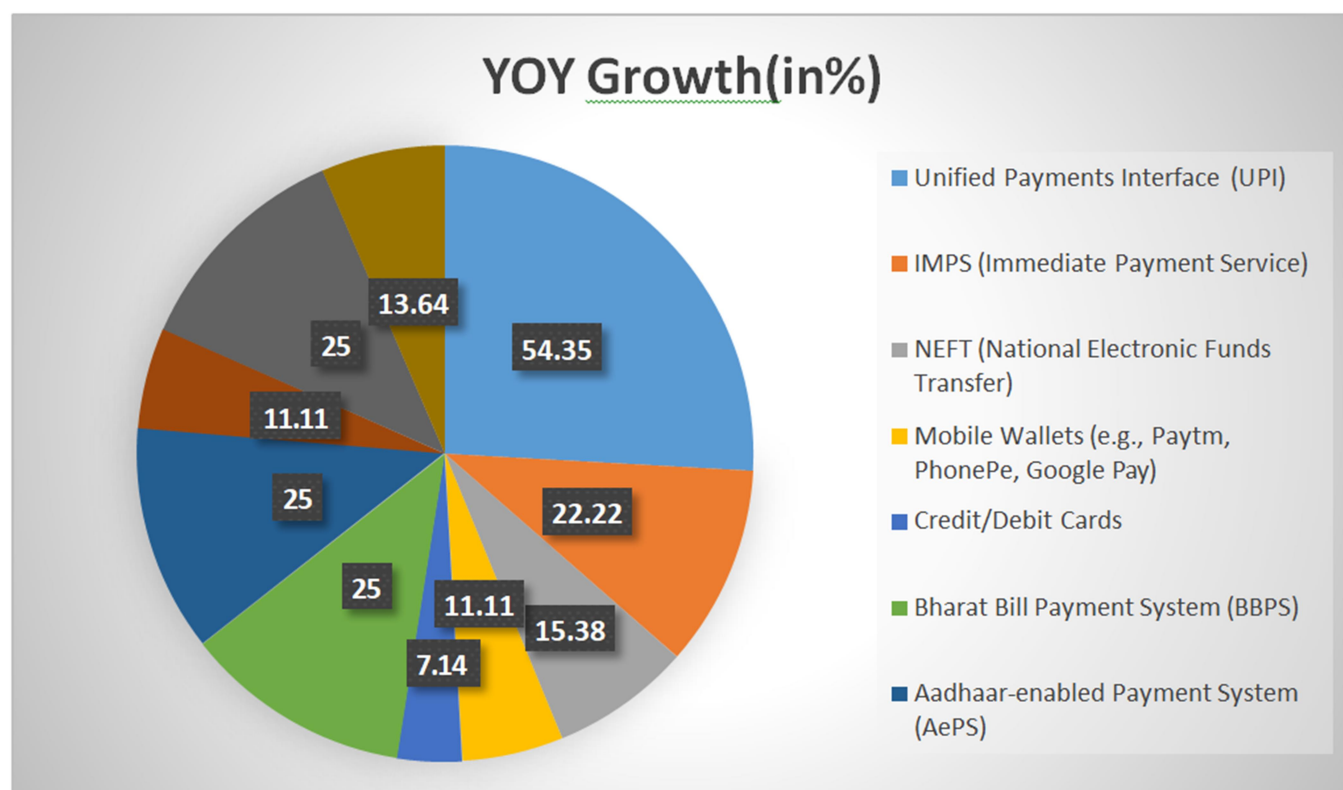
Digital payment methods such as UPI, IMPS, NEFT, Mobile wallets, Debit/Credit cards, BBPS, AePS, PPIs, QR codes, and Internet banking have been widely used across India.

Here is the data in table format for the most used digital payment methods and their show in the financial year 2022-23 and 2023-24:

Payment Method	Transactions in FY 2022-23 (in crore)	Transactions in FY 2023-24 (in crore)	Growth Rate (YoY)*	Analysis Result
UPI	8,500	13,116	54%	UPI show remains the lead in India's digital payments, driving the highest growth.
IMPS	450	550	22%	IMPS shows steady growth, favored for instant transfers.
NEFT	130	150	15%	NEFT Show continues to grow moderately, still popular for bank-to-bank transfers.
Mobile Wallets	450	500	11%	It show steady growth, maintaining a strong position in peer-to-peer payments and small transactions.
Credit/Debit Cards	2,800	3,000	7%	It show continue to grow moderately, remaining for larger transactions and e-commerce purchases.



BBPS	40	50	25%	BBPS show steady growth, popular for utility and bill payments.
AePS	400 million	500 million	Moderate growth	AePS grows in rural regions, determined by biometric authentication and increasing financial inclusion.
PPIs	180	200	11%	PPIs Show healthy growth, with increasing usage in digital wallets and gift cards.
QR Code Payments	200	250	25%	It show rapid growth in retail transactions, especially in small businesses and urban areas.
Internet Banking	220	250	14%	It grows steadily, primarily used for high-value transactions and fund transfers.



*Year-on-Year (YoY) Growth

Rate=(Value in Previous YearValue in Current Year–Value in Previous Year)/ Value in Previous YearValue in Current Year *100



The YOY growth rates from FY 2022-23 to FY 2023-24 show strong adoption of digital payments, with UPI leading at 54.35%. Other methods like IMPS, NEFT, and Internet Banking also grew solidly. BBPS, AePS, and QR Code payments saw a 25% increase, reflecting greater diversity in payment options. While credit/debit cards and mobile wallets grew slower, the overall trend highlights continued growth and digital financial inclusion in India.

Conclusion

Digital payment systems in India have transformed financial transactions, offering convenience, speed, and accessibility. Through government initiatives like Digital India and innovations such as UPI, mobile wallets, and Aadhaar-based systems, digital payments have significantly increased financial inclusion and economic growth. While challenges like digital literacy and cyber security, ongoing efforts from both the government and private sector are driving further adoption and improvement.

Digital methods like UPI, IMPS, and mobile wallets have shown remarkable growth, especially between FY 2022-23 and FY 2023-24, with UPI leading at 54.35% YoY growth. As digital payments continue to grow, they are transforming India's financial ecosystem, promoting economic growth, convenience, and security. India's digital payment infrastructure is well-positioned to become a global leader in digital financial services.

References

- Dr. Ravi (2017) "Digital Payment Systems and Rural India: A Review of Transactions in a Cashless Economy."
- Pavithra C B (2020) "An Empirical Analysis on the Factors Affecting Consumers Perception towards Digital Payment Systems."
- The Department of Financial Services (DFS) drives expansion of digital payments in India and abroad. Reserve bank of india ,National Payments Corporation of India, npci.org.in



A STUDY OF CONSUMER BUYING DECISION: A COMPREHENSIVE APPROACH FROM CONVENIENCE, PRODUCT INFORMATION, VARIETY OF GOODS, AND PRICE SENSITIVITY PERSPECTIVES

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Abstract

The Indian e-commerce sector is predicted to expand to roughly 190 billion US dollars by the time of 2025. This sector's rise may be attributed to a variety of factors, including enhanced infrastructure, a surge in the number of internet surfers and individuals with smartphones in India, and a shift in customer behavior toward purchasing items via the internet versus conventional shopping locations. Indian buyers have fully accepted the web-based purchasing paradigm, and as a result, an increasing number of vendors are turning to E Commerce venues to offer what they sell. The purpose of the study aims to comprehend precisely why consumers have switched to E-Commerce systems, as well as the multiple variables such as " Convenience, Product Information, variety of goods and Price Sensitivity" regarding online stores and their influence on consumer's adoption of purchasing goods via the internet. The study aims to determine which factors impact consumer acceptance of online purchasing and how E-Commerce enterprises may enhance their level of service in order to lure additional consumers. The primary information for this research was acquired from consumers in Surat, Gujarat, India.

Keywords: E-Commerce, Consumer Buying behavior, Convenience Perspective, Product Information Perspective, Variety of Goods, Price Sensitivity.

Introduction

During the epidemic and ensuing lockdown in 2019 and 2020, the Indian e-commerce business is growing rapidly. The lockdown had an impact on the flourishing of numerous industries throughout the entire nation, whereas the E-Commerce Industries remained relatively unaffected, with increasing client purchases and revenue expansion. According to Goldman Sachs, India's e-commerce market would be worth \$99 billion by 2024, with online shopping predicted to have more than doubled to roughly 11%



current 4.7% within 2019 at a CAGR of 27%. The internet-based grocery industry estimated to be currently worth less than \$2 billion will grow to \$29 billion by 2024. Online purchases of goods will increase between 3,00,000 for each day within 2019 to in excess of around 5 million every day until 2024. The surge in broadband and smartphones usage in India is driving the development. Indian customers' shift to purchasing goods via the internet at leisure has also contributed to this trend. Rising adoption of smartphones in rural regions, as well as 5G Internet mobile access, have contributed to a shift in buyer behavior. The growing popularity of online resources has brought the customers to the merchants through supplying the essential connecting infrastructures. E-commerce has evolved into a popular medium for connecting customers and vendors. As more buyers accept the web-based purchasing paradigm, retailers are beginning to utilize online retailers to meet the demands of their customers. This phenomena has resulted in the expansion of Amazon India, Snapdeal, Mishoo, Flipkart, whose have witnessed an upsurge in income as more merchants and buyers join the world of e-commerce.

Literature Review

“Predictors of online shopping in India: an empirical investigation” Urvashi Tandon (2020), The study examines the consequences of many aspects on consumer fulfillment, including requirements for performance, expectations for effort, social influence, enabling circumstances, motivational factors, financial value, tradition, logistics management, internet usage, and the POD payment alternatives. The investigation discovered that Pay on Delivery (POD) is seen as a secure option by consumers. As a result, online merchants should spread the POD product to clients around India.

“Preferences of Indian consumers towards attributes of online shopping websites: a conjoint analysis” Aanchal Aggarwal (2020), This research found that buyers' purchasing intentions are influenced by three key factors: perceived convenience, privacy, and details accuracy. The research indicated that considered accuracy of information is an especially essential component in establishing trust with online shops by minimizing misunderstanding and creating a sense of openness.

“Role of Shopping Values and Web Atmospherics in E-Satisfaction and Repurchase Intention” T. Sai Vijay, Sanjeev Prashar & Chandan Parsad (2016). The researcher examine the factors such as supernatural purchasing value, economic shopping value, internet accuracy, web amusement, and the efficacy of the information influence the intent to repurchase. "The research indicated that influence of internet associated factors and utilitarian shopping norms showed a significant influence on customer online satisfaction however emotional components did neither exhibit any consequence on buyer online fulfillment"



“Revisiting Trust toward E-Retailers among Indian Online Consumers” Prageet Aeron, Shilpi Jain & Alok Kumar (2019), in this research paper researcher find out that attributes such as competence, charitable behavior, truthfulness, acceptance, awareness, and technological knowledge contribute to online consumer trust. The study examined psychological in nature technical, and administrative variables influencing consumer confidence in internet retailers.

Objective: To analyze how various degrees of Convenience Perspective, Product Information Perspective, Variety of Goods, Price Sensitivity influence customer buying decision in e-commerce.

E Commerce

E Commerce is a kind of method to buy or sell goods or services via ICT. It includes practices that include selling products online, e-payments, e-auctions, and internet-based banking. E-commerce has altered the way companies run and customers purchase by providing ease, connectivity, and worldwide. "E-commerce is the process of conducting commercial transactions through electronic means, primarily over the internet. It involves activities such as online shopping, electronic payments, and digital marketing, enabling businesses to reach customers beyond geographical boundaries and offering consumers a convenient way to purchase goods and services remotely." by P. T. Joseph and S. J. Prince.

Consumer Buying Behavior: Purchase behavior among customer encompasses the steps and actions that customers do throughout their choices regarding purchases. It refers to the different variables, influences, and incentives that lead people to choose, buy, and utilize items or services. Personal likes and dislikes, perspectives, and preconceptions all have an impact on this sort of conduct, as are commercial stimulation, societal factors, and environmental considerations. Recognizing customer purchasing behavior is critical for organizations looking to successfully promote what they sell, customize their offers to fit consumer demands, and create effective advertising campaigns.

▪ Convenience

The Convenience Perspective is an important aspect that drives customer purchasing decisions. Convenience is defined as the simplicity and affordability of acquiring goods or services, which is an important factor in molding customer buying decisions. Here is how Convenience Aspect influences customer purchasing behavior like Time Saving, Availability, Minimal Effort, 24/7 Access, and Customization.

▪ Product Information

The Product Information has a substantial impact on customer purchasing decisions. Customers use product information to make educated purchase decisions. There are certain connected



issues that consumers evaluate while reviewing the product description before purchasing something from an e-commerce website or application. Users may obtain information from a variety of sources like corporate websites, feedback on goods, online communities, and word-of-mouth recommendations. Comprehensive and reliable information on something's characteristics, specs, substances, or materials may improve its appearance while also increasing customer trust in their purchasing choice.

▪ Variety of Goods

The diversity of items provided has the potential to greatly influence customer buying patterns in a number of ways. A diverse range of items gives customers more alternatives to pick from, permitting them to pick out things that most closely suit their interests, requirements, and affordability. When there is a wide variety of items accessible, buyers are more probable to stumble upon things that match their individual likes, preferences, and lifestyles. Buyers may consider a brand or shop that sells a wide range of products as more valued and reputable, resulting in strengthened confidence and allegiance over time.

The diversity of items offered may have a substantial impact on customer purchase behavior by providing options, fulfilling preferences, promoting inquiry, and increasing perceived worth, eventually influencing decisions about buying and maintaining customer loyalty.

Research Methodology

1. Research Design

This study will adopt a descriptive research design to analyze consumer buying behavior in the context of e-commerce, specifically from the perspectives of convenience, product information, variety of goods, and price sensitivity. Descriptive research allows for a comprehensive understanding of the characteristics, preferences, and factors that influence consumer behavior during online shopping.

2. Research Approach

A quantitative research approach will be used in this study, which will allow for the collection of numerical data and statistical analysis. The use of a structured questionnaire will enable the research to capture the opinions and behaviors of a large sample of respondents.

3. Population and Sample

The target population for this research includes consumers of Surat district who regularly shop online. The sample size will be determined using Cochran's formula for sample size determination, which will ensure that the sample is statistically representative of the population. A sample size of 150 respondents will be chosen to allow for meaningful analysis and increase the reliability of the findings.



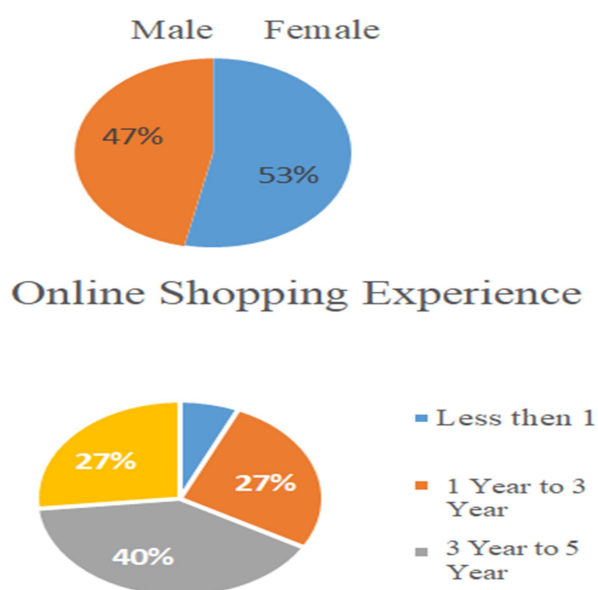
4. Data Collection:

The primary data for our study survey was acquired using Google Forms. The core data was acquired in the type of qualitative data, indicating people's interest in electronic purchasing. The poll was performed using Google Forms and shared via email, WhatsApp, telegram and social media sites. All the selected 150 responded are belongs to Surat District of Gujarat, India.

Preparation of questionnaire

This paper is based on primary data. To collect this data researcher has prepare a well structure questionnaire. This questionnaire is divided in two parts. First General Information which consist name, gender, age, education, and e commerce experience of despondence and Second part is based on Likert Scale (1 to 5) regarding to this topic like Convenience, Product Information, Variety of Goods and Price sensitivity.

Data Analysis

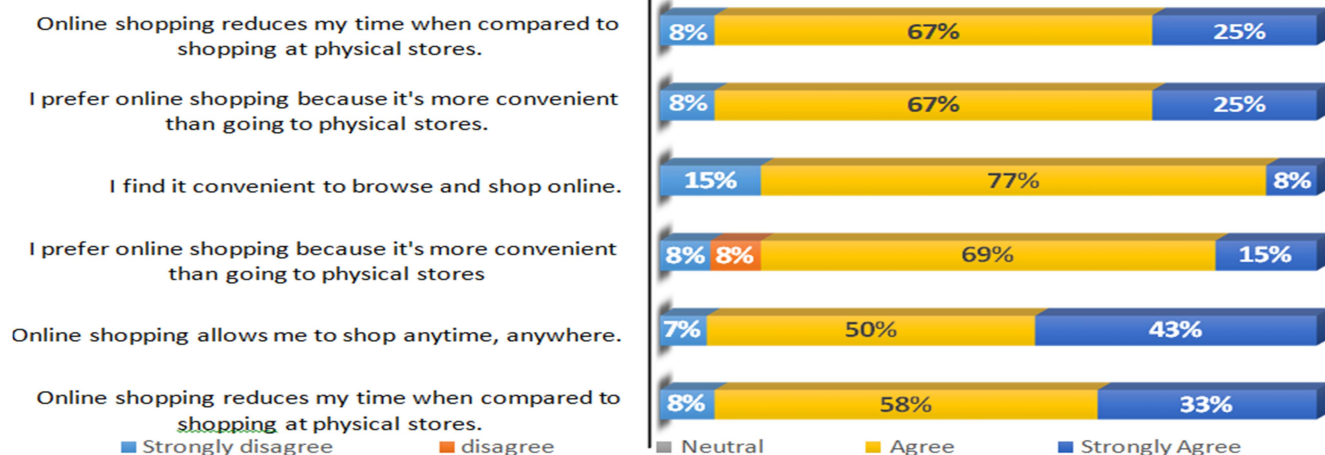


There are 47% of the respondents are female and another 53% respondents are male among the 150 respondents who are participants in this survey.

