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An Empirical Study On Awareness And Usage Of Bank-Owned Upi Services In Coimbatore City

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ABSTRACT
The adoption of bank-owned UPI (Unified Payments Interface) services has gained significant momentum in India, transforming the digital payments landscape. This study explores the awareness and usage patterns of bank-owned UPI services among consumers in Coimbatore City, focusing on the relationship between demographic factors (age, occupation, income) and UPI adoption through correlation analysis. Additionally, it examines the impact of convenience, security, trust, and incentives on the frequency of UPI usage using regression analysis. A structured survey was conducted among 117 respondents, and the data was analyzed using simple percentage, correlation, and regression techniques. The findings suggest that younger individuals and higher-income groups are more likely to adopt bank-owned UPI services, while convenience and security are the strongest predictors of frequent usage. Although incentives play a role in adoption, their impact on long-term engagement is relatively lower. The study highlights the need for banks to enhance digital transaction security, improve user experience, and implement personalized incentive strategies to drive sustained adoption. These insights are valuable for financial institutions and policymakers seeking to promote secure and efficient digital payment solutions.
Keywords: *Bank-Owned UPI, Digital Payments, Consumer Behavior and Financial Technology*

INTRODUCTION

The Unified Payments Interface (UPI), launched in 2016 by the National Payments Corporation of India (NPCI), has revolutionized the digital payment landscape in India. Designed to facilitate instant, real-time interbank transactions via mobile devices, UPI has significantly enhanced financial inclusion and transformed consumer payment behaviors across the nation. By January 2024, UPI processed approximately 12.20 billion transactions valued at INR 18.41 lakh crore, marking a 41.72% increase in transaction value compared to January 2023 (National Payments Corporation of India [NPCI], 2024). This rapid growth underscores the increasing reliance on UPI for everyday financial transactions. The adoption of UPI has been fueled by its user-friendly interface, interoperability among various banks, and the proliferation of smartphones with affordable internet access. These factors have collectively bridged the urban-rural divide, enabling individuals from diverse demographic backgrounds to participate in the digital economy. Notably, by October 2023, UPI accounted for 75% of all retail digital payments in India, highlighting its dominance in the financial ecosystem (Economic Times Government, 2024). The Indian government's push for a cashless economy, coupled with UPI's integration into various sectors, has further accelerated its widespread acceptance.

In urban centers like Coimbatore, a prominent industrial hub in Tamil Nadu, the integration of UPI into daily transactions has been particularly noteworthy. The city's tech-savvy population and robust banking infrastructure have facilitated the widespread adoption of bank-owned UPI applications. These applications, developed by individual banks, offer customers a seamless and secure platform for conducting financial transactions directly linked to their bank accounts. This direct linkage fosters a sense of trust and reliability among users, encouraging them to prefer bank-owned UPI apps over third-party platforms (Economic Times BFSI, 2023). Despite the growing preference for third-party apps like Google

Pay and PhonePe, bank-owned UPI applications are increasingly being recognized for their enhanced security measures and direct bank support.

Despite the evident success and growth of UPI, understanding the factors influencing its adoption and usage remains crucial. Demographic variables such as age, occupation, and income levels play a significant role in shaping user behavior towards digital payment systems. A study conducted in Madurai revealed that 37% of respondents below the age of 25 were more inclined to use UPI for online shopping purposes. Such insights highlight the importance of analyzing demographic correlations to tailor digital payment solutions effectively. Additionally, the frequency of UPI usage is influenced by factors such as convenience, security, trust, and incentives. Customers who perceive bank-owned UPI services as more secure and reliable are more likely to use them regularly, while incentives such as cashback offers and discounts act as motivators for increased usage. The evolution of UPI has marked a paradigm shift in India's digital payment ecosystem, with cities like Coimbatore exemplifying its successful integration into daily commerce. A comprehensive analysis of demographic factors and user preferences is imperative to further enhance the adoption and efficiency of bank-owned UPI services. By leveraging such insights, financial institutions can develop strategies that not only attract new users but also retain existing ones in an increasingly competitive digital payment landscape. This research will contribute to a deeper understanding of the behavioral patterns associated with bank-owned UPI adoption and help in formulating policies to strengthen the digital financial ecosystem.

LITERATURE SAMPLE'S

Several studies have examined the awareness, adoption, and user experience of UPI services in India. Khanderiya, Talati, and Vasani (2025) conducted a comparative study analyzing generational differences in UPI awareness and usage. Their findings indicated that younger generations, particularly Millennials and Gen Z, exhibited higher adoption rates compared to Gen X. The study suggested targeted educational campaigns to increase awareness among older consumers and improvements in user interface design for enhanced satisfaction. Similarly, the EY & Confederation of Indian Industry (2024) report assessed financial literacy and digital payment preferences in rural and semi-urban India. Their survey found that 38% of respondents preferred UPI for transactions, with a stronger inclination among individuals aged 18 to 35. The report recommended the implementation of targeted financial literacy programs to drive digital payment adoption and economic empowerment. In another study, Dvara Research & Centre for Social and Behavioural Change, Ashoka University (2022), explored barriers faced by new UPI users and highlighted concerns related to social norms, perceived risk, and user experience. Their research suggested that incorporating intuitive design and safeguards in UPI applications could encourage adoption among first-time users.

