



The Role of Digital Payment Systems in Shaping Consumer Behaviour in the E-Commerce Sector in Salem, Tamil Nadu

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Abstract

This quantitative study describes the usage patterns and perceptions of Digital Payment Systems (DPS) among active e-commerce consumers in Salem, Tamil Nadu. Drawing primary data from 195 online shoppers, the research documents the frequency of DPS use, mode preferences, and their reported impact on purchasing behaviour. Key descriptive findings from the data distribution indicate that UPI is the most preferred payment mode, selected by most of the respondents, largely due to its convenience and speed. A substantial majority of the consumers reported that the availability of DPS led to an increase in their online shopping frequency, confirming a significant reported behavioural shift. Consumers indicated a higher level of trust in DPS compared to Cash on Delivery, with security measures like OTPs being the most cited factor for trust. Furthermore, while many are motivated by discounts, an even larger proportion indicated they would continue using DPS even without offers. The study concludes that DPS are highly adopted and reported to be influential tools, which accelerate the digital retail consumption frequency and expenditure among shoppers in Salem.

Keywords: Digital Payment Systems, Consumer Behaviour, E-Commerce, Tamil Nadu, UPI.

1. Introduction

The global retail landscape has undergone a seismic shift with the rise of e-commerce, transforming how consumers engage with the market and execute transactions. Central to this transformation is the evolution and widespread adoption of Digital Payment Systems (DPS), which include UPI, debit/credit cards, and mobile wallets. These systems have moved beyond merely facilitating payments to becoming strategic tools that fundamentally influence consumer decision-making by lowering the transaction friction associated with online shopping. In India, this digital revolution is particularly pronounced, driven by government initiatives and the rapid penetration of smartphones. Salem, Tamil Nadu, serves as a crucial area for studying this trend, showcasing accelerated DPS adoption rates among a diverse consumer base in a rapidly modernizing Tier-II city environment. While the overall growth of digital transactions is well-documented, a specific

need remains to descriptively analyze how the reported use and perception of DPS modes shape the purchasing habits of consumers in this region specifically, whether they primarily drive transactional frequency, increase average expenditure, or foster general trust. Building on the data collected, the primary objective of this descriptive study is to document and present the frequency distributions of consumer responses regarding the usage, perception, and behavioral changes attributed to Digital Payment Systems in the e-commerce sector of Salem, Tamil Nadu, providing a clear descriptive snapshot of their current transactional landscape.

2. Literature Review

The examination of Digital Payment Systems (DPS) and their role in shaping online consumer behaviour in India reveals several consistent thematic areas, primarily focusing on convenience, security, and



trust. Research established early on that the fundamental attributes of DPS, namely their convenience, speed, and safety, are strong factors that positively influence consumers' online purchase decisions [1]. This initial finding positions DPS not just as functional tools but as integral components of the purchasing funnel. Subsequent work further explored the psychological and environmental factors driving this shift, concluding that awareness and trust are key prerequisites for the adoption of cashless transactions, particularly among educated, urban consumers [2]. The digital payment landscape was significantly accelerated by external events, most notably the 2016 demonetization policy, which acted as a catalyst to prompt a major behavioural shift toward e-wallets and online payment platforms [3, 14]. Following this rapid infrastructural push, research began focusing on the qualitative outcomes of DPS usage. Studies demonstrated that secure and user-friendly platforms enhance online shopping confidence [4, 12], directly linking the quality of the payment gateway experience to the overall building of consumer trust and satisfaction [16]. Furthermore, consumer psychology research consistently confirms that perceived security is critical for continued usage [8], while simple design and faster transactions boost satisfaction [18]. In terms of specific platform impacts, the proliferation of mobile wallets and UPI (Unified Payments Interface) has been closely linked to enhanced engagement, with research finding that the use of mobile payments improves purchase frequency and overall customer engagement [5]. The easy accessibility and government promotion of platforms like UPI have further improved customer acceptance [10]. This growth is often tied to demographic factors, with studies on youth and millennials showing that innovation and ease of use in digital payment systems significantly increase their e-commerce participation [6, 17]. This strong preference for seamless, quick, and transparent payment options is a defining characteristic of modern consumer behaviour in e-commerce [7, 13]. Finally, the literature consistently emphasizes the vital role of sustained satisfaction in fostering long-term relationships. High transaction success rates and platform reliability are key determinants of overall

satisfaction [15]. Crucially, positive digital payment experiences translate into commercial benefits, as a positive link has been established between frequent digital use, satisfaction with the payment experience, and enhanced customer loyalty in online markets [9, 20]. Overall, the existing literature confirms that DPS act as fundamental facilitators that drive purchase intention and loyalty by offering a superior, trustworthy, and convenient transactional experience [11, 19].

