



Impact of digital payment adoption on consumer purchase behaviour in India

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Abstract

Digital payment systems have transformed transactional behaviour in emerging economies, particularly in India, following rapid technological advancements and financial inclusion initiatives. This study examines the influence of digital payment adoption on consumer purchase behaviour, focusing on perceived convenience, security, trust, promotional incentives, and ease of use. Primary data were collected from 412 respondents through a structured questionnaire. Structural Equation Modelling (SEM) was employed to examine the relationship between independent variables and digital payment-driven purchase behaviour. Results reveal that perceived convenience, trust, and ease of use significantly affect consumers' likelihood of purchasing via digital payment systems, while promotional incentives exert a moderate effect. This study contributes to the growing literature on consumer behaviour and financial technologies and provides implications for policymakers, fintech companies, and retail marketers to enhance digital transaction experiences.

Keywords: Digital payments, UPI, consumer behaviour, fintech, purchase intentions, mobile wallets

Introduction

Digital technologies have rapidly transformed the way consumers transact, interact with firms, and make purchasing decisions. In the Indian context, digital payments such as UPI, mobile wallets, QR-based payments, and card-less transactions have seen unprecedented growth due to rising smartphone penetration, improved internet access, and government initiatives promoting a cash-lite economy. Consumer behaviour—traditionally dependent on physical, cash-based purchases—has shifted toward fast, contactless, and secure payment methods.

The adoption of digital payment platforms has been accelerated by multiple factors, including convenience, lower transaction time, safety concerns during the COVID-19 pandemic, improved security frameworks, and incentives such as cashback and discounts. These factors have reshaped how consumers evaluate products, choose retailers, and complete purchases. As a result, consumer purchase behaviour is increasingly influenced not only by product attributes, but also by the efficiency and trustworthiness of payment mechanisms.

Despite India's leadership in digital payment growth, research focusing specifically on how digital payment adoption influences consumer purchase behaviour remains limited. Most existing studies emphasize either financial inclusion, technological acceptance, or banking sector transformation, but few have examined its direct behavioural implications on consumer buying patterns across retail categories.

Thus, this paper investigates the relationship between digital payment adoption and consumer purchase behaviour in India. The study explores how variables such as perceived convenience, perceived security, trust in platform, promotional incentives, and ease of use influence consumers' purchasing intentions when using digital payment methods.

Literature Review

Perceived convenience is widely considered a critical factor influencing digital payment usage. Sharma & Kukreti

(2023)^[1] found that consumers prefer digital methods due to reduced transaction time and the elimination of cash-handling issues. Similarly, Jiang *et al.* (2022)^[2] argue that convenience enhances perceived usefulness, which directly shapes purchase intentions.

Perceived security also shapes user adoption of digital payment platforms. Studies by Al-Adwan (2024) indicate that concerns over fraud, data privacy, and authentication significantly affect trust and consequent behavioural intentions. Enhanced encryption and multi-layer verification methods increase user confidence.

Trust plays an essential role in technology-based transactions. According to Bansal & Chauhan (2021)^[4], trust reduces perceived risk and encourages users to engage more frequently in digital transactions. Trust in the technology provider, banking system, and government regulations is key to sustained behavioural change.

Promotional incentives, such as cashback and discounts offered by platforms like Google Pay, PhonePe, and Paytm, motivate trial and repeat purchases. Research by Singh (2024)^[5] shows that incentives strongly influence initial adoption but may have a diminishing effect over long-term usage.

Ease of use, based on the Technology Acceptance Model (TAM), is considered one of the strongest predictors of digital payment adoption. Davis (1989)^[6] and later researchers observed that systems perceived as easy to operate are more widely accepted and integrated into purchasing routines.

This review highlights the need to study these factors collectively within the Indian context, especially in relation to consumer purchase decisions.

Research Methodology

1. Research Design

A quantitative research design was adopted to test relationships between independent variables (perceived convenience, trust, security, ease of use, promotional incentives) and consumer purchase behaviour. A conceptual

framework was developed following the structure of established models used in technology adoption research.

2. Questionnaire Design and Measures

A structured questionnaire was created using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Items for each construct were adapted from existing validated scales and reviewed by experts. A pilot test with 45 respondents confirmed reliability, with all Cronbach’s alpha values above 0.70.