There are 6% of respondents who have an experience of online shopping for less than one year, 27% of respondents who have an experience of online shopping between 1 year to 3 years, 40% of respondents who have an experience of online shopping between 3 year to 5 years, 27% of respondents who have an experience of online shopping for more than 5 years.

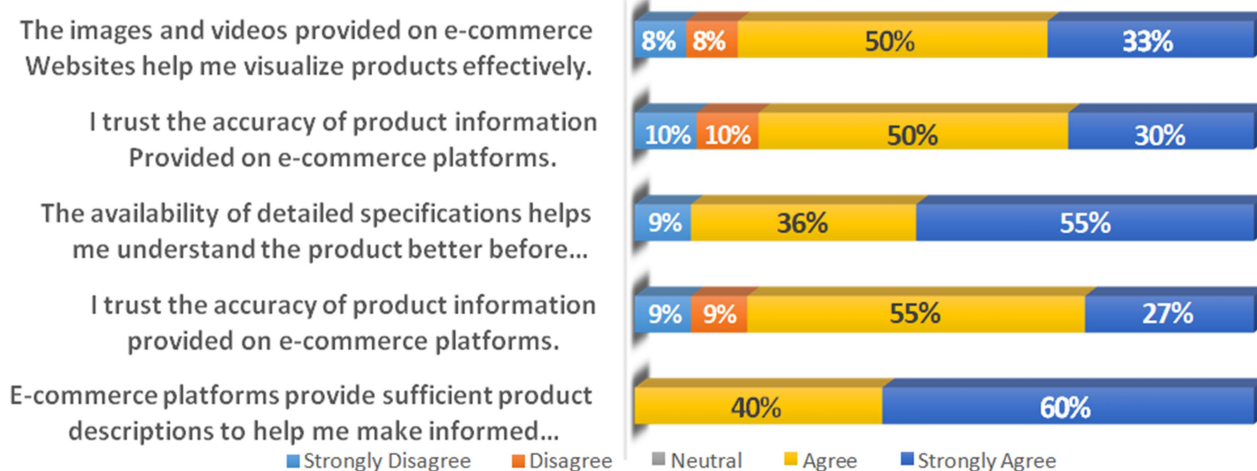


Convenience



Convenience is the one of the major factor for using any online commerce services. There are 25% are strongly agree, 67% are agree and 8% are strongly disagree that E Commerce reduce their time compare to brick and motors methods. There are 25% respondents strongly agree, 67% are Agree and 8% are strongly disagree that E Commerce is more convenient then physical stores. There are 8 % respondents are strongly agree, 77% are agree and 15% are strongly disagree that E Commerce application or websites are convenient to browse.

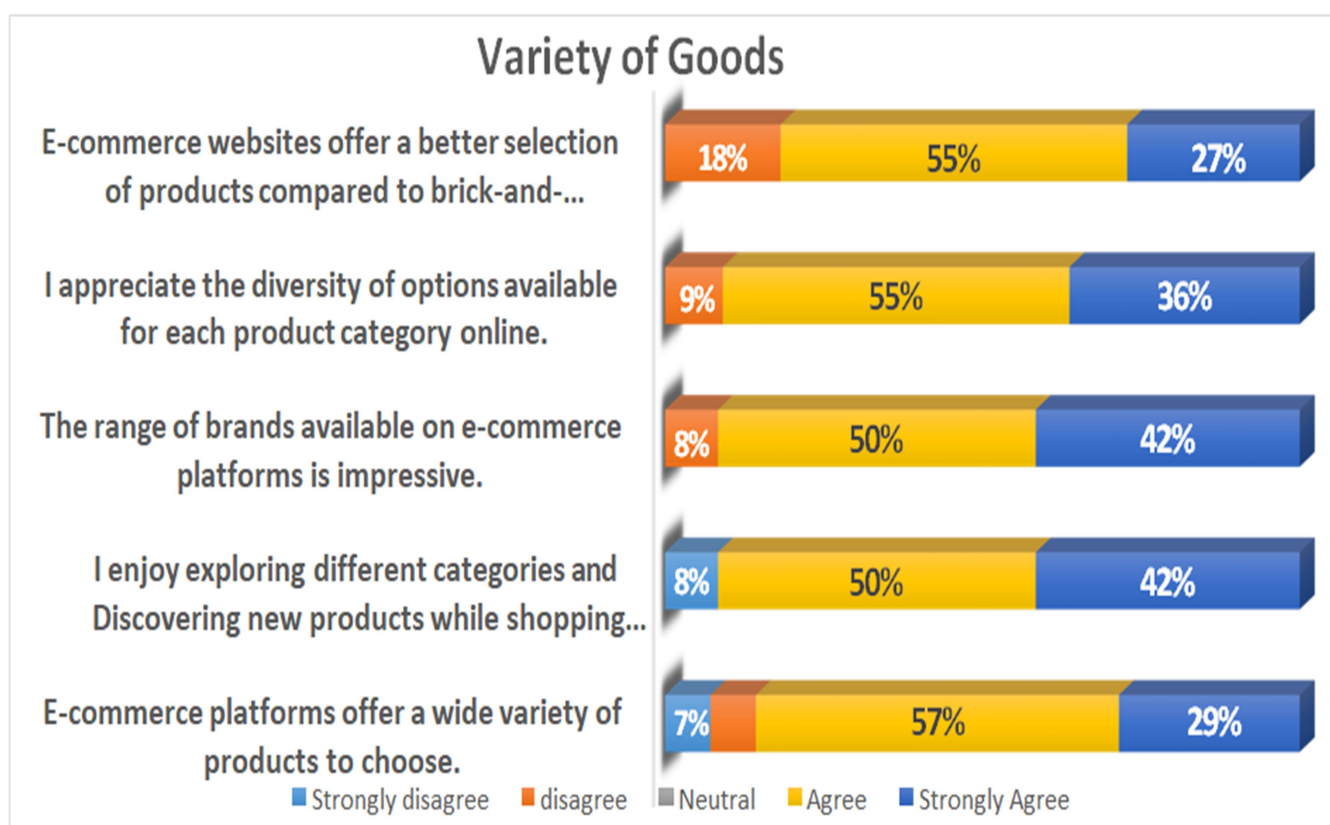
Product Information



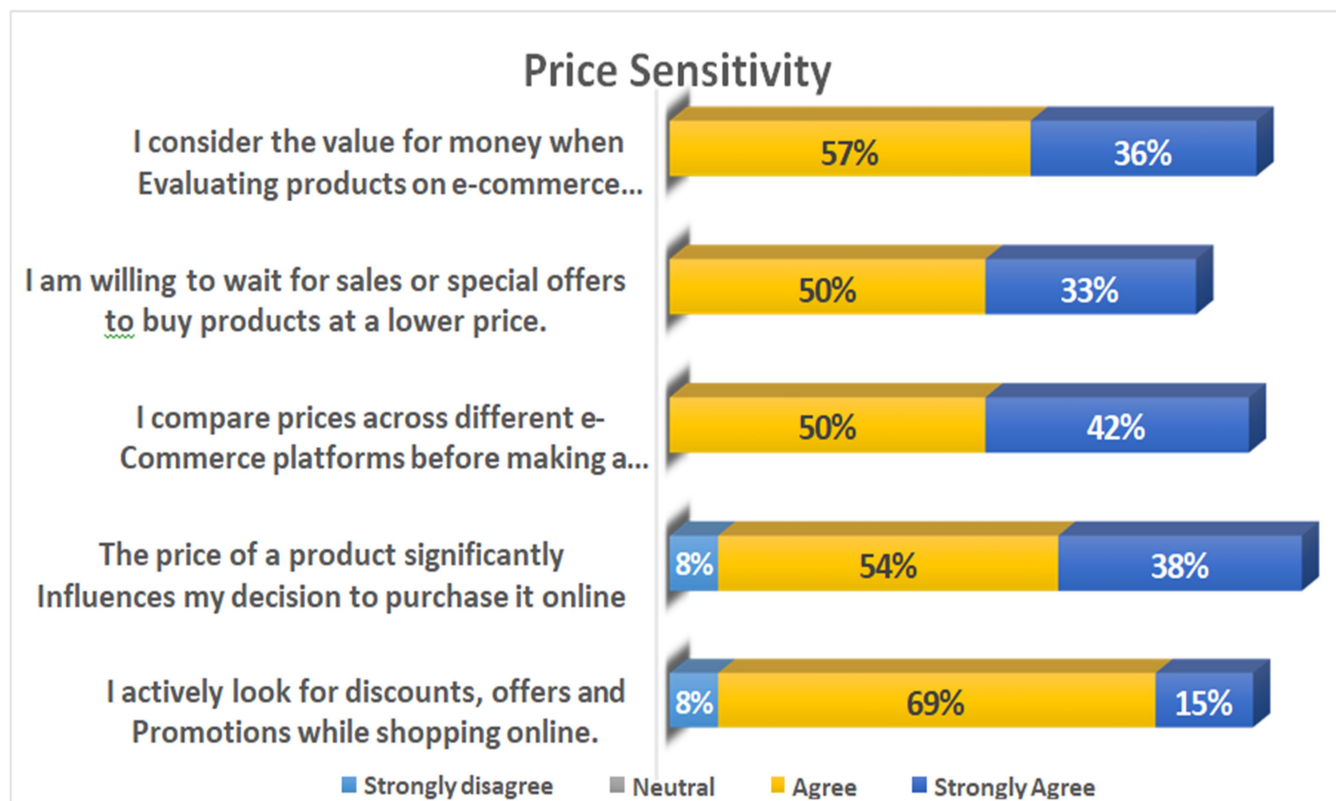
According to the findings, the vast majority of respondents found the product details on e-commerce platforms useful, notably for visualizing things via photographs and videos (83%), as well as comprehending them through thorough specs (91). However, trust in the veracity of product information receives a mixed reaction, with 50% staying neutral and 40% agreeing, showing potential for



development in developing reliability. Notably, all respondents think that product descriptions are adequate, with 60% strongly agreeing, highlighting their relevance in assisting with buying decisions. Overall, while visual material and extensive explanations are assets, improving the perceived accuracy of product information has the potential to increase consumer confidence.



The chart elucidates respondents' perceptions of the assortment of goods available on e-commerce platforms. A substantial majority (82%) concurred or strongly concurred that e-commerce platforms deliver a superior selection of products compared to conventional brick-and-mortar establishments. Additionally, 91% of respondents acknowledged the extensive diversity within individual product categories, while 92% commended the impressive breadth of brands offered, underscoring the platforms' capacity to accommodate varied consumer preferences. Moreover, 92% conveyed their enjoyment in navigating diverse categories and uncovering novel products during the online shopping process. Collectively, 86% affirmed that e-commerce platforms present an extensive array of products, highlighting their efficacy in providing comprehensive options and enriching the consumer experience.



Toward price sensitivity in the context of e-commerce shopping. A substantial majority (93%) consider value for money as a critical factor when evaluating products, with 57% agreeing and 36% strongly agreeing. Similarly, 83% of respondents are willing to wait for sales or special offers to secure lower prices, reflecting the importance of promotions in influencing purchasing behavior. Price comparison across different platforms is a prevalent practice, as evidenced by 92% of respondents engaging in this behavior, signifying a discerning approach to online shopping. Additionally, 92% indicated that price significantly impacts their purchasing decisions, underscoring the role of competitive pricing in driving sales. Lastly, 84% actively seek discounts, offers, and promotions, highlighting the pivotal role of cost-saving opportunities in shaping consumer preferences. These findings underscore the pronounced influence of price sensitivity on e-commerce consumer behavior, emphasizing the necessity for platforms to implement competitive pricing strategies and promotional campaigns to attract and retain customers.

Conclusion

This research paper highlights key consumer preferences in e-commerce. Among 120 respondents (47% female, 53% male), convenience emerged as a major factor, with 92% agreeing that e-commerce saves time, offers greater ease than physical stores, and is user-friendly. Most respondents valued product details like images (83%) and specifications (91%), though trust in information accuracy was moderate



(40% agreeing, 50% neutral). E-commerce platforms were praised for variety, with 82% favoring their selection over physical stores, 91% appreciating diversity, and 92% enjoying brand options and product discovery. Price sensitivity also played a significant role, as 93% prioritized value for money, 83% awaited sales, and 84% actively sought discounts. These findings underscore e-commerce's strengths in convenience, variety, and affordability while suggesting the need to improve trust in product information.

References

- Tandon, U. (2021). Predictors of online shopping in India: An empirical investigation. *Journal of Marketing Analytics*, 9(1), 65–79.
- Kumar, S., & Agarwal, V. (2021). Price sensitivity and its impact on consumer buying behavior in online retail: A study of Indian consumers. *Journal of Retailing and Consumer Services*, 58, 102-307.
- Aggarwal, A. (2020). Preferences of Indian consumers towards attributes of online shopping websites: A conjoint analysis. *International Journal of Public Sector Performance Management*, 6(5), 605–621.
- Sood, M., & Kaur, A. (2020). Consumer buying behavior in e-commerce: A review of recent developments and future research directions. *Journal of Retailing and Consumer Services*.
- Aeron, P., Jain, S., & Kumar, A. (2019). Revisiting trust toward e-retailers among Indian online consumers. *Journal of Internet Commerce*, 18(1), 45–72.
- Chen, S., & Lee, C. (2019). The role of trust and security in shaping consumer buying behavior in e-commerce. *Computers in Human Behavior*, 92, 1-10.
- Sharma, R., & Singh, R. (2018). Consumer buying behavior in Indian e-commerce: The influence of website quality, social media, and payment security. *International Journal of Information Management*, 39, 139-148
- Vijay, T. S., Prashar, S., & Parsad, C. (2017). Role of shopping values and web atmospherics in e-satisfaction and repurchase intention. *Journal of Internet Commerce*, 16(1), 32–52.

**EXPLORING BANKS' ROLE IN PROMOTING GREEN URBAN PROJECTS AND SUSTAINABILITY IN GUJARAT**

By

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By

Dr. Dharmendra Mistry**Professor and Principal****C.C. Sheth College of Commerce, Gujarat University, Ahmedabad****Abstract**

Urbanization and environmental sustainability are critical to modern development, necessitating a balance of economic expansion and environmental responsibility. Green finance, which promotes ecologically friendly ventures, is critical to attaining this balance. Banks play an important role in fostering green urban development by financing projects that use renewable energy, energy-efficient infrastructure, and are climate resilient. This study looks at how banks promote green urban initiatives in Gujarat, one of India's most industrialized states. It investigates financial trends, regulatory concerns, and policy gaps influencing sustainable banking in the region. Based on secondary data, the study examines publications, financial records, and government regulations on green banking, highlighting the efforts of institutions like as Bank of Baroda, Axis Bank, HDFC Bank, and State Bank of India. Challenges noted include poor public awareness, large financial risks, regulatory inconsistencies, and a lack of acceptable finance tools for green projects. To promote green banking in Gujarat, the research recommends strengthening regulatory frameworks, providing financial incentives, supporting ESG-based banking, and encouraging public-private partnerships. By tackling these issues, banks may help Gujarat achieve sustainable urban growth.

Keywords: Climate finance, Sustainable Banking, Urban Sustainability, Green Finance

Introduction

Urbanization and environmental sustainability are key issues in modern development. As cities grow, the need for infrastructure, energy, and resources rises, frequently at the expense of environmental damage. Sustainable urban development strives to strike a balance between economic expansion and environmental responsibility. One of the most important drivers of sustainability is green finance, which refers to financial products and services that promote ecologically beneficial enterprises. Banks play an important role in green urban development by funding renewable energy, energy-efficient buildings, sustainable transportation, and climate-resilient infrastructure. Gujarat, one of India's most industrialized



and urbanized states, has experienced significant economic growth while facing environmental challenges. The Gujarat Solar Policy, Smart Cities Mission, and Green Energy Corridor are all examples of government efforts aimed at fostering sustainable urban development. However, financing these projects necessitates significant investment, making banks and financial institutions critical partners in Gujarat's Sustainability efforts.

Banks, as financial intermediaries, control the movement of capital to diverse sectors. Their support for green urban projects can help Gujarat hasten its transition to sustainability. However, green financing in Gujarat confronts numerous problems, such as legislative loopholes, financial risks, and low public awareness. Understanding banks' role in sustainable urban development can help improve financial systems and policy frameworks

Research Objectives

1. Investigate how banks in Gujarat fund green urban initiatives.
2. Examine the trends and problems in sustainable banking.
3. Determine the regulatory and institutional gaps in green financing.
4. Make policy proposal to help enhance the green banking ecosystem.

Review of Literature

Rahman, M. H., Rahman, J., Tanchangya, T., & Esquivias, M. A. (2023). The study found that while both India and Bangladesh are working towards SDGs 7 and 13, India's State Bank of India has made greater progress in green banking activities. To attain these sustainability goals, more regulatory monitoring and funding for environmentally friendly projects are required.

Mir, A. A., & Bhat, A. A. (2022). This study highlights SBI and MayBank's initiatives to demonstrate the value of green banking in fostering sustainability and reducing global warming. It also advocates for additional study to create a globally approved green banking framework and broaden its impact on environmental sustainability.

Bhatnagar, M., Taneja, S., & Özen, E. (2022). This study emphasizes the relevance of green finance in India, particularly for startups, and its role in supporting sustainable entrepreneurship. Government measures and finance sector changes are propelling the country's shift toward environmentally friendly corporate practices.

Agrawal, R., Agrawal, S., Samadhiya, A., Kumar, A., Luthra, S., & Jain, V. (2024). Green finance (GF) and green innovation (GI) are important factors in promoting environmental sustainability



and circular economy practices, according to this research. It offers policymakers and stakeholders insights into how to use GF and GI to balance financial and environmental goals.

