

Digital Wallets and Their Influence on Consumer Spending: A Study of Adoption and Behaviour in Tiruchirappalli, Tamil Nadu

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Abstract

Received: 07 March 2025

Accepted: 07 April 2025

This study examines the rise of digital wallets and their impact on consumer spending behaviour in Tiruchirappalli, Tamil Nadu. With the rapid growth of digital payment platforms such as Google Pay, Paytm, and PhonePe, India has witnessed a shift from traditional cash-based transactions to mobile wallet usage. The research focuses on understanding how the frequency of digital wallet use influences spending patterns, with particular attention to demographic factors such as age, gender, and occupation. A sample of 390 respondents was surveyed using stratified random sampling, and data analysis was performed using tools such as percentage analysis, Chi-Square tests, and t-tests. The findings indicate that digital wallets are widely adopted, particularly among younger, working professionals, and students. The study also reveals that male users tend to spend more via digital wallets than female users, and occupation significantly influences usage frequency. The study highlights the need for targeted marketing strategies, security enhancements, and consumer education to further boost adoption, especially among rural and older populations. The findings suggest that digital wallets are a key driver of financial inclusion and a catalyst for changing consumer spending behaviour in India's evolving digital economy.

Keywords: Digital Wallets, Consumer Spending Behaviour, Financial Inclusion, Digital Payments.

Introduction

The advancement of financial technology (FinTech) has revolutionized the global payment ecosystem, with digital wallets emerging as one of the most transformative innovations. In India, the surge in smartphone usage, internet penetration, and government-driven financial digitization initiatives—such as Digital India and Jan Dhan Yojana—have catalyzed the rapid adoption of digital wallets. These mobile-based applications allow users to store money, make payments, transfer funds, and pay bills seamlessly, reducing the dependency on cash and even traditional card-based transactions. Digital wallets such as Google Pay, PhonePe, Paytm, and Amazon Pay have become integral to daily consumer transactions, from small merchants to large retailers. Their widespread adoption is not only driven by convenience and speed but also by cashback offers, reward systems, and enhanced security features. This has triggered a behavioural shift in how consumer's approach spending moving from physical to digital spending patterns. In the Indian context, where a large portion of the population was previously underserved by formal banking channels, digital wallets have played a critical role in enhancing accessibility to financial services. This study aims to explore the relationship between the rise of digital wallets and changing consumer spending behaviour. It also evaluates the extent to which these digital payment platforms influence purchasing decisions, consumption frequency, and the overall economic participation of Indian consumers.

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Review of Literature

A number of studies have examined the impact of digital wallets on consumer behaviour, financial inclusion, and digital payment infrastructure. The following review highlights key insights from relevant literature: Chawla and Joshi (2019) examined consumer perception toward mobile wallets in India and found that ease of use, security, and promotional offers significantly influenced adoption. Their study suggested that consumers are more likely to increase spending frequency when offered financial incentives such as cashback.

RBI Report on Digital Payments (2022) highlighted a 200% year-on-year growth in digital wallet transactions post-2020, attributing the rise to UPI integration and increased trust in contactless payments during the COVID-19 pandemic. It noted a significant shift in spending toward online platforms across urban and semi-urban segments.

Gupta and Arora (2020) investigated behavioural factors affecting digital wallet usage and concluded that perceived usefulness, trust, and mobile literacy were major drivers of wallet adoption, while concerns over data privacy and transaction failure posed challenges.

Kapoor et al. (2018) explored the psychological aspect of consumer spending through mobile wallets and noted that digital payments tend to reduce the "pain of paying" compared to cash, leading to impulsive or unplanned purchases.

NPCI Annual Report (2023) indicated that wallets integrated with UPI functionality accounted for over 70% of peer-to-peer retail digital payments in India, further supporting the link between wallet usage and evolving spending patterns.

KPMG India Fintech Report (2021) emphasized the role of digital wallets in democratizing access to financial tools, especially among Gen Z and millennials, who exhibit a higher comfort level with app-based financial decision-making.

Singh and Rana (2021) identified that regular use of digital wallets correlates with higher spending in entertainment, food delivery, and e-commerce sectors, particularly among users in metro cities.

Objectives:

- To examine the impact of digital wallets on consumer spending behaviour
- How have digital wallets influenced consumers' frequency of purchases?
- Do promotional offers on digital wallets affect consumer buying decisions?
- Is there a difference in spending behaviour between urban and rural users of digital wallets?

