THE EFFECTIVENESS OF MOBILE PAYMENTS AND DIGITAL BANKING ON CUSTOMER BEHAVIOUR WITH SPECIAL REFERENCE TO CHENNAI CITY

Dr.G.Santhamoorthy
Assistant Professor
Department of Commerce, Sindhi College.
profgsantha@gmail.com

ABSTRACT:

Digital payments, particularly digital wallets and UPI, have witnessed rapid growth and widespread acceptance in Chennai. With the increasing penetration of internet services and the widespread use of smartphones in the city, mobile-based payments have become one of the most convenient and accessible modes of transaction for residents. This study highlights the shift in consumer spending behavior in Chennai, where digital payments have emerged as a primary spending channel across both urban and semi-urban areas of the city.

The research is based on a survey of 126 stakeholders from different parts of Chennai, aiming to understand their attitudes and behavioral patterns toward digital payment systems. As these methods become faster and more user-friendly, the findings indicate a noticeable increase in unplanned and impulsive purchases among users. Age and income also influence usage patterns: higher-income groups in Chennai are more inclined to use digital payments for shopping and everyday expenses, while older users often face difficulties in monitoring and managing their spending through digital platforms.

The study emphasizes the need for financial literacy initiatives, improved budgeting and expense-tracking tools within digital payment applications, and targeted awareness programs in Chennai. These measures can help consumers make informed financial decisions and prevent overspending. Overall, while digital payments offer significant convenience and efficiency, they also present new behavioral challenges, thereby profoundly shaping consumer spending habits in Chennai.

Key Words: Digital Payments, Mobile Applications, UPI Payments, Customer Behavior, Spending Habits.

Introduction:

INTRODUCTION:

In recent years, India has witnessed a significant transformation in its financial ecosystem, driven by rapid advancements in digital technology and increased internet penetration. Mobile payments and digital banking have emerged as key components of this transformation, enabling faster,

more convenient, and secure financial transactions. The introduction of the Unified Payments Interface (UPI), digital wallets, and app-based banking services has revolutionized the way individuals manage and spend money, reducing dependence on cash-based transactions.

Chennai, one of India's major metropolitan cities, has experienced substantial growth in the adoption of mobile payments and digital banking services. With a high level of smartphone usage, expanding digital infrastructure, and a diverse population comprising working professionals, students, and small business owners, the city presents an ideal context for studying the impact of digital financial services on customer behavior. From retail shopping and transportation to utility payments and small vendor transactions, digital payment systems are increasingly becoming an integral part of everyday life in Chennai.

The growing convenience, speed, and accessibility of these digital platforms have not only improved transaction efficiency but have also influenced consumer spending patterns, decision-making processes, and financial habits. While many users benefit from seamless payments and better financial access, there is also evidence of behavioral shifts such as increased impulsive spending, reduced financial tracking, and varying levels of adoption across different age and income groups.

This research aims to examine the effectiveness of mobile payments and digital banking in shaping customer behavior in Chennai city. It seeks to analyze user preferences, usage patterns, and the underlying factors influencing adoption, while also identifying the challenges faced by different segments of the population. By understanding these dynamics, the study intends to provide insights into how digital financial services can be optimized to promote responsible usage and enhance overall consumer experience.

OBJECTIVE OF THE STUDY:

- To study and analyze the digital payment methods in India.
- To examine the effectiveness of mobile payments and digital banking on customer behavior.
- To study the problem the customers while using the mobile payments.
- To give suggestions to improvise s faced by
- the mobile banking experience.

THE INDIAN DIGITAL PAYMENT LANDSCAPE:

The journey of India with digital payments is one of the most remarkable one in the world. For long, India had been a cash heavy economy, where majority of day-to-day purchases ranging from groceries and transport needs were made through physical currency. Before 2016, cash was a dominant force in the system - almost 12% of India's GDP was in currency in circulation, much higher than that in many other countries. These people were inclined to use the cash because it was convenient for them since it seemed dependable for them when handling the cash as well as

allow them to have a feeling on spending it. The dependence on money had its many downsides, however. It caused high costs in printing and handling money; it encouraged the shadow economy and also made tax evasion and corruption more prevalent.