Sharma, M., & Choubey, A. (2022). Green banking efforts have a vital role in improving brand image and consumer trust in Indian banks. It provides useful insights into the role of green products, corporate social responsibility, and internal processes in fostering sustainability in the banking sector.

Sahoo, M. K. (2024). In order to support sustainable energy programs, this report highlights how urgently the Indian banking industry must embrace green financing. It demonstrates the advantages of green investments in environmental conservation and economic growth through successful case studies and regulatory frameworks. The paper calls for the incorporation of environmental, social, and governance considerations into banking processes to promote long-term sustainability and risk reduction.

Prabhu, G. N. (2021). This study highlights how green banking can help promote environmental sustainability by lowering carbon footprints and implementing eco-friendly procedures. It emphasizes the shift to electronic transactions and internet banking as critical initiatives for banking sector sustainability.

Hang, N. P. T. (2022). In order to balance economic growth and environmental preservation, this study looks at the function of green banking in Vietnam's sustainable development. Using data from 700 commercial bank managers, it analyzes major drivers of green bank development and makes policy recommendations. The study underlines the importance of green banking as a foundation for a green economy and future banking models in Vietnam.

Gour, K., & Agarwal, C. (2024). This study centers on the idea of "green banking," which was first proposed in 2003 with the goal of promoting environmental sustainability by lowering reliance on raw materials derived from trees and paper use. It emphasizes the growing awareness of environmental challenges and the significance of corporations adhering to sustainable practices, such as the 3P's rule: Profit, People, and Planet.

Kadaba, D. M. K., Aithal, P. S., & KRS, S. (2022). This research emphasizes how Sustainable Finance (SF) may help advance both environmental preservation and economic growth, with a particular emphasis on assisting MSMEs and enterprises with green projects like waste management and renewable energy. It underlines the role of financial tools like Green Bonds and Climate Funds in enabling green projects in India. The study also suggests a sustainable finance strategy to help India achieve Net Zero Emissions by 2070 and accomplish the Sustainable Development Goals (SDGs).

Green Financing and Sustainable Banking

Green finance is defined as financial products and investments that promote environmental sustainability, such as green bonds, climate finance, and sustainability-linked loans. It encourages



environmentally friendly initiatives such as renewable energy, energy-efficient buildings, and sustainable urban infrastructure.

Environmental, social, and governance (ESG) considerations are included into financial decision-making through sustainable banking. Banks play an important role in funding green urban projects, lowering carbon footprints, and encouraging responsible investment. Green finance and sustainable banking contribute to climate change mitigation while supporting long-term economic growth, particularly in rapidly urbanizing regions such as Gujarat.

Policy and Regulatory Framework for Green Finance in India

India's Financial Regulators and Initiatives for Sustainable Banking

India's financial regulators have launched many programs to encourage sustainable banking and green finance. This includes

- **RBI Initiatives**

ESG Guidelines (2024) : RBI's proposed rules seek to integrate climate-related financial risks into the operations of regulated firms while maintaining openness and global coherence. These steps will improve the financial sector's governance, risk management, and accountability.

Priority Sector Lending (PSL) in Renewable Energy: PSL in renewable energy promotes banks to fund renewable energy projects, encouraging sustainable development by making financing more available and increasing investment. This effort promotes economic growth, environmental sustainability, and the transition to cleaner energy.

- **Securities and Exchange Board of India (SEBI) Regulations**

The Green Bond Framework: SEBI's 2024 framework enables corporations to issue ESG debt securities, including as green, blue, yellow, and transition bonds, for sustainable projects. It requires transparency in disclosures and adheres to international listing rules. This contributes to India's sustainability goals, assists enterprises in raising funding, and reduces capital costs for renewable energy.

Business responsibility and sustainability reporting (BRSR): According to SEBI's 2024 BRSR rules, listed companies must adhere to industry norms, make sure that disclosures are clear, and secure independent assurance. These recommendations improve investor decision-making and encourage stakeholder engagement beyond the financials.

- **Government Policies**

India's Green Hydrogen Mission (2024): India's National Green Hydrogen Mission intends to increase green hydrogen production to 5 million tonnes by 2030, lowering dependence on fossil fuels



and boosting exports. With an initial budget of ₹19,744 crore and ₹600 crore for 2024-25, it promotes clean energy in major industries.

The National Adaptation Fund for Climate Change (NAFCC): The National Adaptation Fund for Climate Change (NAFCC), run by NABARD, provides funding for climate adaptation projects in vulnerable Indian regions. It supports projects in agriculture, water management, and disaster risk reduction to build resilience to climate change.

Research Methodology

The research will use secondary data, examining existing reports, financial records, government regulations, and research studies on green banking and urban sustainability in Gujarat. Data will be gathered from publications by banks, regulatory bodies, and government agencies, providing information on funding patterns, problems, and the impact of green finance projects.

Trends in Green Banking and Sustainable Finance in Gujarat

Gujarat's strong renewable energy sector, industrial expansion, and proactive government regulations have propelled the state to the forefront of green banking and sustainable financing. Banks play an important role in funding green urban projects, renewable energy, and ESG investments. Several major aspects point to the growing importance of sustainable banking in Gujarat.

The research will use secondary data, examining existing reports, financial records, government regulations, and research studies on green banking and urban sustainability in Gujarat. Data will be gathered from publications by banks, regulatory bodies, and government agencies, providing information on funding patterns, problems, and the impact of green finance projects.

Green Banking and Sustainability Initiatives by Leading Banks in Gujarat

Green banking in Gujarat is expanding, with banks such as BoB, Axis, HDFC, and SBI funding renewable energy, sustainable urban developments, and eco-friendly activities. Green bonds, biodiversity restoration, and financial inclusion are among the most prominent trends. These activities help to ensure environmental sustainability by promoting both rural and urban growth in the state.

Bank of Baroda (BoB) : Bank of Baroda promotes environmental sustainability through projects such as Green Ride, Swachhta Pakhwada, and Mangrove Cleanup Campaigns. It encourages tree planting, marine litter cleanup, and paperless operations. The bank also promotes financial literacy and rural employment through 64 RSETI centers and 87 FLCCs, which benefit millions.

Axis Bank : Axis Bank's green portfolio of ₹18,907 crores supports renewable energy, clean transportation, and waste management. It has planted 1.3 million trees, with a goal of two million by



2027. The bank supports biodiversity restoration, sustainable cities, and financial inclusion, which affects 1.7 million households.

HDFC Bank: HDFC Bank promotes rural sustainability in Gujarat by encouraging water conservation, organic farming, and solar-powered irrigation. It encourages soil erosion control, millet cultivation, and mangrove plantations to build disaster resilience, as well as improving rural livelihoods through livestock management and community development.

State Bank of India (SBI): SBI has constructed 795 solar rooftops, planted 18 million trees, and set up 538 rainwater collection systems. It continues to promote financial inclusion, SME growth, and sustainable urban initiatives while incorporating green finance into its banking strategy.

Challenges in Gujarat's Green Urban Banking

Despite increased attempts to promote green urban banking, many problems impede its advancement in Gujarat:

Low Awareness and Understanding: Many firms and individuals are unaware of the benefits of green finance. This impedes the implementation of sustainable financial practices and slows the shift to greener initiatives.

High Perceived Risks: Green urban projects, such as renewable energy infrastructure or eco-friendly structures, frequently incorporate newer technologies and unproven concepts. Banks are apprehensive about financing these initiatives due to perceived financial risks and unclear returns.

Regulatory and Policy Gaps: While the Gujarat government is committed to sustainability, policy frameworks are lacking, making green funding difficult. The absence of clear regulations and incentives for banks to favor green loans or bonds dampens enthusiasm for sustainable investments.

Lack of Tailored Financial instruments: The shortage of financial instruments specifically tailored for green projects, such as green bonds or green loans, stifles the expansion of green banking.

High Initial Capital Needs: Many green projects necessitate considerable upfront investments. This might be a hurdle for small and medium-sized firms (SMEs) or local projects who lack the necessary cash to build environmentally friendly infrastructure.

Case Studies on Green Banking in Gujarat

Bank of Baroda (BoB) - Environmental Initiatives

The Bank of Baroda (BoB) actively promotes sustainability in Gujarat with programs such as the Green Ride with Milind Soman and the Mangrove Cleanup Campaign, which successfully eliminated



over 600 kg of marine debris. BoB also prioritizes tree planting and paperless operations, demonstrating its commitment to a greener, cleaner future for the state.

Axis Bank: Green Portfolio & Tree Plantation

Axis Bank has made major investments in green projects, managing a ₹18,907 crore portfolio focused on renewable energy and waste management. The bank has planted 1.3 million trees and plans to plant 2 million more by 2027, as well as participate in biodiversity restoration projects such as mangrove planting. These projects help to improve urban sustainability in Gujarat.

HDFC Bank: Holistic Rural Development in Gujarat

The Parivartan Holistic Rural Development Programme by HDFC Bank in Gujarat focuses on sustainable water management, organic farming, and solar irrigation. The program, which is particularly effective in Kheda and Jamnagar, promotes mangrove plantations and increases agricultural productivity, hence enhancing disaster resilience and encouraging environmental conservation in rural communities. These case studies highlight how Gujarat's banks are promoting green banking and sustainable financing, combining environmental sustainability with economic prosperity.

Policy Recommendations for Improving Green Banking in Gujarat

Promote Awareness and Capacity Building: Conduct state-level awareness initiatives to educate businesses and individuals about the benefits of green finance. Provide green financial product training to banks, enterprises, and local entrepreneurs, allowing them to better grasp sustainable investment options.

Create a Strong Regulatory Framework: Establish a clear policy framework for green financing, including criteria for green loans and bonds. Introduce incentives for banks that finance sustainable projects, such as tax rebates or interest rate reductions, to encourage a transition to green financing.

Develop customized financial instruments: Encourage the creation of green bonds, loans, and sustainable investment funds aimed exclusively at green urban development initiatives. This will contribute to inexpensive and accessible finance for renewable energy and environmentally friendly infrastructure.

Introduce risk mitigation instruments: Implement government-backed guarantees or risk-sharing systems to mitigate perceived financial risks for banks that sponsor green urban initiatives. This will encourage investment in green initiatives by giving financial institutions more security.

Change Banking Practices to Include ESG Considerations: Banks must consider environmental, social, and governance (ESG) factors when making lending and investment decisions. This can be facilitated by rules requiring financial firms to report their ESG practices and green financing holdings.



Encourage Public-Private Partnerships: Encourage PPPs for large-scale green urban initiatives, including renewable energy and sustainable infrastructure. These collaborations can leverage governmental policy support and private sector investment to scale sustainable projects throughout Gujarat.

Gujarat's green banking sector can be strengthened by implementing these policies, overcoming current impediments and supporting long-term development throughout the state.

Conclusion

Banks play an important part in Gujarat's green urban development by funding sustainable projects. However, problems such as poor knowledge, regulatory loopholes, and financial risks impede advancement. Green finance adoption can be accelerated by fortifying regulations, encouraging ESG-based banking, and cultivating public-private collaborations. Improving financial instruments and regulatory assistance will help Gujarat move toward a more sustainable and resilient urban future.

References

- Rahman, M. H., Rahman, J., Tanchangya, T., & Esquivias, M. A. (2023). Green banking initiatives and sustainability: A comparative analysis between Bangladesh and India. *Research in Globalization*, 100184.
- Mir, A. A., & Bhat, A. A. (2022). Green banking and sustainability—a review. *Arab Gulf Journal of Scientific Research*, 40(3), 247-263.
- Bhatnagar, M., Taneja, S., & Özen, E. (2022). A wave of green start-ups in India—The study of green finance as a support system for sustainable entrepreneurship. *Green Finance*, 4(2), 253-273.
- Agrawal, R., Agrawal, S., Samadhiya, A., Kumar, A., Luthra, S., & Jain, V. (2024). Adoption of green finance and green innovation for achieving circularity: An exploratory review and future directions. *Geoscience frontiers*, 15(4), 101669.
- Sharma, M., & Choubey, A. (2022). Green banking initiatives: a qualitative study on Indian banking sector. *Environment, Development and Sustainability*, 24(1), 293-319.
- Sahoo, M. K. Green Capital: A Sustainable Energy For Indian Banking Industry Through Strategic Financial Investments.
- Prabhu, G. N. (2021). Green Banking practices—A case study on Indian Green Banking system. *Journal homepage: www.ijrpr.com ISSN*, 2582, 7421.
- Hang, N. P. T. (2022). Policy implications for the green bank development in the context of global climate change. *Emerging Science Journal*, 6(4), 817-833.



- Gour, K., & Agarwal, C. (2024). Incentives & Barriers for Green Banking Adoption: Paving the Path towards Sustainable Financial Practices. *Available at SSRN 4690046*
- Kadaba, D. M. K., Aithal, P. S., & KRS, S. (2022). Impact of sustainable finance on MSMEs and other companies to promote green growth and sustainable development. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 6(1), 60-76.

**IMPACT OF WORKING CAPITAL MANAGEMENT ON THE PROFITABILITY WITH
SPECIAL REFERENCE TO MARUTI-SUZUKI INDIA LTD**

By

Alpeshkumar Dineshbhai Makwana**Ph.D. Scholar****School of Commerce, Gujarat University, Ahmedabad****Abstract**

The Present study is based on secondary data, which have been collected from annual reports of Maruti- Suzuki India Ltd for the period of 2018-19 to 2022-23. The main objectives of this examination are to find- out the impact of working capital management on profitability with special reference to Maruti-Suzuki India Ltd. in this study we use dependent variables to achieve the objective of our study. In dependent variable, we use return on capital employed (ROCE) to measure the profitability of a company and in the independent variable, we use Inventory turnover ratio (ITO), current ratio (CR), and working capital turnover ratio (WCTR) as working capital management matrices. The statistical tools like descriptive statistics, and correlation analysis has been used for the analysis of collected data. In correlation analysis the result shows that ROCE is positively related to ITO and WCTR while negatively related to CR, but result shows that there is relation between dependent variable (ROCE) and independent variable (ITO,WCTR,CR).

Keywords: Working Capital Management, Profitability, Maruti-Suzuki India Ltd, ROCE, CMIE prowess IQ, Annual Reports

Introduction

The financial strength of a company is measured by generally working capital ratios. Every business organisation must have to maintain balance between liquidity and profitability while conducting its day to day operation. Liquidity is an effective tool to ensure that the firms are able to meet its short-term obligation. Total fund of the business unit is will be invested in fixed as well as in current assets. The fixed asset will help to earn return while current assets are essential to run daily business operation. The working capital and profitability have some relationship with each-other. There are many research works available with respect to different industry in India. The profitability increased the very first reason behind it is proper management of working capital. It is up to the business unit how they divert their fund between current and fixed assets, if business unit reduced investment in current assets, the



reduced fund can be usable for profitable opportunities which is increased shareholders return and growth of business unit. Basically there are 3 types such as aggressive working capital policy, moderate working capital management policy and conservative working capital management policy each and every have their pro and cons. Every business unit must have to follow policy with respect to working capital management on the basis of nature, size, industry, business type, and status in the particular industry. The main aim of this examination is to find out "Does the management of working capital influence the profitability of Maruti Suzuki India Ltd.?"

Review of Literature

Rafathunnisa Syeda, (2021). Studied on impact of working capital management on profitability, a case study of 15 US trading companies from 2015-2019. They used descriptive statistics, regression analysis and working capital management, profitability ratios as proxy variables. They found that there was a highly negative relationship between return on assets and inventory turnover and cash conversion cycle. They also found that regression analysis showed R-squared value in the table is 0.584 i.e. 58.4% of variation in the dependent variable net profitability was explained by the independent variables.

Patel, K.A., (2015). Studied on impact of working capital management on profitability in Indian petroleum industry with special reference to Indian Oil Corporation from 2009-10 to 2013-14 by using descriptive statistics, Pearson correlation analysis. They found that correlation coefficient between WC and NP of the IOC is observed to be highly negatively correlated i.e. -.928 which was nearer to -1 which concluded that there is relation between working capital and profitability of IOC.

Patel, Parjapati, (2012). Studied on comparative study on working capital management of selected steel company in India from 2006-2011. They used operating cycle analysis, size-wise analysis, and ratio analysis methodology to know the comparative position of steel companies in working capital management. They found that TATA steel ltd has highest growth of net working capital during holding period followed by Jindal steel ltd and negative with JSW steel. They also found that average gross operating cycle is highest with ESSAR steel ltd i.e. 92.36 days followed by SAIL i.e. 88.38 days and Jindal steel i.e. 69.50 days, which concluded good working capital management in these companies.

Gill, A., Biger, N., and Mathur, (2010), Studied on the relationship between working capital management and profitability evidence from the United States from 2005-2007 of an 88 American firms listed on New York exchange. They used descriptive statistics, regression analysis for working capital management and profitability ratios as proxy variables. They found that there was statistically significant relationship between cash conversion cycle and profitability, measured through gross operating profit.



They also found that managers can create profits for their companies by handling correctly the cash conversion cycle and by keeping accounts receivables at an optimal level.

Padachi, K., (2009). Studied on trends in working capital management and its impact on firm's performance of Mauritian 58 small manufacturing firms from 1998-2003 using panel data analysis. He found that high investment in inventories and receivables days, account payable days and cash conversion cycle. They also found that there was increasing trends in the short term component of working capital financing.

Objective of the Research

The main objective of the research is to identify the relation of WC on profitability of Maruti Suzuki India Ltd.

Hypothesis

H0: There is no relationship between the working capital and profitability.

H1: There is relationship between the working capital and the profitability.