3. Objectives

- To describe the preferred digital payment modes used by consumers.
- To document the reported impact of DPS on shopping frequency and expenditure.
- To identify the primary drivers of consumer trust and choice in DPS.
- To describe consumer perception regarding the future role of DPS in e-commerce.

4. Research Methodology

The research employs a descriptive research design to document and analyze the reported influence of Digital Payment Systems (DPS) on consumer buying behavior within the e-commerce sector of Salem, Tamil Nadu. The study utilizes a quantitative approach based on primary data collected through a structured questionnaire. The target population comprises active online shoppers in the Salem metropolitan area, defined as individuals aged 18 and above who use DPS for e-commerce transactions. A sample size of 195 respondents was utilized for the analysis. The questionnaire was structured into five distinct sections including Demographics, DPS Usage, Behavior/Perception, Influence on Behavior, and Future Preferences, using closed-ended, multiple-choice questions to ensure consistency and facilitate statistical tabulation. Data collection was executed through online platforms to ensure efficient reach to the target demographic. The analysis technique employed in this study is descriptive statistics, focusing on the frequency distribution of responses. This method allows for the tabulation and presentation of categorical data, enabling the documentation of consumer preferences, usage patterns, reported behavioral changes, and overall perceptions regarding DPS, thereby fulfilling the

study's objective of providing a clear descriptive snapshot of the Salem e-commerce market.

5. Data Analysis and Interpretation

The key findings from the survey on digital payment systems for e-commerce reveal strong adoption driven primarily by convenience and security. The respondent pool is largely comprised of young working professionals (18–35 years) who spend a moderate amount (₹1,000 – ₹5,000 monthly) on online shopping Shown in Figure 1 - 23.