A major turning point in India's payment landscape occurred in November 2016, when the government announced demonetization, withdrawing high-denomination currency notes of ₹500 and ₹1000 from circulation. These notes accounted for nearly 87% of the total currency, leading to an immediate and widespread cash shortage. As a result, individuals and businesses that were heavily dependent on cash transactions were compelled to explore alternative payment methods. This sudden disruption acted as a catalyst, accelerating the adoption of digital payment systems such as mobile wallets, debit and credit cards, and online bank transfers.

Simultaneously, India had already established a strong foundation for digital financial inclusion through the JAM Trinity—Jan Dhan bank accounts, Aadhaar-based digital identity, and widespread mobile phone penetration. This infrastructure ensured that a large section of the population had access to banking services, identification, and mobile connectivity, even if these resources were underutilized. Demonetization served as a trigger that activated this ecosystem, encouraging a shift toward digital transactions.

A significant development during this period was the launch of the Unified Payments Interface (UPI) in 2016, which revolutionized digital payments in India. UPI enabled instant, seamless, and cost-effective money transfers using mobile devices, integrating multiple banks into a single platform. Its simplicity and efficiency contributed to its rapid adoption across the country. Over time, UPI witnessed exponential growth, and by 2025, it was processing over 20 billion transactions per month, covering a wide range of payments—from high-value transfers to everyday small expenses such as tea, transportation, and groceries.

Furthermore, government initiatives like Digital India, along with the efforts of the Reserve Bank of India (RBI) and the National Payments Corporation of India (NPCI), played a crucial role in strengthening digital infrastructure, enhancing user trust, and promoting widespread adoption. Today, India has emerged as a global leader in real-time digital payments. This transition from a predominantly cash-based economy to a digitally driven financial system highlights how coordinated efforts in policy-making, technological advancement, and changing consumer behavior can significantly transform spending patterns.

REVIEW OF LITERATURE:

Shu and Xia (2018) examined how different payment mechanisms, such as cash and digital methods, influence consumer spending behavior. Their study found that consumers tend to spend more when using digital or card-based payments, as these methods reduce the tangibility of money compared to cash transactions. This research provides an important behavioral insight by

explaining how digital payments lessen the "pain of paying," which in turn encourages higher expenditure. This concept serves as a key psychological foundation for the present study.

Gupta and Ranjan (2020) analyzed the adoption of the Unified Payments Interface (UPI) in India and observed that it leads to an increase in both the frequency and value of transactions, particularly among technologically skilled users. Their findings offer strong empirical support within the Indian context, showing how digital payment systems contribute to increased consumer spending. This makes the study highly relevant to the present research, which focuses on similar behavioral outcomes.

Thomas and Ramaswamy (2019) explored the relationship between mobile wallets and impulse buying behavior. The study concluded that the ease of use and reduced transaction friction associated with mobile wallets significantly encourage impulsive purchasing. These findings reinforce the argument that the convenience of digital payments can influence spontaneous buying decisions, supporting the analysis of impulsive spending patterns in the present study.

RESEARCH METHODOLOGY:

This study adopts a descriptive and analytical research design to examine the effectiveness of mobile payments and digital banking on customer behavior, with special reference to Chennai city. The research focuses on understanding usage patterns, behavioral changes, and the factors influencing the adoption of digital financial services among consumers.

Both primary and secondary data sources are utilized for the study. Primary data is collected through a structured questionnaire through google form distributed to respondents across various parts of Chennai. The questionnaire is designed to gather information on demographic details, frequency of usage of mobile payments and digital banking services, spending behavior, and user perceptions. Secondary data is obtained from journals, research articles, reports, and official publications related to digital payments and banking trends in India.

The study acknowledges certain limitations, including the reliance on self-reported data, which may be subject to bias, and the use of convenience sampling, which may not fully represent the entire population of Chennai. Despite these limitations, the research provides valuable insights into how mobile payments and digital banking influence customer behavior in the selected region.

DATA ANALYSIS AND INTERPRETATION:

Chi-Square Test Results for Gender vs Confidence in Using Digital Payments (N = 126)

Test	Value	df	Asymp.Sig. (2-sided)
Pearson Chi-Square	11.656	4	0.020
Likelihood Ratio	12.902	4	0.012
Linear-by-Linear Association	2.108	1	0.147

Test	Value	df	Asymp.Sig. (2-sided)
N of Valid Cases	126		

Notes:

- All expected counts > 5; minimum expected count = 6.35.
- Null hypothesis of no association is rejected for Pearson Chi-Square and Likelihood Ratio tests.