Data and Methodology

The present study is based on secondary data, which has been collected from published annual reports and prowess-IQ CMIE database for the period 2018-19 to 2022-23 of Maruti-Suzuki India Ltd. In this study, we used dependent and independent variables to achieve our objective of the study. In dependent variable, we use return on capital employed to measure the profitability of the company and in independent variable, we use inventory turnover ratio, current ratio, and working capital turnover ratio as working capital management criteria. Different formulas, variables as mentioned earlier which are tabulated below:

Table 1: Variables Formulas and Abbreviations

VARIABLES	ABBREVIATIONS	MEASUREMENT
Dependent:		
Return on capital employed	ROCE	NPBIT/CAPITAL EMPLOYED*100
Independent:		
Inventory turnover ratio	ITO	COGS/avg. Stock
Current ratio	CR	Current asset/current liabilities
Working capital turnover ratio	WCTR	Net sale/NWC



Some statistical tools like descriptive statistics, correlation analysis and regression analysis used for analysis. The V.30 version of SPSS Statistics has been used to analyze the collected data.

Statistical Methods

For complete understanding and trends of the collected data over the years descriptive statistics like mean, median, minimum, maximum, standard deviation, are used. In order to analyze the collected data for our variables which has been calculated by using IBM SPSS Statistics is version 30.0.0, software.

Correlation Analysis

Correlation is a statistical measure that describes the strength and direction of a relationship between two variables.

Data Analysis and Interpretation

Descriptive statistics:

Table 2: Descriptive Statistics

	ROCE	ITO	CR	WCTR
Mean	11.868	19.292	0.8714	-58.368
Median	12.06	23.06	0.906	-32.24
Minimum	7.22	11.94	0.616	-203.99
Maximum	17.36	25.87	1.164	29
Standard Deviation	4.13	6.74	0.23	88.88
Observation	5	5	5	5

- ROCE: It is a financial ratio that measures a company's profitability and efficiency in using the capital employed in its business. Table-1 study reveals that the mean value of 11.868, which shows average firm ability to generate profit per 100 rupees of long term investment in capital employed. The minimum value is 7.22, the maximum value is 17.36 and standard deviation value is 4.13.
- ITO: The Inventory Turnover Ratio measures how quickly a company sells and replaces its inventory. The study reveals that the mean value of ITO is 19.292 which show the average speed of inventory is converted into a sale. The minimum value is 11.94, the maximum value is 25.87 and standard deviation value is 6.74.



- CR: - It is the measure of capacity of the firm to pay its short-term liabilities and to ascertain the short-term financial strength of the business. The Study reveals that the mean value of CR is 0.8714, the minimum value is 0.616, the maximum value is 1.164 and Standard Deviation value is 0.23.
- WCTR: It is the measure the number of times the working capital convert in sales. The Study reveals that the mean value of WTO is -58.368, which indicate the firm ability to generate sale per rupee of working capital. The minimum value is -203.99, the maximum value is 29 and Standard Deviation value is 88.88.

Correlation Analysis

Table 3: Correlation Analysis

Correlations					
		ROCE	ITO	CR	WCTR
ROCE	Pearson Correlation	1	.368	-.530	.291
	Sig. (2-tailed)		.542	.358	.635
	N	5	5	5	5
ITO	Pearson Correlation	.368	1	.409	.455
	Sig. (2-tailed)	.542		.494	.441
	N	5	5	5	5
CR	Pearson Correlation	-.530	.409	1	-.079
	Sig. (2-tailed)	.358	.494		.900
	N	5	5	5	5
WCTR	Pearson Correlation	.291	.455	-.079	1
	Sig. (2-tailed)	.635	.441	.900	
	N	5	5	5	5

Table-3 study reveals that ROCE is positively related to ITO (i.e. 0.368) and WCTR (i.e. 0.291) while negative relation with CR (-0.530). It indicates an ROCE (Dependent Variable) is positively related to ITO (Independent Variable) and WCTR (Independent Variable) means when independent variable increases which also influence to increase dependent variable to increase while ROCE (dependent variable) is negatively with CR (Independent variable) which shows opposite relation between this variable when one variable increases other decreases and vice-versa.



Conclusion

The Present study is based on secondary data, which has been collected from published annual reports from the period of 2018-19 to 2022-23 of Maruti-Suzuki India Ltd. The mean value of ROCE is 11.87, which indicates the moderate level of profitability. The mean value of ITO is 19.29, which shows Fast-Selling Inventory Means Faster Conversion Rate of Inventory into Sale. The mean value of CR is 0.8714 which shows firm may be facing liquidity issues due to inadequate working capital management. The mean value of WCTR is -58.37 which indicates firms may have inefficient working capital management which may lead to liquidity problems

In the Correlation Analysis, ROCE is a positive relationship with WCTR and ITO 0.291 and 0.368 respectively, while negative correlation with CR value is -0.530. There is no significant impact of ITO, CR, and WCTR on ROCE because p-value is more than 0.05 that means null hypothesis is accepted, it means there is no relation between working capital management metrics (ITO, CR, & WCTR) with profitability metrics (CR). The p value for all the variables are above 0.05, indicating that the observed correlations may be due to chance.

Therefore, it cannot be concluded that there is a significant relationship between ROCE and ITO, WCTR, or CR. The results suggest that other factors may be influencing ROCE and further analysis would be needed to identify the key drivers of ROCE.

Delimitations of The Study

- The study is limited to five years 2018-19 to 2022-23 only.
- The study is limited to only one company. i.e., Maruti-Suzuki India Ltd. so findings cannot be generalized to whole industry.
- The study is based on secondary data. Therefore, the quality of study depends purely upon the accuracy, reliability and quality of the secondary data source.
- The performance of WCM is also affected by other factors like inflation, market change etc. Have not been covered by this study.
- There are different methods to measure efficiency, effectiveness and profitability.
- Different tools used to analyze the data, have own limitation that applies to this study also.

References

- Gill, A., Biger, N., Mathur, N., (2010). The relationship between working capital management and profitability: evidence from the United States, business and economics journal, vol. 2010, BEJ-10.



- Padachi, K. (2006). Trends in working capital management and its impact on firm's performance: an analysis of Mauritian small manufacturing firm's international review of business research papers, vol. 2, no. 2, 45-58.
- Patel, J.A., Parjapati, K., (2012). "A comparative study on working capital management of selected steel companies in India", Asian journal of research in business economics and management, vol. 2, no. 7.
- Patel, K.A. (2015). "Impact of working capital management on profitability in Indian petroleum industry with special reference to Indian Oil Corporation", Research hub-international multidisciplinary research Journal (RHIMRJ), vol. 2, issue 5, ISSN 2349-7637.
- Rafathunnisa Syeda, (2021), impact of working capital management on profitability: a case study of trading companies, accounting and finance innovations, DOI: 10.5772/intechopen.99912., ISBN: 978-1-83968-571-2, E-BOOK (PDF) ISBN: 978-1-83968-599-6.

**ANXIETY AND MENTAL HEALTH AMONG GOVERNMENT AND PRIVATE B.ED.****COLLEGE STUDENTS**

By

Dr. Geeta Kanaiyalal Prajapati**Assistant Professor (Psychology)****Government Arts College, Gandhinagar****Abstract**

The main objective of the present research was to investigate Anxiety and Mental health in Government and Private B.Ed. College students. The total sample consisted of 120 students, in which 60 were Private B.Ed. College and 60 were Government B.Ed. College students. The research tool for Anxiety test was developed by A.P.K.Sinha and L.N.K. Sinha and Gujarati standardization made by Dr. D. J. Bhatt. Mental health tool was measured by Dr. D. J. Bhatt and Gita R. Gida was used to collect the data. Here the 't' test was applied to check significance difference and 'r' was applied to check the correlation. The finding of the study revealed that there was a significant difference between students of Government and Private B.Ed. college on Anxiety and also there was a significant difference between students of Government and Private B.Ed. college on mental health. The 'r' between Anxiety and mental health was (-0.86). So we can say that there was a highly negative correlation.

Keywords: Anxiety, Mental health, t-test & r test for analysis

Introduction

The present era is known as era of Anxiety. Anxiety is very common for all human. Anxiety is uncomfortable experience of worry, fear and apprehension accompanied by various Physical sensations (Wilson et al.1995). Anxiety is defined in terms of its physical and physiological effects on a person or thing. Anxiety can be a mental, physical or an emotional stain. It can also be a tension or a situation or factor that can cause Anxiety. Anxiety occurs where there is a discrepancy between the demands of the environment or workplace and an individual's ability to carry out and complete these demands. Often Anxiety or can lead the body to have a physiological reaction which can strain a person physically as well as mentally. Anxiety can be either a short term „state“ or a long term 'trait'.

Anxiety is the subjective unpleasant feelings or dread over anticipated events, such as the feelings of imminent death. Anxiety is not the same as fear, which is a response to a real or perceives immediate threat. Anxiety is the expectation of future threat. Anxiety is a feeling of fear, uneasiness and worry.



Usually generalized and unfocused as an overreaction to a situation that is only subjectively as menacing (Bouras, N. Holt, G.,2007). Muscular tension, restlessness, fatigue and problems in concentration are common symptoms of anxiety. Student mostly feels anxiety for exam. People can also face stage fright, test anxiety, somatic anxiety and mathematical anxiety.

Mental health is term used to describe either a level of cognitive or emotional well- being or an absence of a mental disorder. The world health organization defines “mental health is a state of complete physical, mental, social and spiritual well-being and not the absence of disease or infirmity. The concept of mental health includes subjective well being perceived self-efficiency, autonomy, competence and recognition of the ability to realize one’s intellectual and emotional potential. It has been also defined as state of well-being whereby individual’s recognize their abilities or able to cope with their normal Anxiety of life, work productivity and fruitfully make a contribution to their communities (Agarwal, 2007).

Anxiety is a much talked phenomenon. Mental health is also very important of our life. Present investigation was an attempt to study Anxiety and mental health among students of Government and Private B.Ed. College.

Review of Relevant literature

According to Scot & Wertheimer (1992) Review of related literature may help to make progress towards the solution of new problems emphasizing to the importance of survey of related literature.

1) A comparative study of Mental Health among Government and private school teachers
Vyas K.R. (2014)

Purpose: To examine Mental Health among government and private school teachers

Conclusion: The finding of the study revealed that there was significance mean difference between government and private school teachers and also found that the mean difference of government school teachers was very high to compare private school teachers.

2) Mental health and stress among government and private B.Ed college students.
Janani Jalpa. A (2016)

Purpose: The purpose of the present study to find out mental health and stress among government and private B.Ed College students.

Conclusion: The result revealed that significance difference in mental health and stress with respect to government and private B.Ed students, while the correlation between mental health and stress reveals 0.79, its very high positive correlation.



3) A Study of the causes and effects of Anxiety among students in Higher Education. Tianqui Jia(2024)
(Journal of Education Humanities and Social Science)

Purpose: The purpose of the essay is to explore the major causes and effects of anxiety among the students in higher education. By examining the academic and economic pressure, social challenges, future uncertainty, that contribute to anxiety, one can better understand the multifaceted nature of this issue.

Conclusion: Anxiety among students in higher education is a multifaceted issue with far-reaching roots and implications. The pressures of academic achievement, financial burdens, uncertainty about future, personal and environmental factors, create a complex picture that can seriously affects student's mental health and overall well-being.

Objectives

1. To check significant difference between students of Government and Private B.Ed. college on Anxiety.
2. To check significant difference between students of Government and Private B.Ed. college on Mental Health.
3. To check the correlation between Anxiety and mental health among Government and Private B.Ed. college students.

Hypothesis

1. There is no significant difference between the mean score of Government and Private B.Ed. College students on Anxiety.
2. There is no significant difference between the mean score of Government and Private B.Ed. College students on Mental Health.
3. There is no significant correlation between Anxiety and mental health.

Variables

1. Independent variable: types of college
 - a. Government B.Ed. college students
 - b. Private B.Ed. college students
2. Dependent variable: The total score of Anxiety test and Mental Health scale
3. Control variable: only Government and Private B.Ed. colleges of Ahmedabad city.



Tools

- Personal datasheet:

In this research personal datasheet preparing to collect personal data for the Government and Private B.Ed. college students like as Name of College, Area etc.

- Anxiety scale:

It was developed by A.P.K. Sinha and L.N.K.Sinha and gujarati standardization was made by Dr. D.J. Bhatt. It consists of 90 statements. This test measures the level of anxiety of the respondent. The respondent has to give his/her response in just „yes“ or „no“. It is a self-administrative test. The reliability of the test was 0.85 as per the method of test-retest. As the Brownman's formula it is 0.92.

- Mental health scale:

The mental health scale was developed by Dr.D.J.Bhatt & Geeta R.Geeda (1992).The scale consisted of 40 items, each was to rate on three point scale. The reliability of this scale is 0.94 and validity is 0.63 established by the author.

The samples of the present study consisted of 120 Government and Private B.Ed. College were randomly selected. There are 60 are Government B.Ed. College students and 60 Private B.Ed. college students taken out in the present research.

Procedure

In this research Anxiety test and mental health scale was administrated individually as well as on Government B.Ed. college and Private B.Ed. college students from Ahmedabad city, while collecting data for this study before attempting the questioner the subjects were requested to read the instruction carefully and follow then data collection was completed then 't' test was used to check the significance difference between students of Government and Private B.Ed. college and 'r' was used to check correlation between Anxiety and Mental health.

Result & Discussion

The aim of present research was to study of Anxiety and Mental health among students of Government and Private B.Ed. College. Here the test of Anxiety scale was made by A.P.K. Sinha and L.N.K.Sinha and gujarati standardization was made by Dr. D.J. Bhatt and the mental health scale was developed by Dr. D.J.Bhatt & Geeta R.Gida (1992) was used. Here result discussion of Anxiety and Mental health scale are as under.



The purpose of present study was to investigate significant mean difference between students for Government and Private B.Ed. College on Anxiety and Mental health. The data collection was completed then t-test was applied to find out the significance of mean difference and r was used to check the correlation. Obtained results are presented in Table-1, 2 and 3.

Table No. 1

‘t’ calculation of Anxiety between students of Government and Private B.Ed. college

Types of college	N	Mean	S.D.	t	Sig.
Private B.Ed. college	60	60.50	10.70	17.70	0.01**
Government B.Ed. college	60	20.40	8.50		

Significance levels 0.05=1.97

0.01=2.59

We show Table-1 ‘t’ calculation of Anxiety between students of Government and Private B.Ed. college. Here the mean of Private B.Ed. college students was 60.50 & S.D. was 10.70 and the mean of Government B.Ed. college students was 20.40 & S.D. was 8.56. So the mean difference between students of Government and Private B.Ed. College on Anxiety was 40.10. Therefore we can say that the Private B.Ed. college students were higher Anxiety than Government B.Ed. college students. We show the ‘t’ value of Anxiety is 17.70; it was significant at 0.01 levels. So the hypothesis is not accepted.

Table No. 2

‘t’ calculation of Mental Health between students of Government and Private B.Ed. college

Types of college	N	Mean	S.D.	t	Sig.
Private B.Ed. college	60	72.30	5.10	11.50	0.01**
Government B.Ed. college	60	84.40	6.30		

Significance levels 0.05=1.97

0.01=2.59

We show Table-2, ‘t’ calculation of mental health between students of Government B.Ed. college students and Private B.Ed. college that the mean of Private B.Ed. college students was 72.30 & S.D. was



5.10 and the mean of Government B.Ed. college students was 84.40 & S.D. was 6.30. So the mean difference between students of Government and Private B.Ed. College on mental health was 12.10. Therefore we can say that the Government B.Ed. college students are good in mental health than Private B.Ed. college students. We show that the 't' value of mental health was 11.50; it was significant at 0.01 levels. So, here hypothesis is not accepted.

Table No. 3

Correlation calculation between Anxiety and mental health

Variables	N	Mean	'r'
Anxiety	120	140.45	-0.81**
Mental Health	120	78.35	

P>0.01**

We show Table-3 correlation calculation between Anxiety and mental health that r value is -0.86. So the result clearly revealed that the correlation between Anxiety and mental health was Negative High correlation. So we can also say that when students of Government and Private B.Ed. College feel higher Anxiety they were suffering a bad mental health.

Conclusion

According to the result, a significant difference was observed between students of Government and Private B.Ed. College on their Anxiety and mental health also. We also have seen that correlation between Anxiety and mental health was high Negative correlation.

References

- B. D. Dhila & L. R. Yagnik & Chothani, (2005) Research Methodology, first addition, Akshar publivcation, Ahmedabad.
- Jogsan Y. A., Statistical Table, testing signification of t-distribution, Akshar publication, Ahmedabad, 60.
- Shah Arvind (2007) "Asadharan Manovigyan" Devine publication(83-86)
- Shah Dharmini (2009) "A study of anxiety of high school students of Ahmedabad city with relation to some variables" P.G.D.C.A. Dissertation, Gujarat University, Ahmedabad(24-36)
- Wilson T.G. (1995) 'Abnormal Psychology' A Simon& Schuster Compony,(133-165)

**CORPORATE SOCIAL RESPONSIBILITY IN INDIA: KEY ISSUES AND EMERGING CHALLENGES**

By

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&

Dr. Vishwa Deuskar**Assistant Professor****JG College of Commerce, Ahmedabad****Abstract**

Corporate Social Responsibility (CSR) in India has undergone significant transformation, especially following the Companies Act, 2013, which made CSR spending mandatory for certain companies. While CSR initiatives have contributed to social welfare, environmental sustainability, and economic development, their effective implementation remains a challenge. Businesses face regulatory complexities, stakeholder expectations, financial constraints, and difficulties in measuring impact. Additionally, the rising importance of ESG (Environmental, Social, and Governance) standards, concerns over green washing, and the need for long-term sustainable programs have further complicated CSR execution. This paper explores the key issues and emerging challenges in CSR implementation in India, highlighting the need for strategic, transparent, and impactful CSR initiatives. By addressing these challenges, companies can enhance their social contributions while fostering sustainable business growth.

Keywords: Corporate Social Responsibility (CSR), Companies Act 2013, Stakeholder Engagement, Regulatory Compliance, CSR Impact Measurement, Sustainability, CSR Challenges.

