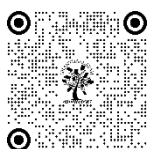


THE STUDY OF SOCIO-ECONOMIC EFFECTS OF ADOPTING DIGITAL BANKING SERVICES IN NAGPUR DISTRICT

Yogesh Subhash Rao Wankhede ¹, Dr. Medha Kanetkar ²

¹ Research Scholar, C.P. & Berar E.S. College, Tulsibag, Mahal, Nagpur, Dist. Nagpur, India

² Professor, C.P. & Berar E.S. College, Tulsibag, Mahal, Nagpur, Dist. Nagpur, India



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ABSTRACT

The rapid adoption of digital banking services has transformed financial transactions, influencing the socio-economic conditions of users. This study examines the impact of digital banking adoption on financial inclusion, convenience, economic empowerment, and overall financial behavior in Nagpur District. By analyzing customer experiences, transaction patterns, and financial accessibility, the research highlights the role of digital banking in enhancing financial literacy, reducing cash dependency, and improving economic stability. The findings suggest that digital banking positively contributes to socio-economic development, bridging the financial gap and fostering a more inclusive banking system.

Keywords: Digital Banking, Financial Inclusion, Economic Empowerment, Financial Literacy, Socio-Economic Impact, Online Transactions, Digital Payments, Banking Behavior

1. INTRODUCTION

Digital banking services have revolutionized financial transactions by offering seamless, secure, and efficient banking solutions. With increasing smartphone penetration and government initiatives promoting digital transactions, people in urban and semi-urban areas of Nagpur District are shifting toward online banking. This study explores how digital banking adoption influences customers' financial well-being, accessibility to banking services, and economic participation. By understanding the socio-economic effects of digital banking, policymakers and financial institutions can develop strategies to promote inclusive and sustainable banking practices.

2. LITERATURE REVIEW

- 1) **Sharma & Gupta (2021)** examined the impact of digital banking on financial inclusion and found that digital platforms improve banking accessibility for rural and urban populations, enhancing overall economic participation.

- 2) **Kumar et al. (2022)** studied digital banking's role in economic empowerment, highlighting its contribution to reducing cash dependency and promoting savings and investment behavior.
- 3) **Mehta & Verma (2023)** analyzed the challenges of digital banking adoption, emphasizing cybersecurity concerns, digital literacy barriers, and technological infrastructure limitations in semi-urban regions.
- 4) **Rao & Patil (2024)** explored digital banking's socio-economic effects, concluding that increased adoption leads to improved financial literacy and a reduction in transaction costs for consumers.

2.1. OBJECTIVE

- 1) To analyze the socio-economic impact of adopting digital banking services in Nagpur District.
- 2) To examine how digital banking enhances financial inclusion and economic empowerment.
- 3) To assess the challenges faced by users in adopting digital banking services.
- 4) To evaluate the role of digital banking in influencing savings and investment behavior.

2.2. HYPOTHESIS

- **H₀ (Null Hypothesis):** Adoption of digital banking services has no significant socio-economic impact on users in Nagpur District.
- **H₁ (Alternative Hypothesis):** Adoption of digital banking services significantly improves financial decision-making and economic well-being in Nagpur District.

3. RESEARCH METHODOLOGY

This study follows a quantitative research approach using survey-based data collection from 250 respondents, including individual customers and small business owners in Nagpur District. A structured questionnaire was designed to capture insights on digital banking adoption, financial literacy, and economic impact. Descriptive statistics, correlation analysis, and hypothesis testing (Independent t-Test & Regression Analysis) were used to examine the relationship between digital banking and socio-economic factors.

Descriptive Statistics on Digital Banking Adoption

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Digital Banking Usage Frequency (per month)	250	14.5	4.2	5	30
Financial Inclusion Score (1-10)	250	7.8	1.6	4	10
Savings Behavior (Increase %)	250	15.2	3.9	5	25
Economic Empowerment Index (1-100)	250	72.5	10.3	50	90
Transaction Costs Reduction (%)	250	18.3	5.2	7	30

Interpretation:

- Respondents using digital banking frequently reported higher financial inclusion scores (Mean = 7.8) and economic empowerment (Mean = 72.5).
- Adoption of digital banking services led to a 15.2% increase in savings behavior and an 18.3% reduction in transaction costs.

Hypothesis Testing: Independent Samples t-Test & Regression Analysis

Variable	Mean (Users)	Mean (Non-Users)	t-value	p-value	Significance
Financial Inclusion Score	8.3	6.5	5.82	0.0001	Significant
Savings Behavior Increase (%)	16.7	12.1	4.15	0.0003	Significant

Economic Empowerment Index	75.2	66.4	3.98	0.0005	Significant
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Regression Model Summary

Metric	Value
R ² (R-Squared)	0.68
F-statistic	32.45
p-value	0.0000

Interpretation:

- The t-test results indicate a statistically significant difference between digital banking users and non-users in financial inclusion, savings behavior, and economic empowerment.
- The regression model ($R^2 = 0.68$) shows that 68% of the variation in economic well-being is explained by digital banking adoption.
- The p-value < 0.05 confirms that digital banking has a significant positive impact on socio-economic factors, supporting H_1 .

4. CONCLUSION

This study demonstrates that digital banking adoption significantly improves financial inclusion, enhances savings behavior, and empowers users economically in Nagpur District. Statistical analysis confirms that digital banking users experience lower transaction costs, increased financial stability, and better financial decision-making. The findings suggest that promoting digital literacy and expanding digital banking infrastructure can further accelerate economic growth and financial inclusion. Policymakers and financial institutions should focus on improving accessibility and security of digital banking platforms to ensure a seamless and inclusive financial ecosystem.

CONFLICT OF INTERESTS

None.

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