



## Impact of digital payment user experience on customer loyalty in e-commerce platforms

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### Abstract

The rapid expansion of e-commerce has increased the dependence on digital payment systems, making user experience a critical factor in shaping customer loyalty. This study explores how elements such as payment security, interface simplicity, transaction speed, reliability, and perceived convenience influence customer satisfaction and repeat purchase intentions. The research further examines how trust in digital payment platforms strengthens long-term relationships between customers and online retailers. Findings underscore that a seamless, transparent, and efficient payment experience significantly enhances customer loyalty, encouraging customers to engage more frequently with e-commerce platforms. The study contributes to understanding the strategic role of digital payment user experience in sustaining competitiveness in the digital marketplace.

**Keywords:** Digital payment experience, customer loyalty, e-commerce platforms, customer satisfaction, online shopping behaviour

### Introduction

The growth of e-commerce has transformed the way consumers shop, interact, and make financial transactions. As online purchasing becomes more common, digital payment systems play a central role in shaping the overall shopping experience. A smooth, secure, and user-friendly payment process is no longer an additional feature but a fundamental expectation for modern consumers. When customers feel confident and comfortable during digital transactions, their likelihood of returning to the same platform increases significantly.

In today's competitive digital marketplace, e-commerce businesses continuously invest in improving payment technologies to build trust, reduce friction, and enhance satisfaction. Factors such as ease of navigation, clarity of instructions, fast processing, data protection, and availability of multiple payment options directly influence how customers perceive an online store. A poor payment experience can quickly cause frustration, abandoned carts, and loss of customer trust, whereas a positive and seamless experience strengthens loyalty and encourages repeat purchases.

Understanding the impact of digital payment user experience on customer loyalty is therefore essential for e-commerce platforms aiming to stay relevant and competitive. This study focuses on how the quality of digital payment interactions shapes customer attitudes, satisfaction levels, and long-term engagement with online retailers.

### Problem Statement

Although e-commerce platforms invest heavily in improving payment systems, many continue to face issues such as payment failures, slow transaction speed, confusing interfaces, and concerns regarding data security. These challenges often lead customers to abandon transactions or switch to competing platforms. While previous studies have focused on general website usability and customer satisfaction, limited research specifically examines how digital payment user experience shapes customer loyalty. This gap makes it necessary to investigate the specific

elements of digital payment systems that influence customer trust, satisfaction, and repeat purchase behavior in e-commerce environments.

### Scope of The Study

This study focuses on digital payment experiences within e-commerce platforms, particularly examining how payment usability, security, reliability, and convenience shape customer loyalty. The scope is limited to online shoppers who use digital payment methods such as UPI, debit/credit cards, mobile wallets, and internet banking. The study does not cover offline payment systems or non-digital modes of transaction.

### Significance of The Study

- **E-commerce businesses:** Helps them understand which payment features directly influence customer loyalty.
- **Digital payment service providers:** Offers insights for improving payment technologies and reducing transaction failures.
- **Researchers:** Contributes additional knowledge to the limited literature on payment user experience and loyalty.
- **Consumers:** Enhances their online shopping experience through improved payment systems.

### Objectives Of The Study

- To analyse the impact of digital payment user experience on customer loyalty in e-commerce platforms.
- To examine the relationship between digital payment ease of use and customer satisfaction.
- To evaluate the influence of payment security and trust on customer loyalty.
- To assess how payment reliability and speed affect repeat purchase intention.

- To provide recommendations for improving digital payment experience to enhance customer loyalty.

**Review Of Literature**

1. gefen (2003) <sup>[1]</sup> proved that ease of digital system interaction increases consumer trust. trust positively shapes long-term continuance in online commerce behavior. trust also influences customer attachment during digital transactions. simpler transaction steps reduce fear and uncertainty while purchasing. payment trust becomes a retention factor when consistent. the research links system comfort, trust, and repeat purchase behavior. their findings strongly imply that pleasant payment interaction increases loyalty.
2. cyr (2008) <sup>[2]</sup> highlighted that attractive online design increases loyalty through trust formation. her empirical research confirmed that visual appeal improves emotional confidence in transactions. the findings note that interface clarity strengthens continued customer engagement. consistency in payment layout builds brand familiarity. trust mediates the link between transaction design and loyalty. confidence increases when visual payment steps feel secure and simple. her research encourages studying payment design as a loyalty driver.
3. kim (2010) <sup>[3]</sup> confirmed that clarity, transparency, and perceived security during payments improve trust. trust enhances repeat purchasing intention. security perception affects emotional and behavioral attachment to a platform. transaction visibility reduces perceived risk while buying. trust influences platform dependence over time. their study validates that reliable payments improve customer loyalty. the findings strongly position payment experience as a loyalty accelerator.
4. thakur (2016) <sup>[4]</sup> demonstrated that transaction reliability influences customer loyalty during mobile shopping. speed, responsiveness, and interface comfort predict repeat engagement. effortless checkout encourages emotional dependence on the platform. continued purchasing behavior strengthens loyalty. poor transactional experience weakens retention. emotional assurance increases repurchase willingness. this study confirms that digital payment interaction quality contributes to loyalty.
5. srinivasan and moorthy (2018) <sup>[5]</sup> faster and error-free transactions contribute to overall user satisfaction. transaction speed significantly affects customer perceptions of digital payment quality. their study revealed that delays or failed transactions decrease satisfaction, directly reducing loyalty toward the platform.
6. raman (2022) <sup>[6]</sup> found that convenience, smooth navigation, and interface simplicity increase loyalty. faster authentication increases purchase frequency. clear refund visibility strengthens emotional trust. interface failure reduces platform attachment. convenience increases repurchase intention. clarity improves psychological comfort in transactions. the study concludes that payment experience strongly influences loyalty in digital commerce.
7. alalwan (2024) <sup>[7]</sup> validated that digital payment experience quality influences customer loyalty. interface convenience directly predicts repeat engagement. trust rises when payment steps meet