Introduction

Corporate Social Responsibility (CSR) refers to a company's commitment to operating in an economically, socially, and environmentally sustainable manner while balancing the interests of various stakeholders, including employees, customers, investors, communities, and the environment. CSR extends beyond profit-making objectives and emphasizes ethical business practices, social welfare, and environmental sustainability. It represents a company's responsibility to contribute positively to society



while conducting its business operations in a way that minimizes negative impacts on people and the planet. The concept of CSR has evolved significantly over time. Traditionally, businesses viewed social responsibility as philanthropic activities, such as donations to charities, educational institutions, and healthcare initiatives. However, in modern times, CSR has transformed into a strategic approach where companies integrate sustainable business practices into their core operations. This shift has been driven by increasing awareness of social and environmental issues, regulatory frameworks, and consumer expectations for ethical and responsible business conduct.

CSR covers a wide range of activities, including environmental sustainability efforts such as reducing carbon emissions, conserving resources, and adopting green technologies. It also encompasses fair labour practices, ethical sourcing of materials, ensuring workplace diversity and inclusion, and actively contributing to community development through education, healthcare, and livelihood initiatives. Furthermore, CSR involves corporate governance practices that promote transparency, accountability, and fair treatment of stakeholders. Governments and regulatory bodies in many countries, including India, have recognized the importance of CSR and have mandated certain corporate social responsibility initiatives. For instance, the Indian Companies Act, 2013, made CSR a legal requirement for companies meeting specific financial criteria. This law mandates that such companies allocate at least 2% of their average net profit over the past three years to CSR activities, ensuring that businesses actively contribute to social development.

Beyond legal obligations, CSR has become a vital component of corporate strategy as businesses increasingly recognize that responsible practices can enhance their brand reputation, build customer trust, and improve long-term financial performance.

Investors, consumers, and employees are more likely to engage with companies that demonstrate a commitment to ethical and sustainable business practices. As a result, CSR is no longer viewed merely as a moral obligation but as a strategic tool for fostering business sustainability, competitive advantage, and positive societal impact.

Importance of CSR in the Indian Context

Corporate Social Responsibility (CSR) plays a crucial role in India, given the country's socio-economic diversity, environmental challenges, and developmental needs. As one of the fastest-growing economies, India faces numerous issues such as poverty, unemployment, environmental degradation, and inequality. CSR acts as a bridge between corporate growth and societal welfare, ensuring that businesses contribute to nation-building while maintaining profitability and sustainability. One of the key reasons CSR is essential in India is its role in addressing socio-economic disparities. A significant portion of the



Indian population still struggles with basic necessities such as healthcare, education, and sanitation. CSR initiatives by companies help improve access to these essential services, especially in rural and underprivileged areas. Many corporations invest in building schools, providing scholarships, setting up healthcare camps, and supporting livelihood programs, thereby contributing to social development and poverty alleviation.

Environmental sustainability is another major area where CSR has a profound impact. India faces severe environmental challenges, including air pollution, water scarcity, deforestation, and climate change. Many companies have taken up CSR initiatives focused on reducing their carbon footprint, promoting renewable energy, managing waste effectively, and conserving natural resources. These initiatives not only help mitigate environmental risks but also align with global sustainability goals such as the United Nations Sustainable Development Goals (SDGs). CSR also plays a vital role in enhancing corporate reputation and consumer trust. Indian consumers are becoming increasingly conscious of ethical and sustainable business practices. Companies that actively engage in CSR tend to build a positive brand image, attract loyal customers, and gain a competitive advantage. Employees, too, are more motivated to work for organizations that demonstrate a commitment to social responsibility, leading to better employee engagement and retention.

The Indian government has taken significant steps to institutionalize CSR through legal mandates. The Companies Act, 2013, made India the first country in the world to legally require large corporations to allocate a minimum of 2% of their net profits towards CSR activities. This law has ensured that corporate contributions are directed towards critical areas such as education, healthcare, skill development, environmental conservation, and rural development. It has also encouraged transparency and accountability in CSR spending, ensuring that funds are utilized effectively for societal benefit. Moreover, CSR in India fosters collaboration between businesses, non-governmental organizations (NGOs), and government agencies. Many companies partner with NGOs and community-based organizations to implement their CSR initiatives effectively. This collaborative approach helps leverage resources, expertise, and local knowledge, leading to more impactful and sustainable development outcomes.

Literature Review

Gupta (2023) provides a comprehensive analysis of the CSR landscape in India, highlighting several impediments to effective implementation. The study identifies a lack of a holistic approach among companies, inadequate community participation, and inefficiencies within implementing agencies as primary challenges. Gupta emphasizes that many firms adopt a fragmented strategy towards CSR,



focusing on isolated initiatives rather than integrating CSR into their core business operations. This piecemeal approach often leads to suboptimal outcomes and fails to address the broader socio-economic issues at hand. Furthermore, the research points out that community engagement is frequently superficial, with companies not investing sufficient effort to understand or meet the actual needs of the communities they intend to serve. Implementing agencies also face challenges related to efficiency, transparency, and building consensus on CSR programs, which further complicates the execution of CSR initiatives.

In a similar vein, the Ministry of Corporate Affairs (2020) discusses the challenges inherent in CSR practices in India. The report underscores issues such as transparency, a narrow perspective on CSR, lack of consensus among stakeholders, and inadequate infrastructure as significant obstacles. Transparency issues arise when companies do not fully disclose their CSR activities or the impact thereof, leading to skepticism about their genuine commitment to social responsibility. The narrow perspective refers to the tendency of companies to view CSR merely as a compliance requirement or a tool for image building, rather than as a strategic initiative that can contribute to sustainable development. The report also highlights the absence of a unified approach among various stakeholders, including businesses, government agencies, and non-governmental organizations, which hampers the formulation and implementation of effective CSR strategies. Additionally, inadequate infrastructure, both within companies and in the broader ecosystem, poses a challenge to the efficient execution of CSR projects.

Kumar (2022) delves into the factors driving CSR practices in Indian companies, identifying progressive self-interest, social investment, transparency, trust, and increased public expectations as key motivators. The study suggests that companies are increasingly recognizing the strategic benefits of CSR, such as enhanced brand reputation, customer loyalty, and employee satisfaction. Social investment, which involves investing in initiatives that yield social benefits while also contributing to the company's objectives, is gaining traction as a CSR strategy. Transparency and trust are highlighted as crucial elements, with stakeholders demanding greater openness regarding companies' CSR activities and their outcomes. The research also notes that public expectations have risen, with consumers and investors alike favoring companies that demonstrate a genuine commitment to social and environmental responsibilities.

Singh (2021) provides an overview of CSR in India, discussing its evolution and the challenges associated with its implementation. The paper notes that while CSR has traditionally been viewed as a philanthropic activity, there is a growing recognition of its strategic importance. However, the study identifies several challenges, including a lack of awareness and understanding of CSR among businesses, especially small and medium-sized enterprises, and the absence of standardized guidelines for CSR reporting and evaluation. The research emphasizes the need for capacity building within companies to



design and implement effective CSR strategies and calls for the development of standardized frameworks to assess the impact of CSR initiatives.

Key Issues in CSR Implementation

While Corporate Social Responsibility (CSR) has gained significant traction in India, its implementation faces several challenges. Despite the legal mandate under the Companies Act, 2013, businesses encounter numerous obstacles in executing CSR initiatives effectively. These challenges range from lack of clarity in policies to issues related to transparency, impact measurement, and alignment with long-term development goals. The following are some of the key issues in CSR implementation in India:

- Many companies view CSR as an obligation rather than a strategic initiative. As a result, CSR activities are often planned in an ad-hoc manner, without alignment to the company's core competencies or long-term business strategy. Without a clear CSR vision and structured execution plan, many initiatives fail to create a lasting impact.
- The Companies Act, 2013, mandates that eligible companies spend 2% of their average net profit on CSR activities. However, navigating legal and regulatory requirements remains a challenge, especially for smaller firms that lack the expertise to interpret the law correctly. Companies often struggle with compliance documentation, reporting requirements, and identifying projects that meet government guidelines.
- Many businesses, especially small and medium-sized enterprises (SMEs), have limited awareness of CSR regulations and best practices. Additionally, employee participation in CSR initiatives is often low, leading to reduced engagement and sustainability of projects. CSR success depends on collaboration among management, employees, NGOs, and government bodies, but lack of awareness and coordination weakens implementation efforts.
- Choosing the right CSR projects is crucial for meaningful impact. Many companies struggle to identify initiatives that align with their expertise and social needs. Some firms invest in high-visibility projects rather than initiatives that address deep-rooted social and environmental issues. The preference for short-term, one-time initiatives over sustainable long-term programs further limits the effectiveness of CSR efforts.
- One of the most significant challenges in CSR implementation is measuring the impact of initiatives. Many companies lack proper monitoring and evaluation mechanisms, making it difficult to assess the effectiveness of their CSR programs. Without data-driven insights, businesses struggle to improve their strategies or ensure that funds are being used efficiently for



social development.

- While many companies partner with NGOs to implement CSR projects, these collaborations often face challenges such as mismatched priorities, poor communication, and lack of trust. Some NGOs may lack the capacity or expertise to execute large-scale projects, leading to inefficiencies and suboptimal results. A well-structured partnership model is essential for ensuring CSR initiatives are implemented effectively.
- CSR spending in India is often concentrated in urban and industrial areas, while rural and remote regions receive less attention. Many companies prefer investing in CSR activities near their operational locations rather than in regions that need them the most. This leads to uneven distribution of CSR benefits, leaving underprivileged areas underserved.
- Some companies engage in "greenwashing," where they exaggerate or misrepresent their CSR efforts to enhance their corporate image. Instead of genuinely investing in sustainable development, businesses may focus on PR-driven initiatives that do not create meaningful social or environmental change. Lack of transparency in CSR spending and reporting also raises concerns about accountability and misuse of funds.
- Many CSR initiatives in India face sustainability challenges, as they are often project-based rather than long-term interventions. Companies may fund projects for a limited period without ensuring their continuity after the initial funding ends. Additionally, scaling successful CSR programs to a national or multi-regional level remains a challenge due to financial, operational, and logistical constraints.
- For many businesses, especially in competitive industries, balancing financial performance with social responsibility remains a challenge. Companies often prioritize short-term profitability over long-term sustainability, leading to reduced CSR investments during economic downturns. Ensuring that CSR remains an integral part of business operations, even in challenging times, requires a shift in corporate mindset and leadership commitment.

Emerging Challenges in CSR

As Corporate Social Responsibility (CSR) continues to evolve in India, new challenges are emerging that affect its implementation and effectiveness. While the mandatory CSR spending requirement under the Companies Act, 2013 has increased corporate participation in social initiatives, shifting economic, environmental, and regulatory landscapes pose fresh obstacles. Businesses must adapt to these challenges to ensure sustainable and impactful CSR initiatives.

- India's CSR framework is constantly evolving, with new amendments, compliance requirements,



and reporting obligations being introduced. Companies often struggle to keep up with these changes, leading to difficulties in aligning CSR initiatives with regulatory expectations. The introduction of penalties for non-compliance has added further pressure on businesses to meet legal obligations.

- With the rising importance of ESG reporting, businesses are expected to integrate CSR into a broader sustainability framework. While CSR in India has traditionally focused on philanthropy and social development, companies now need to align their initiatives with environmental sustainability, ethical governance, and long-term social impact. Many firms face challenges in restructuring their CSR policies to meet global ESG benchmarks.
- Companies are increasingly expected to use technology to track, measure, and report their CSR impact. However, the lack of robust CSR analytics, impact assessment tools, and digital tracking mechanisms makes it difficult to evaluate the effectiveness of CSR programs. Many firms still rely on traditional, non-digital methods of CSR reporting, leading to gaps in transparency and accountability.
- Consumers, investors, and employees now expect companies to go beyond compliance-driven CSR and make a genuine social and environmental impact. The rise of socially conscious consumers means businesses must demonstrate authentic commitment to CSR rather than treating it as a marketing tool. Failure to meet stakeholder expectations can lead to reputational risks and loss of consumer trust.
- Economic slowdowns, global crises (such as the COVID-19 pandemic), and market fluctuations impact companies' financial stability, often leading to reduced CSR spending. Businesses face the challenge of maintaining CSR commitments even in times of financial uncertainty, ensuring that social initiatives remain sustainable and not merely discretionary expenditures.
- Many CSR initiatives in India are short-term projects rather than long-term sustainable programs. Companies often fund initiatives for a limited period without ensuring their continuity beyond the initial investment. The challenge lies in building scalable and self-sustaining CSR programs that continue to deliver impact even after corporate funding ends.
- With multiple companies investing in similar CSR activities (such as education, healthcare, and skill development), certain sectors receive excessive attention, while others remain neglected. This has led to CSR fatigue, where some areas are overfunded while critical social issues, such as mental health and rural infrastructure, remain under-addressed. Allocating CSR resources effectively and diversifying project portfolios is becoming increasingly important.
- CSR initiatives are often implemented in isolation, leading to inefficiencies and duplication of



efforts. Businesses need to collaborate with government agencies, non-profits, academic institutions, and other corporations to maximize impact. However, forming effective partnerships comes with challenges related to governance, alignment of objectives, and measuring collective outcomes.

- With CSR becoming a legal requirement, some companies engage in greenwashing, where they exaggerate their social and environmental contributions to enhance their corporate image. Misuse of CSR funds, lack of transparency, and manipulative reporting practices have raised concerns about the authenticity of CSR initiatives. Strengthening transparency and third-party CSR audits can help address this challenge.
- As climate change becomes a global priority, businesses are expected to incorporate environmental sustainability into their CSR strategies. Addressing issues such as carbon footprint reduction, renewable energy adoption, and responsible resource management requires a shift from traditional CSR models to climate-conscious business strategies. Many companies lack the expertise and resources to transition toward environmentally sustainable CSR practices.

Emerging challenges in CSR require businesses to move beyond traditional philanthropy and integrate strategic, measurable, and sustainable approaches into their initiatives. Companies must align their CSR efforts with global ESG standards, digital transformation, stakeholder expectations, and long-term impact assessment. By addressing these challenges, businesses can create meaningful social change while strengthening their brand reputation and corporate sustainability.

Conclusion

Corporate Social Responsibility (CSR) in India has evolved from a voluntary philanthropic effort to a legally mandated obligation under the Companies Act, 2013. While this has increased corporate participation in social initiatives, significant challenges remain in ensuring the effectiveness, transparency, and sustainability of CSR programs. Companies face hurdles such as regulatory compliance, impact measurement, stakeholder engagement, economic uncertainties, and alignment with ESG (Environmental, Social, and Governance) goals. Additionally, concerns about greenwashing, resource allocation inefficiencies, and lack of long-term sustainability pose further challenges. Addressing these issues requires businesses to adopt a strategic and well-integrated CSR approach that aligns with their core competencies and long-term business objectives. Moving forward, Indian businesses must focus on measurable and sustainable CSR initiatives rather than viewing them as mere compliance requirements. Collaboration with governments, NGOs, and communities, leveraging



technology for impact assessment, and ensuring transparency in CSR spending will be crucial in maximizing social impact. By overcoming these emerging challenges, CSR in India can contribute meaningfully to economic development, environmental sustainability, and social well-being, ultimately creating a more inclusive and responsible corporate ecosystem.

References

- Chandrashekhara, K.L. (2022). Corporate Social Responsibility in India: Issues and Challenges. *Law Audience Journal*, 4(4), 14-27.
- Gupta, S. (2023). Corporate Social Responsibility- Issues and Challenges in India. *International Journal of Management Studies*, 10(2), 83-95.
- Karmakar, S. (2022, December 26). Corporate Social Responsibility (CSR): Challenges and Resolutions. *Cyberswift*.
- Kumar, A. (2020). Corporate Social Responsibility in India: Issues and challenges. *Spectrum: A Journal of Multidisciplinary Research*, 9(1), 81-94.
- Kumar, R. (2022). Corporate Social Responsibility in India: Issues and Challenges. *International Journal of Applied Research*, 8(3), 1641-1648.
- Ministry of Corporate Affairs. (2020). Corporate Social Responsibility in India: Issues and Challenges. *Government of India Report*, 15-27.
- Singh, A. (2021). A Review on Corporate Social Responsibility in India. *International Journal of Creative Research Thoughts*, 9(6), 22-30.
- Waldron, S. (2022, November 23). Corporate Social Responsibility Challenges In India. *INDIA CSR*.



AWARENESS OF NATIONAL PENSION SCHEME (NPS) AMONG GEN-Z AND MILLENNIALS

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Abstract

This research paper examines the awareness and understanding of the National Pension System (NPS) among Generation Z (Gen Z) and Millennials in India. The NPS, introduced in 2004 as a voluntary defined contribution pension scheme, aims to provide financial security in old age. Amin U.(2016) highlighted in her research paper “Analysis on Financial literacy inevitable aspect of financial inclusion” that major respondent faced issue related to awareness of different financial script. Despite its potential benefits, participation rates among younger demographics remain low.

The study employed a quantitative approach, surveying 409 individuals aged 18 to 40 to evaluate their familiarity with the NPS, perceptions of its features, and factors influencing their investment decisions. The findings reveal that while a significant portion of respondents are aware of the NPS, actual enrollment rates are minimal. Key obstacles identified include a lack of trust in government schemes, a preference for more accessible investment options, and limited understanding of the tax advantages and withdrawal processes associated with the NPS.

Notably, Gen Z respondents exhibited a higher propensity to engage with the NPS compared to older Millennials, likely due to their longer investment horizon and evolving financial priorities. Additionally, respondents with prior financial education demonstrated a greater likelihood of participating in the NPS, highlighting the critical role of financial literacy in fostering informed decision-making. The study concludes with recommendations for enhancing awareness and accessibility of the NPS among Gen Z and Millennials. Strategies such as targeted educational initiatives, streamlined enrollment processes, and the integration of digital platforms are essential for increasing participation and promoting long-term financial planning among these generations.