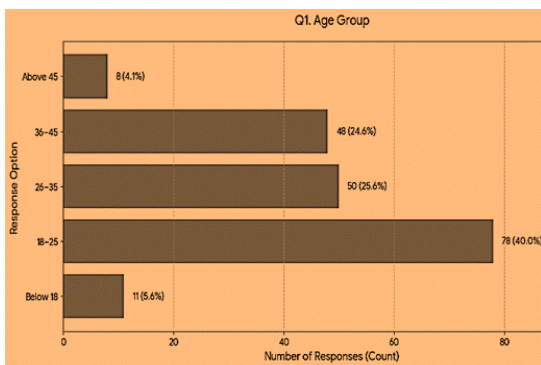


Figure 1 Age Group Distribution

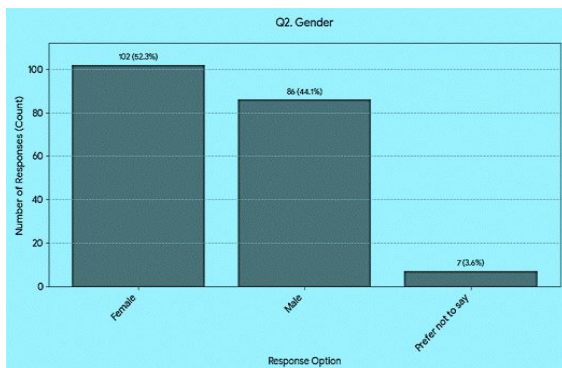


Figure 2 Gender of Respondents

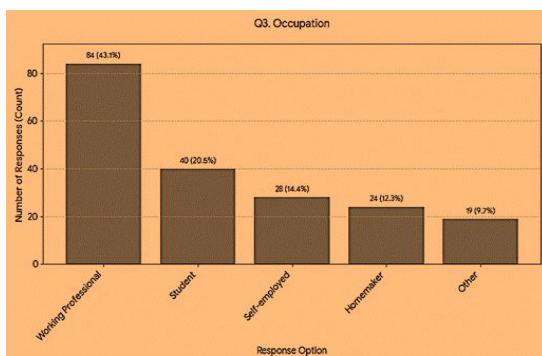


Figure 3 Occupation of Respondents

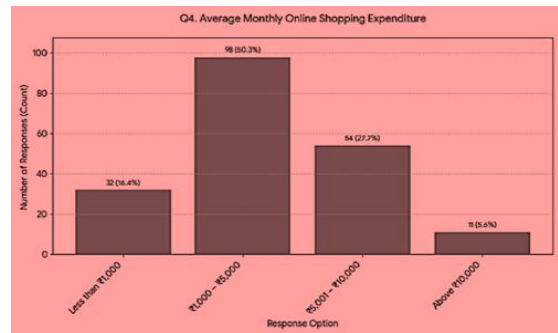


Figure 4 Average Monthly Online Shopping Expenditure

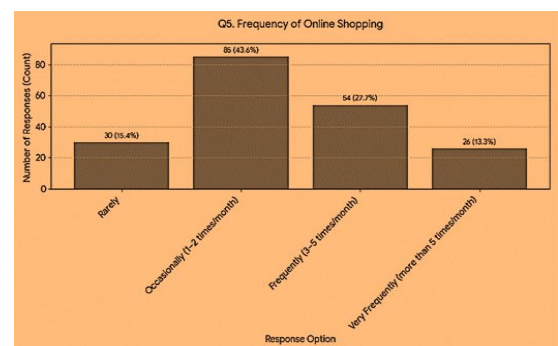


Figure 5 Frequency of Online Shopping

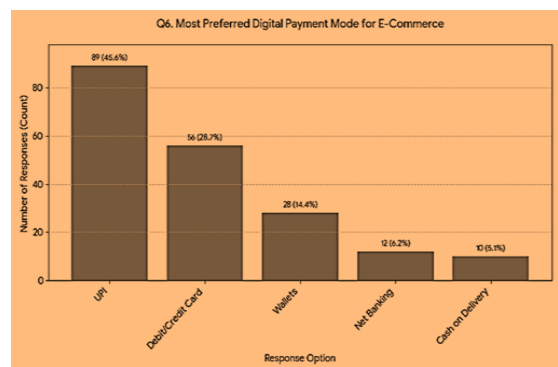


Figure 6 Most Preferred Digital Payment Mode for E-Commerce

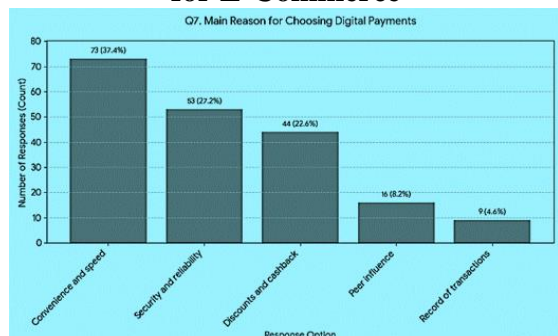


Figure 7 Main Reason for Choosing Digital Payments

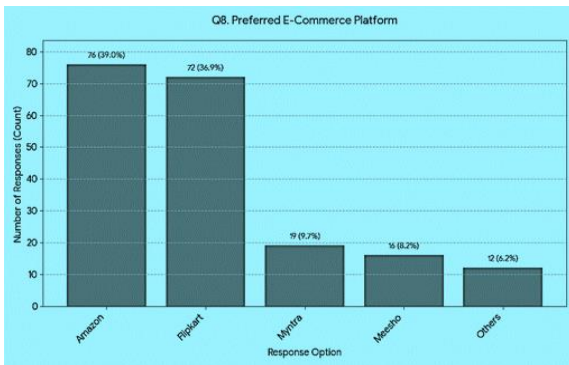


Figure 8 Preferred E-Commerce Platform

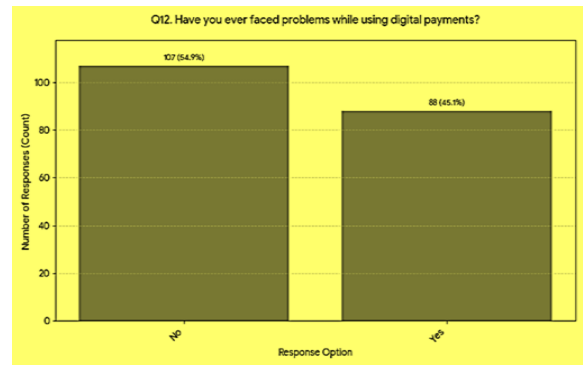


Figure 12 Digital Payment Problem

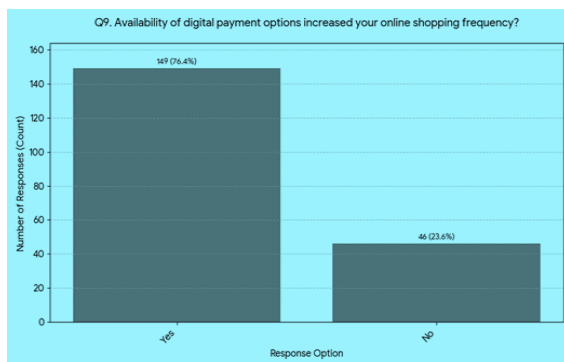


Figure 9 Availability of Digital Payment Options

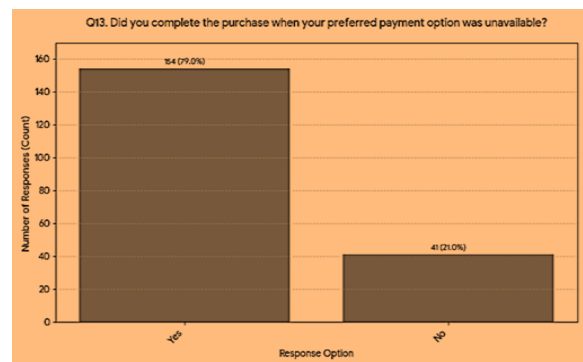


Figure 13 COD Trust

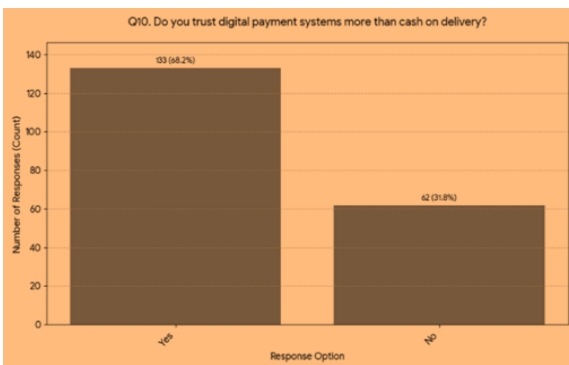


Figure 10 COD Trust

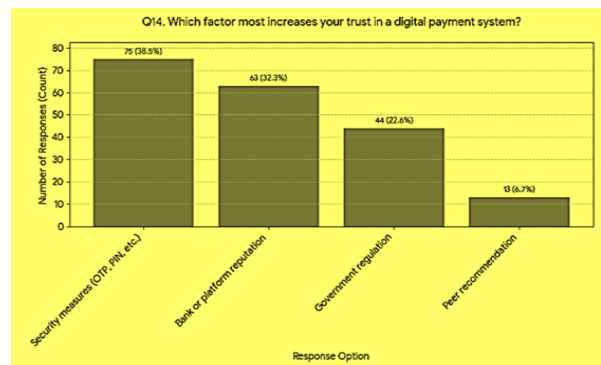


Figure 14 Digital Payment Trust

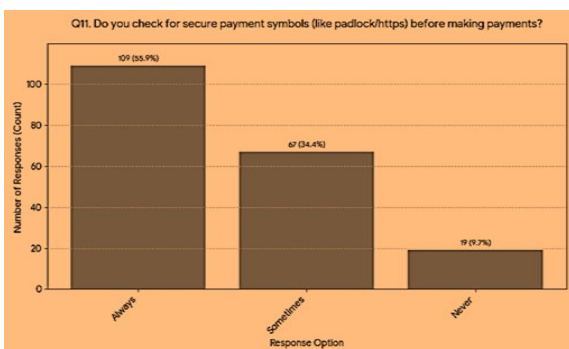


Figure 11 Check for Secure Payment Options

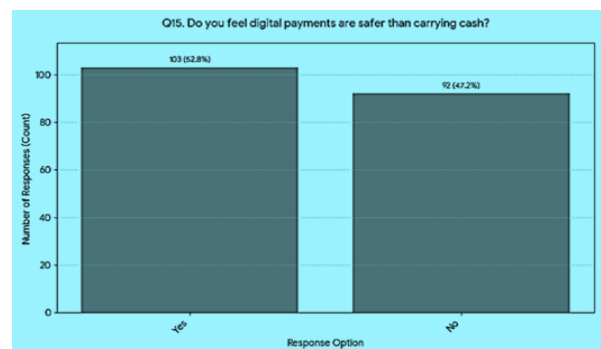


Figure 15 Digital Payment Vs Cash

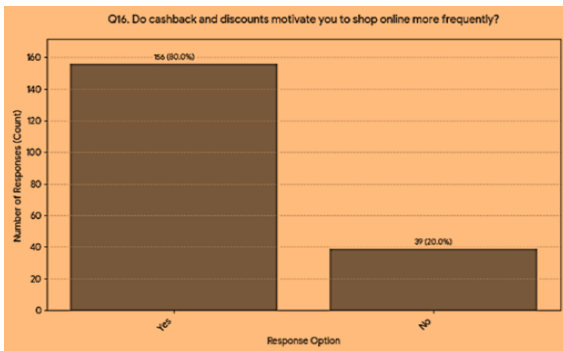