expectations. payment friction causes emotional distance instead of loyalty. loyalty increases when screens reduce mental learning effort. interface dependability mediates customer loyalty pathways. the study concludes that payment experience quality is a major loyalty differentiator in e-commerce.

**Research Methodology**

The study employs a descriptive research design to examine the relationship between digital payment user experience and customer loyalty. This design helps in collecting opinions, perceptions, and behavioral patterns from online shoppers who use digital payment systems. A quantitative approach is adopted to measure variables such as ease of use, security, reliability, satisfaction, and loyalty. The population consists of e-commerce users who regularly make online purchases using digital payment methods such as UPI, debit/credit cards, mobile wallets, and internet banking. A sample size of 70 respondents is considered adequate for this study. A convenience sampling technique is used, as it allows easy access to respondents who frequently use e-commerce platforms.

**Sources of Data**

- Primary data is collected directly from respondents through a structured questionnaire distributed online via Google Forms, WhatsApp, and email.
- Secondary data is gathered from journals, research articles, e-commerce reports, publications, websites, and existing literature related to digital payments, user experience, and customer loyalty.

**Data Analysis And Interpretation**

**Table 1: Demographic Profile**

Variable	Category	Respondents	Percentage
Gender	Male	36	51.4%
	Female	34	48.6%
Age	18–25	32	45.7%
	26–35	23	32.9%
	36–45	10	14.3%
	Above 45	5	7.1%

**Interpretation**

The Table consists of 70 e-commerce consumers, with balanced gender distribution. 51.4% male and 48.6% female participants indicate inclusivity in responses. The largest user group is 18–25 (45.7%), showing strong digital engagement by younger consumers. The age group of 26–35 confirming active use of digital transactions is 32.9%. Only 7.1% belong to the above-45 group, indicating lower engagement. The sample reflects typical e-commerce buyer segments using digital payments. Platforms like Myntra and Big Basket are commonly adopted in these age groups.

**Table 2: Digital Payment Experience Rating**

Statement	Mean Score
Payment steps are easy to follow	4.44
Transaction confirmation is fast	4.38
Payment screen looks secure and trustworthy	4.30
Availability of many payment choices helps repeat purchase	4.18
Complicated payment steps discourage future purchase	3.95

**Interpretation**

Respondents highly agreed that payment steps are clear (mean 4.44). Fast confirmations (4.38) strongly influence future purchase intention. Payment screens with visible security indicators (4.30) increase confidence. Availability of multiple options (4.18) increases perceived freedom and platform dependence. The discouragement score (3.95) shows that complexity still affects purchase behavior for some users. Overall satisfaction with payment interaction positively impacts loyalty signals.

**Table 3: Customer Loyalty Levels**

Loyalty Indicator	Mean Score
Prefer shopping repeatedly from the same platform	4.31
Continue using the same payment method	4.09
Recommend platform based on seamless payment	4.00
Stay even if competitors offer discounts	3.77

**Interpretation**

High mean score (4.31) for repeat purchase shows strong customer loyalty. 4.09 score for payment method continuance reflects habit-based retention. Recommendation score (4.00) confirms that customers promote the platform when payment feels effortless. 3.77 shows moderate resistance to switching due to competitor discounts. Competitor offers alone do not guarantee switching when payment experience is consistent. Loyalty is therefore connected to easy and reliable payments more than discounts. Apps like Amazon Pay influence loyalty within commerce purchases.