Keywords: Financial Literacy, Financial Awareness, NPS, Investment Awareness, Investment Decision.



Introduction

With the rapid evolution of technology and shifting economic landscapes, the financial well-being of younger generations, particularly Gen Z and Millennials, has become a focal point of concern. These cohorts face unique challenges and opportunities in retirement planning, necessitating a thorough understanding of financial instruments designed to secure their futures. The National Pension Scheme (NPS), a government-backed initiative aimed at providing a sustainable pension framework, emerges as a critical tool in this context.

This study investigates the awareness levels of Gen Z and Millennials regarding the NPS, exploring the factors that influence their understanding and participation. By examining the interplay between educational initiatives, the gig economy, and digital financial platforms, the research aims to identify knowledge gaps and attitudes towards retirement planning. Ultimately, insights gained from this analysis will inform policymakers and financial institutions in crafting strategies that enhance financial literacy and encourage proactive retirement planning among these generations. Amin U., Patel B(2012) explained in the paper “Impact of woman empowerment through micro finance institutes: socio-economic and behavioral perspectives affecting to ruler segment woman of Gandhinagar in Gujarat” need to give detailed information to the respondents for investment of their saving for betterment of the respondents. Major issues faced by segment that not aware related to opportunity available to them.

The National Pension System (NPS) is a defined-contribution pension scheme regulated by the Pension Fund Regulatory and Development Authority (PFRDA) under the Ministry of Finance, Government of India. Established in accordance with the Indian Trusts Act of 1882, the NPS Trust manages subscriber assets, ensuring that all holdings are registered in its name while maintaining beneficial ownership for individual subscribers. The NPS operates under a framework that includes various intermediaries, such as custodians and pension funds, tasked with safeguarding subscriber interests and ensuring compliance. As an EEE (Exempt-Exempt-Exempt) instrument, the NPS offers tax-free withdrawals and a tax-exempt corpus upon maturity, making it a pivotal component of retirement planning for Indian citizens aged 18 to 70, including Overseas Citizens of India (OCI) since 2019.

Literature Review

Dhanawade 2023 “Study of awareness level about national pension system among citizen of Mumbai city” Journal of emerging technologies and innovative research. The purpose of this essay is to draw attention to people's degree of knowledge regarding the national pension system. Both primary and secondary sources provide data for the study. A thorough questionnaire is created and distributed to the general public. For the research, 73 responses are gathered and analyzed.



S. Ramesh 2017 “Pension Plans: Awareness among private sector employees – an empirical study” KIIT Journal of Management. Examining the level of awareness among private sector workers in Tamil Nadu's Salem and Erode districts was the primary goal of the study. Three hundred Salem working individuals each received a well-crafted questionnaire. ANOVA, t-test, and percentage analysis are tools used in data analysis.

Singh & Devi 2022 “Awareness Regarding Old Pension Scheme and New Pension Scheme among Government Employees” Contemporary Issues in Banking, Insurance and Financial Services. The study's goal is to ascertain the employees' degree of knowledge regarding the national pension plan (NPS) and general provident fund (GPF) among those employed by the government in the administrative divisions of Karnal, Haryana, and Ambala.

Remya & Sathyadevi 2019 “A Study on Investor Perception towards Pension Schemes with Special Reference to Palakkad” Iconic Research and Engineering Journals. This study's primary goal is to investigate investors' perceptions of pension scheme investments. To gather data, a structured questionnaire is employed. This study has 300 participants in its sample. The statistical tools percentage analysis and weighted ranking procedures have been used to appropriately examine the tabulated data.

Eboh & Blessing 2021 “Retirement Planning Awareness and Planning Options among University Staff in Rivers State, Nigeria” Global Academic Journal of Economics and Business. An eighteen-item self-structured questionnaire was the instrument utilized to collect the data. The mean was used to answer the study questions, and analysis of variance (ANOVA) was used to evaluate the hypotheses at the 0.05 level of significance.

Khot & Aggarwal 2021 “Pension Schemes Provide the Long-Term Security of Private-Sector Workers” International Journal of advance research and innovative ideas in education. Private enterprises can provide their employees defined contribution (DC) plans or defined benefit (DB) plans, two different forms of pension plans.

Kumar & Mahalaxmi 2023 “A study on-post retirement pension scheme evaluation for government employee in India” The Online Journal of Distance Education and e-Learning. The primary goal of the current study is to evaluate the pension plans of retired government employees and determine which pension plans—the Old Pension Plan and the National Pension Plan—are now in effect.

Asher 1999 “The pension system in Singapore” The purpose of this study is to discuss defined contribution plans, which are meant to supply retirement income. The Central Provident Fund, or CPF, which also comprises a number of other mandated savings schemes covering housing, medical savings, and other social aims, is the primary source of required retirement savings.



Kulkarni, Risbud & Gautam 2022 “A Study of The Awareness of The Financial Planning And Implementation Amongst Generation Z” Journal of Positive School Psychology. This study's primary goal is to investigate Generation's overall financial awareness. Students from Generation Z provided their primary data, which was gathered via survey questions. Four hundred pupils from Generation Z made up the study's sample.

Tiwari 2022 “A study of Financial Literacy and Financial Behaviour among Millennials and Generation Z” Journal of the Asiatic society of Mumbai. The purpose of this study is to determine the degree of financial literacy among Generation Z and millennials. A systematic questionnaire was used to gather data from the 109 respondents for the study.

Farooqi & Khan 2022 “A Study of Salaried Employees Financial Planning and Tax Savings Strategies” Indian Journal of Economics and Business. In order to find out more about how paid individuals manage their money and reduce their tax liability, the researcher carried out a study. In this study, survey data from salaried individuals served as the major data collection method.

Chauhan, Baria & Rajput 2021 “A Study on Perception and Awareness towards Retirement Planning” International Journal of Creative Research Thoughts. This study investigates the opinions of employed people in Vadodara from a variety of industry sectors.

Kalyani 2021 “A Study on Awareness and Investment in Retirement Planning among Investors with reference to city of Mumbai” International Journal of Advanced Research in Commerce, Management & Social Science. This study aims to examine investors' knowledge of various retirement pension plans offered by financial markets. Included in the sample size are between 82 and 85 respondents

Noar 2018 “Knowledge on Retirement Related Financial Planning Among Employees” Revelation and Science. The purpose of this study was to evaluate IIUM employees' understanding of retirement financial planning. This study employed a quantitative methodology that involved distributing questionnaires to participants in order to gather primary data.

Heenkenda 2016 “Readiness to Retirement Planning of Estate Sector Employees in Sri Lanka” Department of Census and Statistics of Sri Lanka. The purpose of this study was to determine the motivational factors linked to Sri Lankan employees working in the estate sector's intention to prepare for retirement.

Moorthy 2012 “A Study on the Retirement Planning Behaviour of Working Individuals in Malaysia” International Journal of Academic Research in Economics and Management Sciences. The purpose of this explanatory cross-sectional study is to determine the relationship between retirement planning behavior and the many elements influencing it.



Talib & Manaf 2017 “Attitude towards Retirement Planning Behavior among Employee’s” Journal of Business and Management. The purpose of this study is to investigate the relationship between the retirement planning behavior of EPF workers and the factors influencing such behavior. 172 individuals, from a varied range of staff roles, made up the subjects.

Vakil & Modi 2019 “Retirement Planning of Working Individuals in Ahmedabad” Indian Journal of Applied Research. The purpose of this research is to investigate how working people plan for retirement.

Zeka 2017 “Exploring the Retirement Attitudes of Pre-Retired Individuals in The Eastern Cape, South Africa” International Journal of Management and Applied Science. The purpose of this study is to look into potential influences on people's views on retirement. To investigate the factors influencing pre-retired adults' views toward retirement, a total of 145 Eastern Cape questionnaires that might be used for analysis were put through a series of statistical tests.

Kaur & Lehal 2020 “Establishing the relationship between Retirement Saving Behavior and Retirement Confidence among Service Sector Employees in Punjab” International Journal of Management. The study's goal is to determine the relationship between Punjabi workers in the service sector's retirement confidence and saving behavior.

Mansor & Hong 2015 “Demographic Factors Associated with Retirement Planning: A Study of Employees in Malaysian Health Sectors” Asian Social Science Journal. The present study aims to ascertain the correlation between demographic variables, such as age, household income, gender, and education level, and retirement planning.

Lusardi & Mitchell 2007 “Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel” The current study presents the Rand American Life Panel (ALP), a novel dataset with a number of intriguing qualities for a study of retirement planning and financial literacy.

Patel & Tolawala 2022 “A Study on Awareness and Knowledge about Wealth Management among Individual” International Journal of Academic Management Science Research. Finding out how investors of different genders, ages, and income levels make decisions about their investments is the main goal of the study.

Mohini & Veni 2018 “A Study on Awareness of Personal Financial Planning Among Households in Visakhapatnam City” International Journal of Electronic Marketing and Retailing. The primary aim of the research is to evaluate households' awareness regarding personal financial planning.

Aripin & Puteh 2017 “Financial Wellness and Quality of Life among Young Employees” Journal of Administrative Science. According to the study's findings, the mean values of the financial health



variables—financial behavior, financial happiness, and subjective perception—are, respectively, 5.50, 5.90, and 6.08.

Savaliya & Ayre 2023 “An Analysis of financial planning for salaried employees and strategies for tax saving” International Journal of Advances in Engineering and Management (IJAEM). The purpose of this study is to increase salaried employees' knowledge of tax planning strategies. A standardized questionnaire is used to gather data from 100 randomly selected salaried individuals.

Kaur 2021 “Identifying Factors Influencing Subscribers’ Perception Towards Investment In National Pension Scheme” Journal of Commerce & Accounting Research. The study aims to investigate the elements that influence NPS investment decisions and investigate how NPS subscribers in both the organized and unorganized sectors view socioeconomic concerns.

Hair, Black, Babin & Anderson, 2010 “The reliability of the NPS was assessed using Cronbach's alpha in SPSS version 21.0; elements of the NPS were explored using EFA; and the link between the NPS factors and socioeconomic factors was examined using ANOVA.

Sahu, kataria & Hooda 2015 “National Pension System: A Comparative Analysis” International research journal of management sociology and humanities. The goal of this study is to determine whether the National Pension System (NPS) in our country is capable, appropriate, adaptable, efficient, and sustainable enough to provide benefits to the elderly or if significant systemic improvements are required. Based on secondary data gathered from books, national and international journals, published government reports, and other websites, the study is a comparative analysis.

Mahanti, Tripathy & Sundaray 2017 “Perception towards the Acceptability and Implementation of the New Pension Scheme: A Study in the State of Odisha” International Research Journal of Management Science and Technology. This study's primary goal was to assess the acceptance and perception of the new pension plan.

Poongothai & Jayanthi 2020 “National Pension System – Reasons for Investing” Journal Emerging Technologies and Innovative Research. The purpose of the study is to determine the subscribers' motivations for making National Pension System investments.

Banerjee & Kuntal 2018 “Retirement Planning for an Individual in India” Journal of Advanced Research in Economics & Business Management. The retirement planning methods that people follow and the degree of understanding that people have regarding retirement financial planning, retirement planning instruments, and retirement planning institutions are the subjects of this study.

Jain & Sharma 2018 “A Study on Comparison of National Pension Scheme 2004 with Other Retirement Pension Plans and Subscriber Views about NPS in Some Selected Enterprises with special reference to Kota district” National journal of research and innovative practices.



Sane & Thomas 2014 “The way forward for India's National Pension System” Indira Gandhi Institute of Development Research. This paper examines the existing implementation of the National Pension Scheme against the goals with which it was created. It finds that there are certain critical areas in which the NPS has deviated.

Singh & Kumar 2014 “A Study of Investors Perception Towards Pension Schemes In India” Department Of Business Administration University Of Lucknow. The paper focuses on identifying the perception, attitude, behavior, and other elements that influence present and potential investors' use and assessment of the value of various pension plans for old age security.

Patel & Patel 2012 “A Study of Investment Perspective Of Salaried People” Asia Pacific Journal of Marketing & Management Review. The purpose of this study is to investigate and comprehend the patterns of behavior in investing among salaried individuals in the private sector, as well as the variations in how individuals perceive different investment options.

Chepkoech, Rotich & Ndambir 2017 “This study sought to determine the factors affecting investment decisions of Pension schemes in Kenya” The strategic journal of business and change management. The research design used in the study was descriptive. The study used basic random stratified sampling procedures to select 125 fund managers from 1232 pension systems.

A. Eronimus 2015 “A Study on National Pension Scheme (NPS) In India with Special Reference to Pension Subscribers In Tamil Nadu” Post Graduate and Research Department of Commerce Presidency College. This study looks at the significant views that pension subscribers in the new pension system have demonstrated.

Batavia & Trivedi 2019 “A Study on Awareness And Preference Of Selected Retirement Plans Offered By Top Life Insurance Companies” BVIMSR's journal of management research. Descriptive research design is employed, with primary and secondary data sources. The method of using questionnaire surveys to acquire primary data. The data were analyzed using statistical software such as SPSS.

Afthanorhan, Mamun & Zainol 2020 “Framing the Retirement Planning Behavior Model towards Sustainable Wellbeing among Youth: The Moderating Effect of Public Profiles” Multidisciplinary Digital Publishing. The impact of goal clarity, social influence, financial knowledge, and saving attitudes on the retirement planning construct is investigated in this study.

Zainal Alam & Chen 2021 “Financial Awareness and Retirement Preparedness of Self- Employed Youth in Malaysia” Journal of Wealth Management & Financial Planning. The purpose of this paper was to examine the relationship between the degree of financial awareness and the retirement preparedness of young people who work for themselves in Malaysia.



Safari, Njoka & Munkwa 2021 “Financial literacy and personal retirement planning: a socioeconomic approach” Journal of Business and Socioeconomic Development. The goal of this research was to find out how financial literacy affected individuals' retirement plans in Bukavu, the capital of the Democratic Republic of the Congo (DRC), an impoverished Sub-Saharan nation with a meager social security and pension system.

Hashim, Shin & Lajis 2023 “The Awareness and Intention of Students to Invest in Private Retirement Scheme (PRS) in Malaysia” International Conference on Communication, Language, Education and Social Sciences (CLESS 2023).

Ntalianis Wise 2011 “The Role of Financial Education in Retirement Planning” Australasian Accounting and Finance Journal. The purpose of this survey is to find out what retirement fund members think about the resources for financial education that their retirement fund provides. A questionnaire for the survey was used.

Delafruez & Paim 2011 “Determinants of financial wellness among Malaysia workers” African Journal of Business Management. This study set out to investigate factors that affect financial wellbeing. A multi-stage sampling strategy was used to choose samples from both public and private sector employees.

Kumar & Kumar 2019 “Assessment of Old Age Pension Scheme in Rural Uttar Pradesh: A Preliminary Analysis” Indian Journal of Gerontology. The current study's goals were to find out how much older people knew about old age pensions. A multistage random sampling procedure was used to choose the sample.

Rooij, Lusardi & Alessie “Financial Literacy, Retirement Planning, And Household Wealth” National Bureau Of Economic Research. Using thorough assessments of financial literacy created for a unique module of the Dutch Central Bank Household Survey (DHS), we examine the connection between financial literacy and household net worth in this research.

Research Gap

Research on Generation Z and Millennials' knowledge of and involvement with the National Pension Scheme (NPS) is severely lacking. Their attitudes, intents to participate, and how digital platforms and socioeconomic factors affect their NPS engagement are all poorly understood. Closing this gap will be essential to creating focused plans to improve younger generations' retirement security and financial readiness.

Research Objectives

1. To assess the current level of awareness among salaried individuals regarding the national



pension scheme.

2. To identify demographic factors influencing NPS awareness among target population.
3. To examine the relationship between financial literacy levels and NPS awareness among salaried individuals.
4. To analyses the correlation between NPS awareness and individual perception of the scheme as a viable retirement planning option.

Research Hypothesis

- H1 There is a significant association between "Millennials and Gen Z" and awareness of the National Pension System (NPS).
- H2 There is a significant association between "Millennials and Gen Z" and tax benefit associate with NPS.
- H3 There is a significant association between "Millennials and Gen Z" and selection process of investment options related to flexibility.
- H4 There is a significant difference in the knowledge levels regarding the National Pension Scheme between Millenium and Gen Z.

Research Design

The Descriptive, Single Cross-sectional Research Design is used in this research.

Sampling Plan

- Sample Size: 409 Respondents
- Sampling Unit: Sampling units include different Millennials and Gen-z.
- Sampling Techniques: In this study non-probability 'Convenience Sampling Method' use to collects the data from individuals. Primary data was collected through 'Structured questionnaire' 'Secondary data for the research was collected from various research papers and websites available on the internet.
- Data Collection Method: Data collection through 'Survey Method'.
- Data Analysis: Chi-square Test, T-test

Data analysis and interpretation

Demographic Information

Gender	No of Respondent	Age	No of Respondent	Monthly Income	No of Respondent
Male	231	Gen-Z	230	Less than 15000	76
Female	178	Millennials	179	15001-50000	163
Total	409	Total	409	50001-75000	100



				75001-100000	47
				More than 100000	23
				Total	409
Education Level	No of Respondent	Occupation	No of Respondent	Monthly Savings	No of Respondent
High School or Below	28	Student	105	Less than 5000	112
Bachelor's Degree	173	Employee	228	5001-10,000	80
Master's Degree	208	Businessman	72	10,001-20,000	83
Total	409	Retired	4	20,001-30,000	61
		Total	409	More than 30,000	73
				Total	409

H1: There is a significant association between "Millennials and Gen Z" and awareness of the National Pension System (NPS).