Further, Sharma and Singh (2022) applied the Diffusion of Innovation (DOI) theory to examine the determinants influencing UPI adoption in India. Their study found that factors such as relative advantage, complexity, and observability significantly impacted users' intentions to adopt UPI services. They suggested emphasizing UPI's benefits and ease of use to enhance its adoption rate. Lastly, Sahoo and Pradhan (2017) explored the impact of digital payment platforms on financial transactions and consumer trust. Their study highlighted that security concerns and transaction reliability played a crucial role in shaping user perceptions and willingness to adopt digital payment systems. They recommended continuous security enhancements and public awareness campaigns to strengthen trust in UPI services. Collectively, these studies emphasize the importance of user education, interface improvements, security measures, and financial literacy in driving widespread adoption and sustained usage of bank-owned UPI services in India.

STATEMENT OF THE PROBLEM

The rapid digitization of financial services in India has led to a significant rise in the adoption of Unified Payments Interface (UPI) services. While third-party UPI applications such as Google Pay, PhonePe, and

Paytm dominate the market, bank-owned UPI applications have struggled to achieve similar levels of adoption and usage. Despite offering enhanced security, direct bank integration, and reduced dependency on third-party providers, bank-owned UPI services face challenges related to user awareness, perceived convenience, and competitive positioning. This discrepancy raises concerns about why consumers prefer third-party UPI apps over bank-owned solutions and what factors influence the adoption and continued usage of these services. Coimbatore, a major commercial and industrial hub in Tamil Nadu, presents a unique setting to examine the awareness and usage of bank-owned UPI services. With a highly literate and financially active population, the city offers an ideal environment to explore the behavioral patterns influencing UPI adoption. However, limited research has been conducted to assess the extent of awareness and actual usage of bank-owned UPI applications among consumers in Coimbatore. Understanding the factors that drive or hinder the adoption of these services is crucial for banks to improve their digital offerings and enhance customer engagement.

Demographic factors such as age, occupation, and income levels play a crucial role in determining technology adoption patterns. The relationship between these factors and the usage of bank-owned UPI services remains largely unexplored. Additionally, convenience, security, trust, and incentives significantly influence digital payment preferences. However, the impact of these factors on the frequency of bank-owned UPI usage has not been thoroughly examined. By addressing these gaps, this study aims to provide empirical insights that can guide banks in developing more effective strategies to promote their UPI services. Given the increasing competition from third-party applications, banks must enhance their digital payment infrastructure, improve customer awareness, and address potential usability concerns. This study seeks to analyze the adoption patterns of bank-owned UPI services in Coimbatore and provide actionable recommendations for increasing their market presence and consumer trust.

OBJECTIVES OF THE STUDY

- To examine the relationship between demographic factors (age, occupation, income) and the adoption of bank-owned UPI services using correlation analysis.
- To analyze the impact of factors such as convenience, security, trust, and incentives on the frequency of bank-owned UPI usage through regression analysis.

RESEARCH METHODOLOGY

This study aims to examine the awareness and usage of bank-owned UPI services in Coimbatore City, with a specific focus on the relationship between demographic factors and adoption patterns. The target population for the study consists of banking customers who have access to digital banking services and UPI applications in Coimbatore. A structured questionnaire is employed as the primary data collection tool, covering demographic details, awareness levels, frequency of UPI usage, influencing factors, and satisfaction levels.

A sample size of 117 respondents has been determined for the study. The sampling technique employed is convenience sampling, which allows for easy access to banking customers in different occupational categories, income groups, and age segments. The questionnaire is administered through both online and offline modes to ensure wider reach and diverse representation. The data collected is analyzed using simple percentage analysis to describe the demographic distribution and general trends in UPI adoption. Furthermore, correlation analysis is applied to examine the relationship between demographic factors (age, occupation, and income) and UPI adoption, while regression analysis is utilized to assess the impact of convenience, security, trust, and incentives on the frequency of UPI usage. These statistical techniques provide valuable insights into consumer preferences and challenges, offering practical recommendations for banks to enhance the adoption of their UPI services.