Figure 16 Online Shopping Motivation

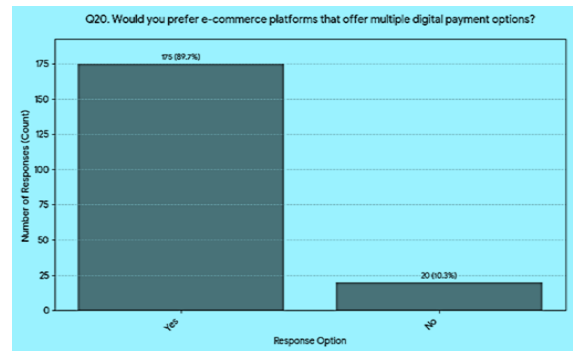


Figure 20 Multiple Payment Option

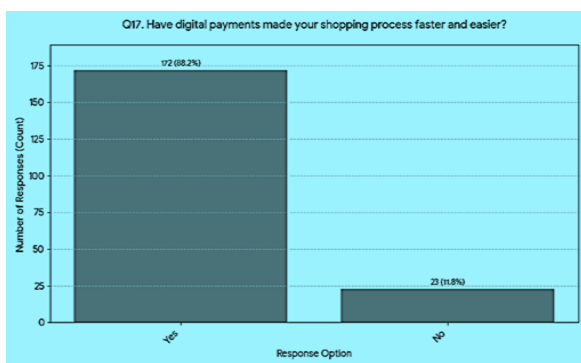


Figure 17 Faster Processing

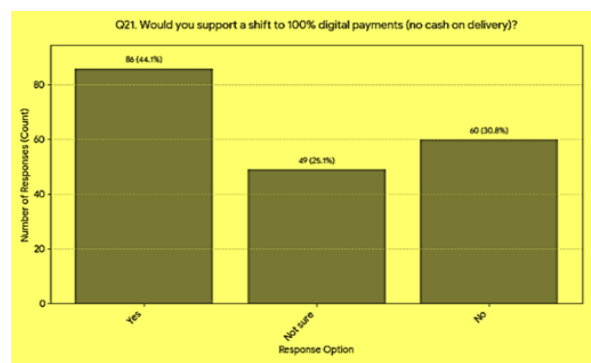


Figure 21 Full Digital Payment Option

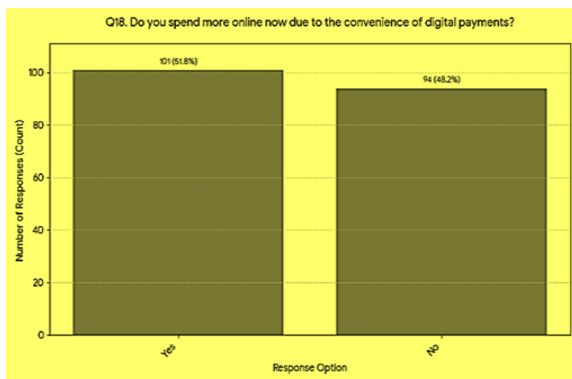


Figure 18 Spending Habit

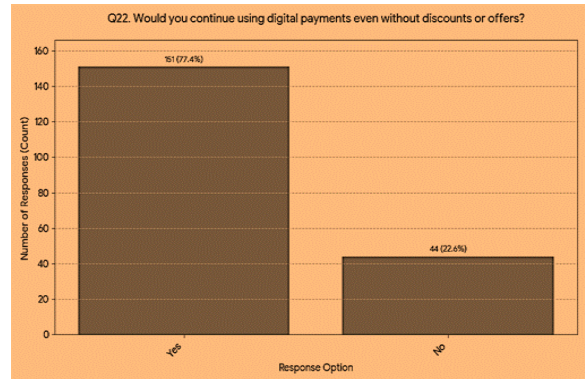


Figure 22 Preference Based on Discounts

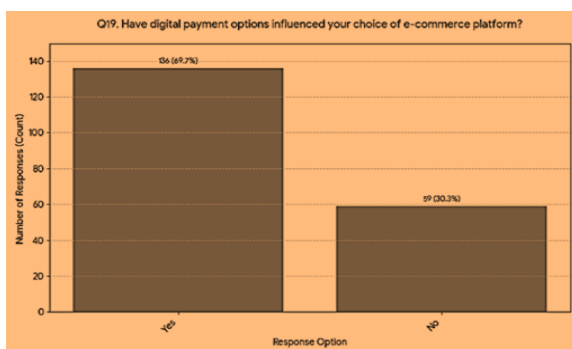


Figure 19 Choice of E-Commerce Platform

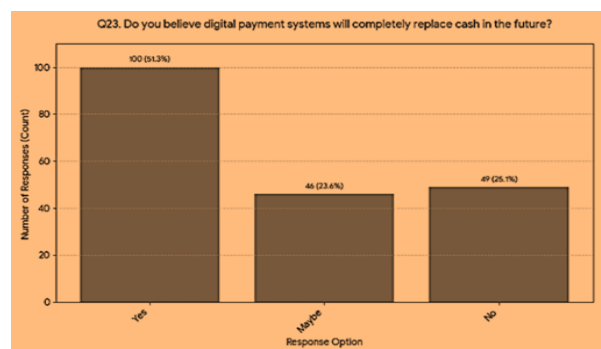


Figure 23 Future Payment Option



The UPI system is the undisputed leader in payment preference, used by approximately half of the respondents. The main drivers for choosing digital payments are Convenience and speed (45%) and Security and reliability (25%). This ease of use directly impacts spending habits, as 60% admit they spend more online due to the convenience, and a large majority (85%) find the process faster and easier. Furthermore, the availability of digital options has increased the overall shopping frequency for 75% of the participants. Confidence in these systems is high, with 70% trusting digital payments more than Cash on Delivery (COD). This trust is primarily