Chi-square

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.838 ^a	1	.175		
Continuity Correction ^b	1.530	1	.216		
Likelihood Ratio	1.856	1	.173		
Fisher's Exact Test				.192	.108
Linear-by-Linear Association	1.834	1	.176		
N of Valid Cases	409				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 40.70.					
b. Computed only for a 2x2 table					

Hypothesis 1 states that There is a significant association between "Millennials and Gen Z" and awareness of the National Pension System (NPS). The Chi square data supports null Hypothesis p value (0.175) is > 0.05 . The Chi-Square tests' results suggest that the data does not support a significant association between age and the awareness of NPS. Therefore, we fail to reject the hypothesis, indicating that age may not play a significant role in determining the awareness of NPS, Which mean that the null hypothesis will accepted and the alternative hypothesis will rejected.



H:2 There is a significant association between "Millennials and Gen Z" and tax benefit associate with NPS.

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.442 ^a	1	.506		
Continuity Correction ^s	.315	1	.575		
Likelihood Ratio	.443	1	.506		
Fisher's Exact Test				.535	.288
Linear-by-Linear Association	.441	1	.507		
N of Valid Cases	409				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 65.21.					
b. Computed only for a 2x2 table					

Hypothesis 2 states that There is a significant association between "Millennials and Gen Z" and tax benefit associate with NPS. The Chi square data supports null Hypothesis p value (0.506) is > 0.05 . The Chi-Square tests' results suggest that the data does not support a significant association between age of respondent and tax benefit associate with NPS. Therefore, we fail to reject the hypothesis, Which mean that the null hypothesis will accepted and the alternative hypothesis will rejected.

H 3: There is a significant association between "Millennials and Gen Z" and selection process of investment options related to flexibility.

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.464 ^a	1	.496		
Continuity Correction ^b	.338	1	.561		
Likelihood Ratio	.464	1	.496		
Fisher's Exact Test				.549	.281
Linear-by-Linear Association	.463	1	.496		
N of Valid Cases	409				
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 83.59.					
b. Computed only for a 2x2 table					



Hypothesis 3 states that: There is a significant association between "Millennials and Gen Z" and selection process of investment options related to flexibility. The Chi square data supports null Hypothesis p value (0.496) is > 0.05 . The Chi-Square tests' results suggest that the data does not support a significant association between age of respondent and tax benefit associate with NPS. Therefore, we fail to reject the hypothesis, Which mean that the null hypothesis will accepted and the alternative hypothesis will rejected.

H 4: There is a significant difference in the knowledge levels regarding the National Pension Scheme between Millenium and Gen Z.

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Side d p	Two-Side d p			Lower	Upper
How would you rate your knowledge level regarding the National Pension Scheme (NPS)?	Equal variances assumed	.138	.710	1.991	407	.024	.047	.233	.117	.003	.464
	Equal variances not assumed			2.006	392.651	.023	.046	.233	.116	.005	.462

The t-test results indicate that there is a statistically significant difference in knowledge levels regarding the National Pension Scheme between Millennials and Gen Z. The significant p-value (0.047) and the positive mean difference (0.233) suggest that one group (likely Millennials, given their historical context with pensions) has a higher level of knowledge than the other group (Gen Z). This finding is important for understanding generational differences in financial literacy and awareness of pension schemes. In summary, based on the t-test results with a two-sided p-value of 0.047, which is less than the significance level of 0.05, we reject the null hypothesis and accept the alternative hypothesis that there is a significant difference in the knowledge levels regarding the National Pension Scheme between Millennials and Gen Z.



Findings

The survey results reveal a demographic skew, with Generation Z respondents constituting 56.2% of the sample compared to 43.8% for Millennials, indicating a bias towards younger individuals that may influence their financial priorities and aspirations. Amin, U., Saraf D. (2020) explained in their paper “A Case presentation: How a Disaster opens boundaries for to development: Potential of Payments Bank in India” that after the epidemic it open boundaries for development and need to focus on available avenues for better return.

Participants exhibited diverse saving habits, with a significant portion saving over 30,000 monthly, reflecting varied financial capabilities that could impact retirement and investment decisions. Respondents articulated a range of savings goals, from immediate needs like purchasing a home to long-term objectives such as retirement. Amin U., Shah K. explained that if a respondent having knowledge for financial literacy and mobile literacy it would give them more power to secure better return avenues. This research also suggest that millennium and Gen z also having a majority prioritized strong returns, security, and aligning savings with specific financial goals.

Amin U., Saxena S., Parmar S., (2024) revelled thought in the paper “An Empirical Investigation Into The Influence Of Selected War Events On Herd Mentality And Its Implications For Market Volatility In The National Stock Exchange Of India (NSE)” that if a respondent took entry in stock exchanges without having proper knowledge , they would loose their savings.

Despite varied financial literacy levels, many self-rated their knowledge as mid-range. While 76.8% were aware of the National Pension Scheme (NPS), a notable 22.7% remained uninformed, highlighting the need for enhanced public education initiatives. Additionally, barriers to NPS investment included ignorance, mistrust, and perceived complexity, suggesting that targeted awareness campaigns could encourage greater participation in retirement savings programs.

References

- Amin U., Patel B. (2012) Impact of women empowerment through MFI's International Journal of Research in Commerce & Management. (Scopus Indexed) vol:2 ISSN 2231– 4245, 81-88
- Amin,U., (2016) Analysis of financial literacy: an inevitable aspect of financial inclusion *SEMCOM*, 3(2), 96-102.
- Amin, U., Saraf D. (2020) A Case presentation: How a Disaster opens boundaries for to development: Potential of Payments Bank in India “Sustainability and management” , ISSN: 1661-5719, 30(1), 170-175.
- Amin U., Shah K. (2022) , “A study on financial literacy and mobile literacy with indian banking system” *पुराणम् - Purana*, ISSN: 0555-7860, 14(1), 49-57.



- Amin U., Saxena S., Parmar S., (2024) "An Empirical Investigation Into The Influence Of Selected War Events On Herd Mentality And Its Implications For Market Volatility In The National Stock Exchange Of India (NSE)" Educational Administration: Theory and Practice 2024, ISSN: 2148-2403, 30(6)(s),50-65
- Afthanorhan, A., & Mamun, A. (2020). *Framing the Retirement Planning Behavior Model towards Sustainable Wellbeing among Youth: The Moderating Effect of Public Profiles*. Multidisciplinary Digital Publishing Institute, 12, 8879, doi:10.3390/su12218879.
- Alam, M., & Chen, Y. (2021). *Financial Awareness and Retirement Preparedness of Self-Employed Youth in Malaysia*. Journal of Wealth Management & Financial Planning, 8.
- Aripin, S. N., & Puteh, F. (2017). *Financial Wellness and Quality of Life among Young Employees*. Journal of Administrative Science, 14(3), 1675-1302.
- Asher, M. G. (1999). *The pension system in Singapore*. Research Gate, .
- Banerjee, S., & Kuntal, N. (2018). *Retirement Planning for an Individual in India*. Journal of Advanced Research in Economics & Business Management, 5(1,2), 16-20.
- Batavia, K., & Trivedi, J. (2019). *A Study On Awareness And Preference Of Selected Retirement Plans Offered By Top Life Insurance Companies* . BVIMSR's Journal of Management Research, 11(2). .
- CHAUHAN, K., & KHATIK, R. (2021). *A STUDY ON PERCEPTION AND AWARENESS TOWARDS RETIREMENT PLANNING*. International Journal of Creative Research Thoughts, 9(3), 2320-2882.
- CHEPKOECH, S., & ROTICH, G. (2017). *FACTORS AFFECTING INVESTMENT DECISIONS OF PENSION SCHEMES IN KENYA*. The Strategic Journal of Business & Change Management, 4(4), pp 432 - 452, 2312-9492.
- Delafronz, N., & Paim, L. H. (2011). *Determinants of financial wellness among Malaysia workers*. African Journal of Business Management, 5(24), pp. 10092-10100, 1993-8233, DOI: 10.5897/AJBM10.1267.
- Dhanawade, N. D. (2023). *STUDY OF AWARENESS LEVEL ABOUT NATIONAL PENSION SYSTEM AMONG CITIZEN OF MUMBAI CITY*. Journal of Emerging Technologies and Innovative Research, 8(6), 2349-5162.
- Farooqi, U. G., & Khan, F. A. (2022). *A Study of Salaried Employees Financial Planning and Tax Savings Strategies*. Indian Journal of Economics and Business, 21(2), .
- International Journal of Advance Research and Innovative Ideas in Education, 7(6), 2395-4396.
- Jain, A., & Sharma, K. D. (2018). *A Study on Comparison of National Pension Scheme 2004 with Other*



Retirement Pension Plans and Subscriber Views about NPS in Some Selected Enterprises with special reference to Kota district. National journal of research and innovative practices, 1(1), 2456-1355.

Kalyani, S. R. (2021). *A STUDY ON AWARENESS AND INVESTMENT IN RETIREMENT PLANNING AMONG INVESTORS WITH REFERENCE TO CITY OF MUMBAI.* International Journal of Advanced Research in Commerce, Management & Social Science, 4(2), pp 154-158, : 2581-7930.

Kaur, R. (2021). *IDENTIFYING FACTORS INFLUENCING SUBSCRIBERS' PERCEPTION TOWARDS INVESTMENT IN*

Kaur, S., & Lehal, R. (2020). *ESTABLISHING THE RELATIONSHIP BETWEEN RETIREMENT SAVING BEHAVIOR AND RETIREMENT CONFIDENCE AMONG SERVICE SECTOR EMPLOYEES IN PUNJAB.* International Journal of Management, 11(10), pp.2053-2064, 0976-6502, DOI: 10.34218/IJM.11.10.2020.196

Khot, S. M., & Aggarwal, D. (2021). *Pension Schemes Provide the Long-Term Security of Private-Sector Workers.*

Kulkarni, N., & Risbud, M. (2022). *A Study Of The Awareness Of The Financial Planning And Implementation Amongst Generation Z.* Journal of Positive School Psychology, 6(6), 2420-2427.

Kumar, A., & Kumar, P. (2019). *Assessment of Old Age Pension Scheme in Rural Uttar Pradesh: A Preliminary Analysis.* Indian Journal of Gerontology, 33(1), pp. 91–106, 0971–4189. .

Kumar, R., & Mahalakshmi, J. (2023). *A STUDY ON-POST RETIREMENT PENSION SCHEME EVALUATION FOR.* The Online Journal of Distance Education and e-Learning, 11(2), 1930-1935.

Lusardi, A., & Mitchell, O. S. (2007). *Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel.* Michigan Retirement Research Center, WP 2007-157, <http://ssrn.com/abstract=1095869>.

Mahanti, A., & Tripathy, S. K. (2017). *Perception towards the Acceptability and Implementation of the New Pension Scheme: A Study in the State of Odisha .* International Research Journal of Management Science & Technology, 8(6), 2250 – 1959.

Mansor, M. F., & Hong, C. C. (2015). *Demographic Factors Associated with Retirement Planning: A Study of Employees in Malaysian Health Sectors.* Asian Social Science, 11(13), 1911-2017, doi:10.5539/ass.v11n13p108.

Mohini, P. (2018). *A Study on Awareness of Personal Financial Planning Among Households in Visakhapatnam City.* International Journal of Engineering and Management Research, 8(4), 2249-



8672.

- Moorthy, M. (2012). *A Study on the Retirement Planning Behaviour of Working Individuals in Malaysia*. International Journal of Academic Research in Economics and Management Sciences, 1(2), 2226-3624.
- Murphy, D. S., & Yetmar, S. (2010). *Personal financial planning attitudes: a preliminary study of graduate students*. Management Research Review, 33(8), 2010, pp. 811-817, 2040-8269, DOI 10.1108/01409171011065617.
- NATIONAL PENSION SCHEME. Journal of Commerce & Accounting Research, 11 (1), 48-57. .
- Njuguna, A., & Otsola, J. (2011). *Predictors of Pension Finance Literacy: A Survey of Members of Occupational Pension Schemes in Kenya*. International Journal of Business and Management, 6(9), doi:10.5539/ijbm.v6n9p101.
- Noar, Z. b. (2018). *Knowledge on Retirement Related Financial Planning Among Employees*. Revelation and Science, 8(1), 31-37. .
- Ntalianis , M., & Wise, V. (2011). *The Role of Financial Education in Retirement Planning* . Australasian Accounting, Business and Finance Journal, 5(2), 2011, 23-37, 1834-2000.
- Patel, S., & Tolawala, N. (2022). *A Study on Awareness and Knowledge about Wealth Management among Individual*. International Journal of Academic Management Science Research, 6(3), 78-84, 2643-900X.
- PATEL, Y., & PATEL, C. (2012). *A STUDY OF INVESTMENT PERSPECTIVE OF SALARIED PEOPLE* . Asia Pacific Journal of Marketing & Management Review, 1(2), 2319-2836.
- Poongothai, T., & Jayanthi, M. (2020). *NATIONAL PENSION SYSTEM – REASONS FOR INVESTING*. Journal of Emerging Technologies and Innovative Research, 7(8), 2349-5162.
- Ramesh, S. (2017). *PENSION PLANS: AWARENESS AMONG PRIVATE SECTOR EMPLOYEES – AN EMPIRICAL STUDY*. Parikalpana - KIIT Journal of Management, 10.23862/kiit-parikalpana/2017/v13/i2/164522.
- REMYA, C., & SATHYADEVI, R. (2019). *A Study on Investor Perception towards Pension Schemes with Special Reference to Palakkad*. ICONIC RESEARCH AND ENGINEERING JOURNALS, 3(2), 2456-8880.
- Rooij, M., & Lusardi, A. (2011). *FINANCIAL LITERACY, RETIREMENT PLANNING, AND HOUSEHOLD WEALTH*. NATIONAL BUREAU OF ECONOMIC RESEARCH, w17339. .
- Safari, K., & Njoka, C. (2021). *Financial literacy and personal retirement planning: a socioeconomic approach*.
- Safari, K., & Njoka, C. (2021). *Financial literacy and personal retirement planning: a socioeconomic*



approach.

- Sahu, H., & kataria, D. (2015). *NATIONAL PENSION SYSTEM: A Comparative Analysis*. International Research Journal of Management Sociology & Humanity, 6(6), 2348–9359.
- Sane, R., & Thomas, S. (2014). *The way forward for India's National Pension System*. Indira Gandhi Institute of Development Research, WP-2014-022.
- Savaliya, P., & Ayre, V. (2023). *An Analysis of financial planning for salaried employees and strategies for tax saving*. International Journal of Advances in Engineering and Management, 5(4), 273-276, 2395-5252.
- SEETHAL, K., & MENAKA, B. (2018). *EVALUATION OF NATIONAL PENSION SCHEME FOR RETIREMENT PLANNING*. International Journal of Economics, Commerce and Research, 154-159, 2250-0006.
- Shirantha, H. (2016). *Readiness to Retirement Planning of Estate Sector Employees in Sri Lanka*. University of Sri Jayewardenapaura, <https://mpira.ub.uni-muenchen.de/72744/>.
- Singh, S. (2014). *A STUDY OF INVESTORS PERCEPTION TOWARDS PENSION SCHEMES IN INDIA*. Department of Business Administration, University of Lucknow.
- Singh, K., & Devi, A. (2022). *Awareness Regarding Old Pension Scheme and New Pension Scheme among Government Employees*. Kurukshetra University, 978-81-955434-5-8.
- Talib, N. F., & Manaf, H. A. (2017). *Attitude towards Retirement Planning Behaviour among Employee's*. Journal of Business and Management, 1 (1): 15-21.
- Tiwari, A., & Yadav, A. (2022). *A STUDY OF FINANCIAL LITERACY AND FINANCIAL BEHAVIOUR AMONG MILLENNIALS AND GENERATION Z*. JOURNAL OF THE ASIATIC SOCIETY OF MUMBAI, XCV(21), 0972-0766,.
- Vakil, S., & Modi, S. (2019). *RETIREMENT PLANNING OF WORKING INDIVIDUALS IN AHMEDABAD*. INDIAN JOURNAL OF APPLIED RESEARCH, 9(9), 2249 - 555X, DOI : 10.36106/ijar.
- Venkatesh, S. (2013). *Awareness of Pension Schemes among Unorganized Sector: An Empirical Study*. International Journal for Behavioral Science & Management, 3(2).
- ZEKA, B. (2017). *EXPLORING THE RETIREMENT ATTITUDES OF PRE-RETIRED INDIVIDUALS IN THE EASTERN CAPE, SOUTH AFRICA*. International Journal of Management and Applied Science, 3(9), 2394-7926.

**PORTS, TRADE AND POWER: THE MARITIME LEGACY OF ANCIENT AND MEDIEVAL INDIA**

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Abstract

The maritime legacy of ancient and medieval India forms a crucial chapter in the nation's historical evolution, reflecting its prowess in trade, diplomacy, and naval architecture. This paper explores the strategic importance of Indian ports, their role in expanding international trade networks, and the intertwining of maritime commerce with political power from the Harappan era to the early modern period. Ancient ports like Lothal, Tamralipti, and Arikamedu, and medieval hubs such as Calicut and Cambay, were not merely trading posts but also cultural crossroads that facilitated the exchange of goods, ideas, religions, and technologies across the Indian Ocean littoral. By analyzing archaeological evidence, literary records, and foreign travelers' accounts, this study illustrates how maritime trade shaped regional economies, royal patronage, and political rivalries. The paper also highlights the influence of Indian seafarers in Southeast Asia and East Africa and examines the decline of indigenous maritime dominance with the advent of European colonial powers. This exploration contributes to a deeper understanding of India's historical engagement with maritime commerce, emphasizing that its oceanic legacy was instrumental in shaping both internal polity and external engagements, leaving a lasting impact on the cultural and economic landscape of the Indian Ocean world.

Introduction

India's maritime history is an underexplored yet significant component of its civilizational narrative, encompassing centuries of commercial brilliance, naval innovation, and transoceanic interaction. Situated strategically along the Indian Ocean rim, ancient and medieval India cultivated a vibrant network of seaports that connected its hinterlands with regions as distant as the Roman Empire, the Arabian Peninsula, Southeast Asia, and East Africa. These ports, such as Bharuch, Sopara, Muziris, Kaveripattinam, and later Calicut and Surat, were instrumental in exporting textiles, spices, gems, ivory, and fine pottery, while also importing horses, gold, wine, and silk.