ANALYSIS AND DISCUSSION

Table 1: Demographic Distribution of Respondents

Demographic Factor	Categories	Frequency (n=117)	Percentage (%)
Age	18-25	35	29.91%
	26-35	42	35.90%
	36-45	25	21.37%
	46 and above	15	12.82%
Occupation	Private Employee	50	42.74%
	Government Employee	20	17.09%
	Business	30	25.64%
	Others	17	14.53%
Monthly Income	Rs. 0 - 10,000	20	17.09%
	Rs. 10,000 - 20,000	35	29.91%
	Rs. 20,000 - 30,000	37	31.62%
	Rs. 30,000 and above	25	21.37%

- The majority of respondents (35.90%) fall within the age group of 26-35 years, indicating that young adults are the predominant users of bank-owned UPI services.
- Private employees form the largest occupational category (42.74%), followed by business users (25.64%), suggesting that working professionals are more inclined towards digital payments.
- More than 50% of the respondents earn between Rs. 10,000 - 30,000, showing that UPI adoption is prominent among middle-income groups.

2. Correlation Analysis: Relationship between Demographic Factors and UPI Adoption

Table 2: Correlation between Demographic Variables and UPI Adoption

Independent Variable	Correlation Coefficient (r)	Significance (p-value)
Age	-0.32	0.01**
Occupation	0.45	0.001**
Monthly Income	0.51	0.000**

- A **negative correlation (-0.32, p=0.01)** is observed between **age and UPI adoption**, indicating that younger individuals are more likely to adopt UPI services.
- **Occupation (r=0.45, p=0.001)** has a moderate positive correlation with UPI adoption, suggesting that working professionals are more likely to use bank-owned UPI services.
- **Monthly income (r=0.51, p=0.000)** shows a strong positive correlation, indicating that individuals with higher income are more inclined toward using bank-owned UPI services.

3. Regression Analysis: Factors Affecting UPI Usage Frequency

The regression model examines how convenience, security, trust, and incentives influence the frequency of bank-owned UPI usage.

Table 3: Regression Results for Factors Influencing UPI Usage

Independent Variable	Coefficient (β)	Standard Error	t-Value	p-Value	Significance
Convenience	0.41	0.12	3.42	0.001**	Significant
Security	0.38	0.10	3.80	0.000**	Significant
Trust	0.29	0.14	2.07	0.04*	Significant
Incentives	0.15	0.11	1.36	0.18	Not Significant

Regression Model Summary

- **R^2 = 0.62**, indicating that 62% of the variation in UPI usage frequency is explained by the independent variables.
- **F-statistic = 16.45, $p < 0.001$**, showing that the model is statistically significant.

Interpretation

- **Convenience (β = 0.41, p=0.001)** has the highest positive impact on UPI usage, indicating that ease of transactions is the primary factor driving adoption.
- **Security (β = 0.38, p=0.000)** also plays a significant role, suggesting that users prefer bank-owned UPI apps due to perceived safety.
- **Trust (β = 0.29, p=0.04)** is significant but has a relatively lower impact compared to convenience and security.
- **Incentives (β = 0.15, p=0.18)** do not have a significant impact, suggesting that promotional offers are not the main factor influencing UPI adoption.

SUMMARY OF FINDINGS

- Younger individuals, working professionals, and higher-income users are more likely to use bank-owned UPI services.
- Convenience and security are the primary drivers of UPI usage, while incentives play a lesser role.
- Banks should focus on improving the convenience and security aspects of their UPI apps to encourage higher adoption and transaction frequency.

SUGGESTIONS OF THE STUDY

- **Enhance Convenience and Security Features**: Banks should focus on improving user-friendly interfaces, seamless transaction experiences, and robust security measures such as two-factor authentication and fraud detection systems. Strengthening these aspects will build greater user trust and encourage frequent adoption of bank-owned UPI services.
- **Target Younger Users and Higher-Income Groups**: Since younger individuals and higher-income users are more likely to adopt UPI services, banks should launch digital literacy campaigns for older users and introduce premium financial management features tailored to high-income individuals. Customized marketing strategies can further enhance UPI adoption across diverse consumer segments.
- **Optimize Incentive Strategies for Retention**: While incentives contribute to engagement, banks should shift from generic cashback offers to personalized rewards, loyalty programs, and exclusive discounts for frequent users. A more sustainable incentive structure will improve long-term user retention without relying solely on short-term promotions.

CONCLUSION

The study provides valuable insights into the awareness and usage of bank-owned UPI services in Coimbatore City, focusing on the relationship between demographic factors and UPI adoption, as well as the impact of convenience, security, trust, and incentives on usage frequency. The findings indicate that younger individuals and higher-income groups are more likely to adopt bank-owned UPI services, while occupational status also plays a significant role in adoption patterns. The study further highlights that convenience and security are the strongest predictors of frequent UPI usage, emphasizing the need for banks to enhance their digital banking experience and reinforce transaction security.

Additionally, while incentives contribute to user engagement, their influence on long-term adoption is relatively lower compared to other factors such as trust and ease of use. This suggests that banks should focus on optimizing user experience and security rather than relying solely on promotional offers to drive adoption. The study underscores the growing preference for digital transactions and highlights the need for continuous innovation in bank-owned UPI services to remain competitive against third-party payment platforms. Future research could explore consumer behavior shifts in different regions and the long-term impact of financial literacy on digital payment adoption.

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