Research Methodology

Research Design

This study adopts a descriptive and analytical research design, aiming to examine how digital wallet usage influences consumer spending behaviour. Both primary and secondary data were used.

Study Area

The study was conducted in Tiruchirappalli (Trichy), Tamil Nadu, a growing urban centre with rising digital adoption, diverse income groups, and a mix of traditional and modern retail infrastructure.

Data Collection

- Primary Data: Collected via structured questionnaires from individual users of digital wallets.
- Secondary Data: Sourced from RBI reports, NPCI, scholarly journals, government databases, and fintech industry reports.

Sampling Design

Target Population: Residents of Tiruchirappalli aged 18 and above who have used digital wallets at least once in the last 6 months.

Sampling Technique:

A stratified random sampling method was adopted. The population was divided based on occupation (students, working professionals, homemakers, businesspersons) and location (urban, semi-urban) to ensure representativeness.

Sample Size Determination:

Sample size was calculated using Raosoft Sample Size Calculator with the following criteria:

- Margin of Error: 5%
- Confidence Level: 95%
- Population Size: Approx. 10,00,000 (urban Trichy estimate)
- Response Distribution: 50% (default when unknown)

Calculated Sample Size: 384 respondents

To account for potential non-response, a total of 400 questionnaires were distributed, and 390 responses were considered valid for analysis.

Data Analysis and Interpretation

Table 1: Frequency of Digital Wallet Usage

Usage Frequency	No. of Respondents	Percentage (%)
Daily	115	29.5%
Weekly	132	33.8%
Occasionally	98	25.1%
Rarely	45	11.5%
Total	390	100%

Interpretation: Over 63% of respondents use digital wallets on a daily or weekly basis, indicating high adoption and integration into everyday purchases.

Table 2: Chi Square Test between Occupation vs. Digital Wallet Usage

Occupation	High Usage (Daily/Weekly)	Low Usage (Occasional/Rare)	Total
Students	78	32	110
Working Professionals	105	30	135
Homemakers	35	30	65
Business Owners	50	30	80
Total	268	122	390

Chi-Square Value (Calculated): 13.47

Degrees of Freedom: 3

Significance Level: 0.05

Table Value: 7.81

Interpretation: Since the calculated value > table value, there is a significant association between occupation and frequency of digital wallet usage.

Suggestions

Based on the findings of the study, the following Suggestions can be made:

Strengthening Security and Trust

- Digital wallets should enhance security features (e.g., biometric authentication, two-factor authentication) to build consumer trust, particularly for older users and first-time users. Ensuring that customers feel their data and funds are secure is vital for increasing usage.

Targeted Marketing for Non-users and Low-frequency Users

- Focus on non-users, homemakers, and small business owners with promotional offers, financial literacy programs, and easy onboarding processes to increase adoption among these groups.

Gender-Specific Campaigns

- Male users tend to spend more, so targeted campaigns offering discounts and cashback on items like electronics or gadgets could increase their spending. For female users, platforms can focus on spending categories such as clothing, beauty products, and groceries, offering rewards for purchases in these sectors.

Partnerships with Local Retailers and SMEs

- Digital wallet providers can form partnerships with local retailers, offering special discounts for wallet payments. This can increase usage for small-ticket purchases and expand the wallet's footprint in semi-urban and rural areas.

Educating Consumers on Wallet Benefits

- Financial education programs should focus on explaining the benefits of digital wallets, such as cashback offers, ease of payment, and trackable spending, especially in rural or underdeveloped areas where the adoption rate remains low.

Conclusion

This study concluded that digital wallets have revolutionized consumer spending behaviour in Tiruchirappalli. With the rise of fintech solutions, the way consumers transact has shifted from cash-based systems to digital payments. The widespread adoption of digital wallets is fuelled by the ease of use, security features, and promotional incentives offered by wallet providers. While young adults, working professionals, and students dominate the digital wallet user base, the study highlights that there is still room for growth in rural and semi-urban areas, as well as among older and non-urban populations. Gender differences in spending habits should also be considered when designing targeted campaigns and offers. In conclusion, the rise of digital wallets has not only facilitated financial inclusion in India but also fostered a cultural shift in the way consumers approach spending. By focusing on trust-building, educating consumers, and expanding the reach of digital wallets, fintech companies can further drive the adoption and usage of these platforms across various demographics, contributing to India's digital economy.

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