The importance of maritime trade extended beyond economics—it played a pivotal role in state formation, cultural exchange, and religious dissemination. Dynasties like the Satavahanas, Cholas, and Zamorins invested heavily in maritime infrastructure, established overseas colonies, and deployed



powerful navies to secure their commercial interests. Foreign accounts by Greek, Roman, Arab, and Chinese travelers provide evidence of India's maritime sophistication and extensive overseas trade.

This paper delves into the maritime landscape of ancient and medieval India, analyzing how ports served as gateways of commerce and conduits of power. It seeks to understand how seaborne trade was intertwined with political authority and how India's maritime influence extended far beyond its shores, shaping regional and global histories.

Delimitation of the Study

- The study focuses on maritime history from 2500 BCE to 1700 CE, encompassing both ancient and medieval periods.
- Emphasis is placed on port cities located in present-day Gujarat, Maharashtra, Odisha, West Bengal, Kerala, and Tamil Nadu.
- The scope is limited to Indian Ocean trade and its impact on India's internal polity, economy, and diplomacy.
- Naval warfare and political power are discussed in relation to the control of trade routes and port infrastructure.
- The study excludes modern colonial maritime developments post-1700 CE.

Review of Literature

Champakalakshmi, R. (1996)

In *Trade, Ideology and Urbanization*, Champakalakshmi explores the interplay between trade, religion, and urban centers in South India. She argues that ports such as Kaveripattinam and Nagapattinam were not only economic hubs but also cultural melting pots that promoted Buddhist and Hindu ideologies. The study provides insights into the merchant guilds and their religious patronage, showing how spiritual legitimacy was intertwined with trade networks.

Mukherjee, Rila. (2011)

Rila Mukherjee, in *Pelagic Passageways: The Northern Bay of Bengal Before Colonialism*, emphasizes the importance of the eastern seaboard and its thriving ports like Tamralipti and Chittagong. Her work reveals that these ports were gateways to Southeast Asia, hosting vibrant trade with Suvarnabhumi (Golden Land) and Srivijaya. The paper contributes to understanding maritime connections beyond the western Indian Ocean and challenges the Eurocentric view of maritime history.

Himanshu Prabha Ray (2003)

Ray's work, *The Archaeology of Seafaring in Ancient South Asia*, uses archaeological evidence from ports like Lothal, Dholavira, and Arikamedu to trace the development of India's maritime



infrastructure. Her analysis shows how ancient India had sophisticated dockyards, warehouses, and trade goods, pointing to an organized maritime economy. Ray also brings in Indo-Roman trade data, highlighting goods like pepper, beads, and textiles.

Sanjay Subrahmanyam (1997)

In his analysis of the *Connected Histories of the Indian Ocean*, Subrahmanyam outlines the fluid nature of maritime boundaries and transregional political alliances. He examines how medieval South Indian kingdoms, especially the Cholas, projected power overseas through naval campaigns in Southeast Asia. His work is vital for understanding the geopolitics of maritime expansion and Indian cultural influence in the Bay of Bengal region.

Romila Thapar (2002)

Romila Thapar's *Early India: From the Origins to AD 1300* includes a comprehensive discussion on how ports served as state revenue generators and as nodes of cultural transmission. Her work discusses the Satavahanas and their control of western ports like Sopara and Bharuch. She connects trade in horses, spices, and luxury goods with the rise of urban settlements and political legitimacy.

K.N. Chaudhuri (1985)

In *Trade and Civilisation in the Indian Ocean*, Chaudhuri explores long-distance trade patterns and merchant diasporas. He asserts that Gujarat's coastal ports were instrumental in Indo-Islamic maritime trade, serving as hubs for Arab and Persian merchants. His work shows the transition from temple-based trade to Islamic mercantile networks in the medieval period.

Research Methodology

This research adopts a **historical-analytical** method using:

- **Primary sources:** Inscriptions (e.g., Junagadh inscription of Rudradaman), travelogues (Periplus of the Erythraean Sea, Fa-Hien, Ibn Battuta), and archaeological reports.
- **Secondary sources:** Books, research journals, and peer-reviewed articles.
- **Cross-Triangle Comparative Framework:** Compares maritime trade, port infrastructure, and political power across three distinct regions: Western India (Gujarat & Maharashtra), Eastern India (Bengal & Odisha), and Southern India (Tamil Nadu & Kerala).

Cross-Triangle Comparative Analysis

Western India: Gujarat & Maharashtra

Western India emerged as a crucial maritime hub from the early Harappan period to the medieval era. Lothal in Gujarat, part of the Indus Valley Civilization (c. 2400 BCE), had a sophisticated dockyard—one of the oldest in the world—suggesting advanced maritime architecture and navigation.



During the early historic period, Bharuch (Barygaza) became a vital port in Indo-Roman trade, exporting spices, textiles, and semi-precious stones, as described in the *Periplus of the Erythraean Sea*.

Under the Maitrakas and later the Solanki dynasty, Cambay (Khambhat) became a textile and gem export hub, taxed heavily by local rulers. Maharashtra's Sopara (ancient Shurparaka), near modern-day Mumbai, also had maritime links to Mesopotamia, Arabia, and the Greco-Roman world. Political powers in the region, such as the Chaulukyas, used port revenues to fund temple-building and military expeditions. Maritime trade also brought Persian and Arab cultural influences that shaped local architecture and society.

Eastern India: Bengal & Odisha

Eastern India's ports were significant not only for commerce but also for religious missions. Tamralipti (modern Tamluk in West Bengal), frequently mentioned in Buddhist Jataka stories and Chinese traveler Fa-Hien's accounts, acted as a major port connecting India to Sri Lanka and Southeast Asia. The Pala Empire (8th–12th century CE), known for Buddhist patronage, used ports like Tamralipti and Chittagong to dispatch emissaries and traders to regions such as Java, Sumatra, and China.

Odisha's Manikpatna and Che-li-ta-lo (identified with modern Puri) were vital in the maritime silk route. Hiuen Tsang's 7th-century CE account mentions these ports as vibrant centers for international exchange. Odisha's famed shipbuilders crafted sturdy wooden ships used for overseas voyages. Trade items included textiles, elephant tusks, and forest products, which were exchanged for gold, silk, and ceramics. The region's flourishing Buddhist and Hindu art styles influenced temple architecture across Southeast Asia, highlighting a blend of spiritual and economic outreach through the sea.

Southern India: Tamil Nadu & Kerala

Southern India's maritime activities peaked during the Chola dynasty (9th–13th centuries CE), with ports like Kaveripattinam (Poompuhar) and Nagapattinam leading naval expeditions to Srivijaya (Indonesia) and Cambodia. The Cholas established a thalassocracy, projecting power through a dominant navy. Trade with Southeast Asia included textiles, spices, pearls, and art. In Kerala, Muziris (modern-day Kodungallur) flourished from as early as the 1st century CE, as noted in Roman texts and the *Sangam* literature.

Roman amphorae, coins, and glassware found at the site suggest brisk trade with Roman Egypt and the Mediterranean. Calicut, under the Zamorins, became a central hub of the spice trade during the late medieval period, attracting Arab, Persian, and Chinese traders. The Chinese explorer Zheng He is believed to have visited Calicut during his 15th-century voyages. Kerala's spice economy helped sustain



Hindu and later Muslim merchant communities, contributing to the cosmopolitan culture that persists today. Southern India's maritime strength symbolized a blend of commercial prowess, naval might, and religious soft power.

Role of Maritime Trade in Cultural Transmission

- ✓ Spread of **Buddhism and Hinduism** to Southeast Asia via Tamil and Bengal coasts.
- ✓ **Indian scripts and languages**, such as Brahmi and Sanskrit, influenced Khmer and Javanese inscriptions.
- ✓ Exchange of **art, architecture, and rituals**, seen in Borobudur (Indonesia) and Angkor Wat (Cambodia).
- ✓ **Arab and Persian traders** in Gujarat and Kerala contributed to the spread of Islam and the rise of Indo-Islamic port towns.

Discussion: Trade and Political Power

Control over maritime trade routes gave rulers access to wealth, alliances, and military resources. For instance: The Cholas used naval power to dominate Southeast Asian trade and assert imperial legitimacy.

The Satavahanas controlled strategic ports and issued coinage with ship motifs, emphasizing maritime symbolism. The Delhi Sultanate and later the Mughals invested in coastal infrastructure and trade diplomacy to boost state income.

Conclusion

The maritime legacy of ancient and medieval India was a cornerstone of its economic prosperity, cultural vibrancy, and political expansion. From the sophisticated dockyards of Lothal to the bustling medieval ports of Calicut, India's coastline was dotted with trade hubs that connected it to Africa, Arabia, Southeast Asia, and beyond. These ports were not merely economic centers but also cultural melting pots where religions, languages, technologies, and philosophies converged.

Dynasties such as the Cholas demonstrated naval dominance and established overseas influence, while coastal polities like the Zamorins of Calicut maintained robust trade ties with Arabs and Chinese. The decline of this indigenous maritime strength with the arrival of European colonial powers marks a critical transformation in India's oceanic history. Recognizing and re-evaluating this maritime past helps reclaim India's rightful place in global maritime heritage and underscores the importance of sea power in shaping civilizations, identities, and international relations throughout history.



References

- Champakalakshmi, R. (1996). *Trade, Ideology and Urbanization: South India 300 BC to AD 1300*. Oxford University Press.
- Chaudhuri, K. N. (1985). *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*. Cambridge University Press.
- Mukherjee, R. (2011). *Pelagic Passageways: The Northern Bay of Bengal Before Colonialism*. Primus Books.
- Ray, H. P. (2003). *The Archaeology of Seafaring in Ancient South Asia*. Cambridge University Press.
- Subrahmanyam, S. (1997). *Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia*. *Modern Asian Studies*, 31(3), 735–762.
- Thapar, R. (2002). *Early India: From the Origins to AD 1300*. Penguin Books.
- Ghosh, A. (Ed.). (1990). *An Encyclopaedia of Indian Archaeology*. BRILL.



TRANSFORMATIVE PEDAGOGY: HARNESSING THE POWER OF EDUCATIONAL TECHNOLOGY FOR 21st CENTURY LEARNING

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Abstract

This research study explores the intersection of transformative pedagogy and educational technology, emphasizing their combined potential to reshape and enhance the learning experience in the 21st century. The 21st century's teaching-learning process was entirely reliant on educational technology. Nowadays, the technology touches every aspect of human life. Technology plays crucial roles in work places, education, entertainments and the way of life surviving. There is evidence of the world's remarkable technical advancement and growth. Technology has also evolved in recent years with the use of laptops, cell phones, websites, text messaging, mobile phone apps, and social networking sites. This development suggests that technology has substantially helped in a variety of contexts, including the education sector. With many apps for online learning, teachers, students, and remote learning, we can observe the benefits of educational technologies. The purpose of this article is to give a brief overview of the importance and application of educational technology in the classroom.

Keywords: Educational technology, Teaching-learning through ICT

Introduction

The use of technology in education is more important than ever in today's world. Despite their awareness of the educational benefits of the equipment, instructors are not trained to use it themselves. Educational technology is a systemic, organized strategy of executing cutting edge innovation to upgrade educational output. It's a comprehensive strategy of conceptualizing directions strategy usage and evaluation, Perusing, Coaching, and making a difference actualize unused educating strategies. It requires educating assets, methodologies and work-related organization, the activities of all individuals within the educational phase. Educational technology has no single word still. Distinctive nations utilize diverse words and equivalent words counting instructional technology, education though ICT, ICT in Education, teaching-leering technology and so on.



Educational technology is a comprehensive term for both the material instruments and the theoretical foundations for supporting learning and teaching. Educational technology isn't limited to tall innovation but is anything that enhances classroom learning within the utilization of blended, face to face, or online learning.

Importance of Educational Technology in education

All students have access to flexible and readily available learning resources because to educational technology. Students can use all materials outside of the classroom, even if they are all available in the classroom. Students with learning difficulties or those who are slow learners would particularly benefit from this. These students are able to review the lessons as much as necessary and have a full understanding of the material.

Students who are unable to make arrangements for daily attendance at classes also benefit from the availability of learning tools. Low-cost electronics designed specifically for education are available for students with limited funds.

For pupils, visual learning is more successful than traditional chalk and talk. This is due to the fact that text is not as quickly processed by the brain as images and motion pictures are. Educational technology supports audio-visual teaching strategies that increase students' retention and engagement of learning.

Benefits of Educational Technology in the Classroom

▪ A Learning Environment with Enhanced Engagement

The creation of a more engaging learning environment for students is one important advantage of using technology into course design. It's difficult to dispute how technology has changed how we educate and learn.

Teachers may use technology to convey material in more engaging and innovative ways. With so many options available (and more in the horizon due to technological breakthroughs like virtual reality), this is an exciting moment to be a teacher designing a course.

▪ Prepare Learners for the Future

Since technology is widespread, it is critical that it be included into the modern learning environment for students. By incorporating technology into your lessons, you may assist students get more comfortable with popular software that they will encounter in their future employment.

Teachers want to prepare their kids, and using technology is a terrific method to accomplish that goal. Students must be able to comprehend the fundamentals since it will be important to them in



the future. Their future personal and professional life will be heavily reliant on the usage of computers and the internet.

▪ Connecting the learners

The ability of a teacher and student to connect with one another is one of the key factors in their success. In order to foster a sense of community in their classes, teachers are always looking for new ways to engage with one another as well as their pupils.

Educators now have the chance to establish new connections with their pupils because to technology. It makes it possible to establish new channels of contact and utilize the Internet to provide course material to students in a fresh way, both of which may be highly beneficial.

Since many kids these days are already drawn to the Internet, you may improve possibilities for your pupils and yourself to form a sense of community in the classroom by implementing these tools.

▪ Fast Collaboration

A collaborative learning environment is essential for fostering engagement. Students can have wonderful conversations when they use technology to encourage and support them. Through technology, students will communicate with one another and talk about various approaches to working together and learning.

Given that some kids are naturally adept at using computers, it won't take them long to pick up some tips and techniques and be able to assist other students with their homework. This fosters a climate of collaboration in the classroom, which strengthens community ties.

▪ Support to Learners

Having access to technology helps many pupils study more effectively. The use of educational technology in the course design is essential to reaching the largest number of learners.

A wider audience may be reached by teachers using a range of teaching and learning strategies made possible by educational technology (more on that in a bit). Many educators want to connect with as many kids as they can, and technology offers them an excellent way to do so.

Issues with using technology in the classroom

Despite the clear advantages of educational technology, adoption of the new tools has not always been without problems. Among the most prevalent problems are:

- **Cost :** Some of these technologies are extremely expensive and out of reach for smaller universities and institutions. Some institutions' policies make matters worse by preventing teachers from providing their pupils with the necessary paperwork and information.



- **Lack of Training:** Educators' familiarity with all new educational technology is greatly enhanced by tech training. Teachers have a steep learning curve when it comes to new technology because of the generational divide between them and their students as well as the fact that the majority of them grew up with the same kind of educational technology that their students have access to and control over.

Institute need to spend time and money acquainting themselves with educational technology and providing them with the necessary training to make the best use of it in order to address this issue. They are unable to produce good outcomes since they are not properly trained to use the latest technologies.

- **Resistance to Accept Change :** It's normal to feel afraid of things you don't know. One obstacle that prevents the widespread use of technology in education is this. The majority of universities and institutions continue to believe that using laptops and other digital devices in the classroom is improper and a distraction, preferring to maintain a conventional approach to education. Furthermore, parents discourage their children from using technology since they believe it to be attractive.
- **Infrastructure:** It has been observed that educational institutions lack the infrastructure necessary for the widespread installation of edutech devices, even in the absence of budgetary constraints. One potential source of interference is the fact that the majority of these gadgets access several programmes and systems over the internet.

Conclusion

With the aid of educational technology, 21st-century's education is fast transforming. The way the education sector operates has been completely transformed by educational technology. Though, it provides multiple advantages, using educational technology. The structure of education has changed due to the integration of educational technology, moving away from conventional teacher-centered methodologies and towards a more dynamic, learner-centric approach. In the present day, digital technologies improve education by making it more interactive, accessible, and adapted to each student's requirements.

The 21st century has witnessed rapid technological advancements that have significantly impacted various aspects of society, including education. The integration of educational technology into pedagogical practices has the potential to transform traditional teaching methods, fostering a more dynamic and learner-centered educational environment.



References

- Anssari, Sahajadhussein G. (2021). *School Digitalization Programs for Interactive Classroom and Teaching-Learning Process through Technology*. Journal of Advances in Education and Philosophy, 05 (05), 125-128.
- Anssari, Sahajadhussein G. (2021). *Centrally Sponsored Education Schemes in India*. Journal of Advances in Education and Philosophy, 05 (05), 129-134.
- Anssari, Sahajadhussein. G. (2022). *The Role of National Education Policy 2020 in School Education through Regional Language:Issues, Approaches and Challenges*. State Level Conference, Gujarat Council of Educational Research and Training, 72-76.
- Spector, J. M. (2015). *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. Routledge.
- Blumberg, P. (2004). *Beginning Journey Toward a Culture of Learning-Centered Teaching*. New forum Press, volume 2, No 1, 2004, 65.
- Ertmer, P. A., Gopalakrishnan, S., & Ross, E. M. (2001). *Technology-using teachers: Comparing perceptions of exemplary technology use to best practice*. Journal of Research on Technology in Education, 33(5).
- Seels, B. B., & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field*. Washington, DC: Association for Educational Communications and Technology.
- Calfee, R. (2006). *Educational psychology in the 21st century*. In P. A. Alexander & P. H. Winne (Eds.) Handbook of educational psychology (2nd Ed., pp. 29-42). Mahwah, NJ: Erlbaum.

Research Review

The Academic Research Issue

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