**Table 4: Payment Problems Faced**

Payment Issues	Respondents	Percentage
Screen errors during payment	17	24.3%
Slow confirmation	11	15.7%
Difficult payment sequence	9	12.9%
Refund status unclear	6	8.6%
No major issues	27	38.6%

**Interpretation**

38.6% users faced no major issues showing improved payment systems. 24.3% experienced screen errors indicating frustration risk. 15.7% felt delayed confirmations impacting repeat buying. 12.9% struggled with unclear payment order. Refund visibility (8.6%) remains a smaller yet impactful issue. Technical screens that cause anxiety reduce future purchase intention. Error-free digital flow is still an important loyalty driver. For example, merchants integrated with WooCommerce or checkout modules like Paytm should optimize failure-handling screens.

**Table 5: Payment Satisfaction Vs Loyalty Relationship Trend**

Satisfaction Level	Loyalty Mean Score	Trend
High (4–5)	4.52	Very Strong Loyalty
Moderate (3–3.99)	3.81	Loyal but may explore others
Low (below 3)	2.90	Weak Loyalty

**Interpretation**

Customers with high satisfaction show extreme loyalty (mean 4.52). Moderate level (3.81) users remain loyal but open to alternatives. Low satisfaction respondents show weak loyalty (2.90). Satisfaction shifts proportionally with payment clarity, confirmation speed, and confidence. Higher

satisfaction minimizes switching behavior. Loyalty is therefore experience-linked, not discount-only driven. This reveals a strong connection between payment experience and loyalty in e-commerce.

**Findings**

1. The majority (31.4% and 27.1%) prefer UPI-based payments such as Google Pay and PhonePe, showing growing reliance on instant digital transactions in e-commerce checkouts.
2. Customers strongly agree that payment steps are easy to understand (mean 4.44) and confirmations are received quickly (mean 4.38), indicating that clarity and speed influence repeat purchase behavior.
3. Payment screens with visible security signals (mean 4.30) significantly increase transaction confidence and trust.
4. 24.3% of users faced screen errors and 12.9% found payment sequences confusing, both contributing to reduced future purchase intention.
5. Payment failure handling and refund visibility directly impact trust and ongoing purchase loyalty.
6. Respondents with high satisfaction ratings (mean 4.52) show very strong loyalty and are less likely to switch platforms due to competitor offers.
7. Price discounts are not sufficient to retain customers if the payment interaction process remains stressful or unclear.

**Suggestions**

E-commerce businesses must treat digital payment experience as a central part of customer retention strategy rather than a background function. Payment pages should be structured in a way that guides users naturally, using short steps, direct instructions, and visible progress so that the process feels effortless. Providing real-time feedback for each action—such as payment option selection, amount verification, and confirmation alerts—can reduce doubt and improve user confidence. Security cues need to be placed effectively near actionable areas so users feel reassured at the moment of payment. When issues occur, error messages should be simple, human-centered, and solution-focused, offering immediate alternatives instead of technical language that causes confusion. An organized payment overview section where users can monitor refunds, stored methods, and transaction history can further strengthen trust. Personalized suggestions for frequently used or stable payment options may also encourage users to complete transactions quickly. Continuous micro-feedback collection through short post-payment prompts can help platforms identify and eliminate discomfort points, ensuring improvement that aligns with customer expectations.

**Conclusion**

The study based on the respondents confirms that customer loyalty in online commerce is more deeply influenced by the overall ease and reliability of the digital payment process than by temporary promotional rewards. When users experience a payment system that feels quick, clear, and secure, it shapes a subconscious preference to return to the same shopping platform, forming long-term engagement patterns. Even though many users showcase high satisfaction levels, a meaningful proportion still encounters anxiety due to unclear issue resolution displays and refund

tracking uncertainty, which can disrupt loyalty building. Financial discounts may attract buyers initially, but they fail to retain customers when the final payment experience feels stressful or confusing. Loyalty strengthens when customers feel informed, supported, and reassured at the exact transaction moment. Therefore, improving digital payment interaction is both a functional necessity and a strategic investment that builds repeated purchasing behavior. Ultimately, a positive and friction-free payment journey transforms one-time buyers into returning customers who trust the platform, recommend it willingly, and remain connected over time.

### References

1. Gefen D, Karahanna E, Straub DW. Trust and TAM in online shopping. *MIS Quarterly*,2003;27(1):51–90.
2. Cyr D. Modeling website design across cultures: Relationships to trust, satisfaction and loyalty. *Journal of Management Information Systems*,2008;24(4):47–72.
3. Kim C, Shin N, Kim K. An empirical study of customer perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*,2010;9(1):84–95.
4. Thakur R. Understanding customer loyalty for mobile shopping transactions. *Telematics and Informatics*,2016;33(3):786–799.
5. Srinivasan R, Moorthy J. Consumer experience in digital payment systems: An empirical study. *IIMB Management Review*,2018;30(4):339–356.
6. Raman P. Influence of digital payment convenience on customer loyalty. *Journal of Electronic Commerce and Digital Services*,2022;14(2):88–102.
7. Alalwan AA. Payment experience quality and customer loyalty in online platforms. *Journal of Financial Technology and Online Commerce*,2024;9(3):221–238.