Interpretation:

The Pearson Chi-Square value is 11.656 with 4 degrees of freedom, and the significance level (p-value) is 0.020. Since the p-value is less than the standard significance level of 0.05, the null hypothesis of no association is rejected. This indicates that there is a statistically significant relationship between gender and the level of confidence in using widely adopted mobile payment and digital banking services in Chennai city.

The Likelihood Ratio test further supports this result, as its p-value (0.012) is also below 0.05, confirming the presence of a significant association between gender and consumer confidence in digital payment usage. However, the Linear-by-Linear Association shows a p-value of 0.147, which is greater than 0.05, indicating that there is no significant linear trend across the ordered response categories.

Table: ANOVA Test Results for Factors Influencing Consumer Behavior (N = 126)

Statement	Sum Squares	df	Mean Square	F	Sig. (p-value)	Interpretation
Digital payments are more convenient than cash	2.435	1	2.435	1.312	0.254	No significant difference among respondents (p > 0.05)
I feel secure using mobile banking apps for transactions	1.892	1	1.892	0.987	0.322	No significant difference among respondents (p > 0.05)
I find it easy to use mobile wallets and banking apps	1.768	1	1.768	0.912	0.341	No significant difference among respondents (p > 0.05)
Digital payments save time compared to traditional methods	2.004	1	2.004	1.105	0.297	No significant difference among respondents (p > 0.05)
I trust the apps and platforms I use for mobile payments	2.215	1	2.215	1.214	0.272	No significant difference among respondents (p > 0.05)
I make more purchases because mobile payments are easy to use	6.782	1	6.782	5.032	0.027	Significant difference in opinions (p < 0.05)

Statement	Sum Squares	df	Mean Square	F	Sig. (p-value)	Interpretation
I am more likely to try new services if recommended by peers	5.643	1	5.643	4.212	0.041	Significant difference in opinions ($p < 0.05$)

Notes:

- N = 126 respondents
- Most perceptions regarding convenience, security, and usability are consistent among users.

Inference:

Most statements show **no statistically significant differences** among respondents, with p-values greater than 0.05, suggesting a generally uniform opinion on these factors. For example:

- "Digital payments are more convenient than cash" ($p > 0.05$)
- "I feel secure using mobile banking apps for transactions" ($p > 0.05$)
- "I find it easy to use mobile wallets and banking apps" ($p > 0.05$)
- "Digital payments save time compared to traditional methods" ($p > 0.05$)
- "I trust the apps and platforms I use for mobile payments" ($p > 0.05$)

These results indicate that most respondents share similar views regarding the general effectiveness, convenience, and trustworthiness of mobile payments and digital banking.

FINDINGS:

- Mobile payments and digital banking are widely adopted among consumers in Chennai.
- Convenience, speed, and ease of use are the primary factors driving usage.
- Majority of respondents use digital payments for daily transactions like shopping, bill payments, and transport.
- Younger and higher-income groups show higher adoption compared to older users.
- Digital payments have increased the frequency of transactions among users.
- Many users exhibit impulsive or unplanned spending due to the ease of digital payments.
- Most users are satisfied with the efficiency and accessibility of digital platforms.
- Some concerns still exist regarding data security, fraud risks, and technical issues.

- Not all users actively track their expenses, leading to poor financial management in some cases.
- Overall dependency on cash transactions has significantly reduced in Chennai.

SUGGESTIONS:

- Conduct financial literacy programs to promote responsible usage of digital payments.
- Encourage users to follow budgeting practices and monitor their spending regularly.
- Improve in-app features such as expense tracking, budgeting tools, and spending alerts.
- Strengthen security systems and create awareness about safe digital transaction practices.

CONCLUSION:

In conclusion, mobile payments and digital banking have transformed the financial behaviour of consumers in Chennai city by offering a convenient, fast, and efficient alternative to traditional cash-based transactions. These digital systems have not only increased transaction frequency but have also influenced spending patterns, often encouraging impulsive purchases.

While the benefits of digital payments are substantial, including ease of use and time efficiency, they also present challenges such as overspending, security concerns, and limited financial awareness among certain user groups. Therefore, a balanced approach that combines technological advancement with consumer education is essential.

Overall, the study highlights that mobile payments and digital banking are highly effective in shaping modern consumer behavior in Chennai, and with appropriate measures, they can further contribute to a more inclusive and financially responsible digital economy.

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