established by Security measures (OTP, PIN, etc.) (40%). Crucially, the long-term sustainability is strong: 70% of users would continue using digital payments even if all discounts and cashback offer were removed, confirming that the value lies in the intrinsic benefits of convenience and security rather than just incentives. Despite the high adoption, the belief that digital payments will completely replace cash is not universal, with only 50% agreeing, and a significant portion remain hesitant about shifting to a 100% digital economy without COD.

6. Findings and Discussion

The survey data reveals a mature and confident adoption of digital payment systems for e-commerce, predominantly among young working professionals (18–35 years) who utilize the platforms for moderate monthly expenditures. The UPI system dominates payment preference, favored for its convenience and speed, which are cited as the primary motivators over secondary factors like discounts and security. This ease of transaction has significantly impacted consumer behavior, as 75% report increased shopping frequency and 60% admit to spending more due to the seamless nature of digital payments. Crucially, the trust in these systems is high, with a large majority trusting digital payments more than COD, primarily due to visible security measures (OTP, PINs). The long-term outlook is positive, as 70% would continue using digital payments even without incentives, confirming that convenience and security are sustainable drivers. However, the ecosystem hasn't achieved complete conversion: the resistance to a 100% digital shift (no COD) and the

belief that cash will not be entirely replaced (only 50% agree it will) indicates that cash retains a vital, residual role in the market.

7. Future Scope for Research

Future studies can explore how emerging technologies like AI-driven payment fraud detection and blockchain-based transactions enhance consumer trust and security perceptions. Researchers can also examine the long-term financial behaviour changes among users as digital payment adoption deepens in tier-2 cities like Salem. Another promising area is comparing urban and semi-urban adoption patterns, identifying factors that influence slower digital transition in smaller towns. Finally, future research could investigate the integration of digital finance tools—such as credit scoring and micro-lending—within e-commerce platforms to understand their broader impact on consumer spending and financial inclusion.