3. Data Collection and Sample Profile

Primary data were collected from 412 Indian consumers via an online survey distributed through social media platforms. After screening incomplete responses, 389 valid samples were retained. Respondents belonged to diverse age groups, occupations, and digital payment experience levels.

4. Tools and Statistics Used

Data were analysed using SPSS and AMOS software. Reliability and validity were tested through Cronbach’s alpha, composite reliability (CR), and average variance extracted (AVE). Structural Equation Modelling (SEM) was used to examine relationships among variables.

5. Data Analysis

| Hypothesis | Path Coefficient (β) | p-value | Result |
|-------------------------------------------------|----------------------|---------|-----------|
| H1: Perceived Convenience → Purchase Behaviour | 0.61 | <0.01 | Supported |
| H2: Perceived Security → Purchase Behaviour | 0.48 | <0.01 | Supported |
| H3: Trust → Purchase Behaviour | 0.72 | <0.01 | Supported |
| H4: Ease of Use → Purchase Behaviour | 0.57 | <0.01 | Supported |
| H5: Promotional Incentives → Purchase Behaviour | 0.29 | <0.05 | Supported |

Trust emerged as the strongest predictor of purchase behaviour, followed by convenience and ease of use. Promotional incentives had the weakest but still significant impact.

Conclusion

This study investigated how digital payment adoption influences consumer purchase behaviour in India. The findings demonstrate that trust, convenience, ease of use, and perceived security significantly affect consumer decisions to transact digitally. Although promotional incentives contribute to usage, their long-term influence is comparatively weaker.

The study concludes that digital payment platforms can strengthen consumer engagement by enhancing trust, simplifying user interfaces, ensuring robust security measures, and continuing promotional efforts that encourage usage.

Implications

For policymakers: Strengthen cybersecurity regulations, promote digital literacy, and expand secure digital infrastructure.

For fintech companies: Improve app usability, invest in fraud-prevention technologies, and maintain transparent communication to build trust.

For retailers: Integrate multiple digital payment options and offer incentives to encourage repeat purchases.

Descriptive statistics evaluated respondent characteristics. CFA (Confirmatory Factor Analysis) assessed measurement model validity. SEM tested hypotheses based on path coefficients, significance levels, and model-fit indices.

Results and Discussion

1. Measurement Model Evaluation

Internal consistency reliability values (CA and CR) ranged from 0.82 to 0.91, exceeding the acceptable threshold. AVE values exceeded 0.50, indicating convergent validity. Discriminant validity was confirmed using the Fornell-Larcker criterion, and VIF values remained below 5, indicating no multicollinearity concerns.

2. Structural Model and Model Fit

SEM results indicated strong model fit:

| Fit Index | Value | Threshold |
|-----------|-------|-----------|
| GFI | 0.91 | >0.90 |
| CFI | 0.95 | >0.90 |
| RMSEA | 0.04 | <0.08 |

These metrics confirm that the structural model accurately explains relationships among the variables.

2.1 Hypothesis Testing

Limitations and Future Research

This study relied on self-reported data, which may include response biases. It also did not focus on any particular retail sector. Future research could:

- Compare urban vs. rural adoption patterns
- Analyse specific platforms such as UPI vs. mobile wallets
- Conduct longitudinal studies to observe behavioural shifts over time

References

1. Sharma K, Kukreti S. Convenience Factors Influencing Digital Payments in India. *Journal of Retail Innovations*,2023;8(2):45–57.
2. Jiang H, Patel R, Menon S. Digital Transaction Behaviour among Emerging Market Consumers. *Asian Journal of Business Research*, 2022, 11(4).
3. Al-Adwan A. Security Perceptions and Technology Adoption in Digital Finance. *International Review of Information Systems*, 2024, 15(1).
4. Bansal V, Chauhan P. Trust in Digital Financial Platforms: A Behavioural Approach. *Management Today*, 2021, 29(3).
5. Singh R. Promotional Incentives as Drivers of FinTech Adoption. *Marketing Perspectives*, 2024, 13(2).
6. Davis F. Technology Acceptance Model: Perceived Ease of Use and Acceptance. *MIS Quarterly*, 1989, 13(3).