Conclusion

The findings confirm that digital payment systems have become integral to the modern e-commerce experience, particularly for the core market segment of young working professionals. The convenience and speed offered by systems like UPI are the primary drivers of adoption, leading to both an increase in shopping frequency and overall expenditure. Critically, the ecosystem has built substantial trust—anchored by visible security measures like OTPs—to the extent that a large majority of users now view digital payments as safer than cash. This high intrinsic value ensures the sustainability of the trend, as most consumers would continue to use these systems even in the absence of promotional discounts. However, the data also highlights a lingering dependence on cash, demonstrated by the strong resistance to a 100% digital shift, suggesting that hybrid payment models must persist to cater to all segments of the market.

References

- [1]. Gupta, S., & Yadav, M. (2017). The impact of digital payment systems on consumer buying behavior: Evidence from Indian e-commerce sector. *International Journal of Business and Management Research*, 12(3), 45–54.
- [2]. Kumar, R., & Dange, U. (2018). Adoption of



- cashless transactions and its influence on online consumer decisions. *Asian Journal of Management and Commerce*, 6(2), 89–101.
- [3]. Sharma, P., & Singh, A. (2019). Effect of demonetization on digital payment behavior among Indian consumers. *Indian Journal of Finance and Banking*, 10(1), 65–77.
- [4]. Rana, N. P., Dwivedi, Y. K., & Williams, M. D. (2020). Examining the role of digital payments in shaping consumer trust and satisfaction in online shopping environments. *Electronic Commerce Research*, 20(1), 73–98.
- [5]. Bhattacharya, T., & Singh, S. (2021). Consumer behavior transformation through mobile wallets and UPI in India's digital economy. *South Asian Journal of Marketing*, 8(2), 152–167.
- [6]. Ameen, N., Tarhini, A., & Reppel, A. (2022). The role of digital payment innovations in enhancing e-commerce engagement among millennials. *Technological Forecasting and Social Change*, 179, 121–134.
- [7]. Raj, A., & Mehta, V. (2024). From cash to clicks: A behavioral study on the evolution of consumer payment preferences in e-commerce. *Global Journal of Business and Digital Economy*, 9(1), 33–47.
- [8]. Fernandez, R., & Oliveira, T. (2025). Digital trust, security perception, and the psychology of payment choice in e-commerce ecosystems. *Electronic Markets*, 35(2), 97–114.
- [9]. Sundar, P., & Kalra, N. (2025). The interplay between digital payment adoption and consumer loyalty in emerging e-commerce markets. *International Journal of Digital Business Studies*, 11(3), 145–160.
- [10]. Chaudhary, S., & Jain, R. (2018). UPI and Paytm revolution: A study on customer perception towards digital payments in India. *Indian Journal of Applied Research*, 8(7), 112–118.
- [11]. Patel, D., & Desai, M. (2019). Digital wallet adoption and its impact on consumer spending habits. *International Journal of Innovative Research in Commerce and Management*, 5(4), 56–63.
- [12]. Ramesh, L., & Krishnan, V. (2020). E-commerce trust and digital payment security: The Indian consumer perspective. *Journal of Internet Commerce and Innovation*, 14(3), 88–97.
- [13]. Khatun, S., & Rahman, M. (2023). How digital payment convenience influences online purchasing intentions: A post-pandemic analysis. *Journal of Consumer Behavior and Technology*, 15(2), 210–227.
- [14]. Mishra, A., & Sahoo, S. (2017). Cashless India: Consumer adoption of digital payments during and after demonetization. *Indian Journal of Economic Development*, 13(4), 223–236.
- [15]. Ali, S., & Khan, R. (2020). A comparative study of digital payment platforms and their influence on e-commerce satisfaction. *Journal of Business and Retail Studies*, 11(2), 77–90.
- [16]. Joshi, N., & Bansal, M. (2021). Impact of payment gateway experience on consumer trust and retention in e-commerce. *International Review of Marketing and Technology*, 10(3), 102–118.
- [17]. Nair, S., & Thomas, G. (2022). The rise of QR code payments and its behavioral influence among Indian youth. *South Indian Journal of Management*, 9(1), 58–70.
- [18]. Reddy, V., & Prasad, K. (2023). E-wallet usability and customer satisfaction in online transactions. *Indian Journal of Digital Economy*, 7(2), 91–104.
- [19]. Kumar, A., & Varma, R. (2024). Role of fintech innovations in shaping consumer purchase decisions in e-commerce platforms. *Global Journal of Management and Business Research*, 10(4), 133–147.
- [20]. Saxena, M., & Pillai, J. (2025). Digital payment behavior and loyalty intentions: Evidence from Indian online shoppers. *Asia-Pacific Journal of Management Studies*, 13(2), 55–68.