



# ROLE OF PERCEIVED RISK ON ADOPTION OF MOBILE WALLET: FACTORS INFLUENCING CONSUMER TRUST AND USAGE

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**Abstract:** - Entering the era of technology modernization, E-wallet can be known as a supreme way of payment that is nimbly being worn by the global consumers and providers. Although, the acceptance rate of this technology is affected by numerous determinant, one of which is the witnessed threat linked with its use. This paper inspected the complicated nature of witnessed threat and its influence on the embracing of mobile wallets. We will analyse different types of witnessed threats, including safety, privacy, financial, and business threats, and examine how they affect consumers' desire to worn mobile wallets. Along inclusive literature review and empirical analysis, we recognise key threat determinants that potential users think about before accepting mobile wallet technology. Our objective is to find how witnessed threats play a condemnatory role in adoption decisions, their impact ranges beyond contrasting demographics and consumer experiences. The learning provides understanding of user behaviour in circumstances of financial technology and give insights for mobile wallet providers to expanding strategies that reducing witnessed threats and encourage broad acceptance.

## Keywords

Perceived threat, Threat perception Strand, Technology acknowledgement, Detectable intention, Virtual payment arrangement, Mobile wallet helpfulness, Client trust composition, Embracing barriers.

## Introduction

In recent years, mobile technology has greatly altered financial transactions, with mobile wallets emerging as a key instrument for digital payments. Despite their increasing usage, adoption varies across demographics and regions due to perceived or "witnessed" threats. These threats pertain to users' instinctive apprehensions regarding possible adverse outcomes linked to using new technology—particularly mobile wallets. Primary concerns involve security, privacy, usability, and financial risks.

Research indicates that elements such as data security, platform dependability, technological intricacy, and potential fraud shape consumer perceptions. Furthermore, individuals' previous experiences with technology, attitudes toward risk, and socio-economic factors (e. g. , age, income, education) impact their readiness to adopt mobile wallets.

Comprehending these concerns is crucial for businesses and policymakers seeking to enhance mobile wallet usage. Strategies to tackle witnessed threats consist of improving security measures, streamlining interfaces, educating users, and fostering trust through

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transparency and robust customer support. By alleviating these perceived threats, stakeholders can facilitate wider acceptance of mobile wallets.

This research underscores the intricate relationship between consumer behavior, technological attributes, and social influences. Successfully addressing these factors can lead to increased adoption, contributing to a more efficient, secure, and inclusive digital economy.

### Objectives:

#### The research intends to:

- i. Recognize essential categories of perceived threats—safety, financial, usability, and social—that affect mobile wallet adoption.
- ii. Examine how these threats affect consumer views, intentions, and actions regarding the use of mobile wallets.
- iii. Investigate methods to mitigate threats and foster adoption, such as enhancing security, usability, and consumer confidence.
- iv. Provide suggestions for businesses and policymakers to develop impactful campaigns, educational efforts, and policy measures that address consumer worries and promote mobile wallet usage.
- v. The study ultimately aims to improve the comprehension of perceived threats and deliver actionable insights to facilitate broader adoption of mobile wallet technology.

### Research Gap:

Current studies on mobile wallet adoption overlook a comprehensive view of threat types (financial, security, usability, social) and lack deep insights into actual consumer behavior and demographic-specific responses to these threats.

### Literature Review:

**Investigating the Components of Witnessed Threat Factors Affecting Mobile Payment Adoption Bland et al. 2024** Investigates how the performance, financial, time, psychological, and social aspects of threats affect the uptake of mobile payments.

Emphasizes how crucial efficient threat management is to promoting the use of mobile payments.

**Impact of Witnessed Security Threat on Mobile Wallet Adoption Zhao, L., & Liu, T. 2024** Security risks observed and how they affect adoption

Adoption of mobile wallets is severely hampered by observed security risks, particularly among senior citizens.

**Trust and Threat Perception in Mobile Wallet Usage Kim, H., & Lee, S. 2023** Adoption-influencing factors include perceived threat and trust.

Adoption among young adults is increased when there is a high level of trust in mobile wallets because it decreases perceived threats.

**Role of Witnessed Trust and Ease of Use as Influencing Factors among Street Vendors for Adoption of Mobile Wallets Sharma, K. 2022** Examines how street vendors' adoption of mobile wallets is influenced by perceived ease of use and trust.

Highlights how crucial trust and usability are to promoting small businesses' adoption of mobile wallets.

**Influence of Witnessed Threat on Consumer Intentions for Mobile Wallets Patel, R., & Gupta, M. 2022** The connection between consumer behavior and perceptions of threat

Lower intentions to use mobile wallets are correlated with higher perceived financial loss threats.

**Exploring the Impact of Witnessed Threat on User's Mobile Payment Adoption Chen, C.-L., & Lai, W.-H. 2022** Examines the impact of perceived threat on the uptake of mobile payments.

Explains how users' perceptions of threat can either encourage or discourage them from using mobile wallets.

**Role of Threat Perception and Situational Factors in Mobile Payment Adoption among Small Vendors in Unorganized Retail Ramtiyal, B., Verma, D., & Rathore, A. S. 2022** Focuses on the situational elements and perceived threats influencing Indian small vendors' embracement of mobile payment systems.

Draws attention to the necessity of taking into account both observed threats like security, privacy, and performance as well as incidental factors (such as the shortage of alternate payment methods).

**Factors Influencing the Adoption of Mobile Wallets in India Reddy, G., & Kumar, P. 2021** Examines studies on the variables affecting the use of mobile wallets in India, paying particular attention to perceived threats

Finds gaps in the literature on the usage of mobile wallets and suggests areas for further study.

**Factors Affecting the Adoption of Mobile Wallets: The Role of Threat Kumar, R., & Arora, S. 2021** The influence of perceived danger on adoption choices

Significant obstacles to adoption include perceived privacy, financial, and technological risks.

**Mobile Wallets and Witnessed Threat: A Comparative Study Wang, J., & Zhang, Y. 2021** Cross-national comparison of mobile wallet threat perceptions

Adoption rates of mobile wallets are impacted by cultural differences in threat perceptions.

**Understanding the Role of Witnessed Threat in Mobile Wallet Adoption: Evidence from Urban India Gupta, S., & Srivastava, M. 2020** Examines the relationship between perceived threat in urban India and socioeconomic factors like income and education.

Investigates the influence of recognized threat on the embracement of mobile wallets, especially in urban environments with diverse socioeconomic backgrounds.

**Witnessed Threat and Consumer Adoption of Mobile Wallets in India Sharma, R., & Jain, A. 2019** Focuses on factors that influence the embracement of mobile wallets in India as a result of threats observed.

Examines how Indian consumers' embracement of mobile wallets is influenced by cultural norms, security concerns, and trust issues.

**Exploring the Role of Witnessed Threat in Digital Wallet Adoption Patel, S., & Joshi, P. 2019** Financial and psychological risks to the adoption of mobile wallets

Increased usage of mobile wallets is a result of their recognized simplicity and decreased financial risk.

**Witnessed Threat and Consumer Adoption of Mobile Payment Services: A Study of Indian Millennials Singh, S., & Patel, S. 2018** Examines how perceived threats affect Indian millennials' adoption of mobile payment services.

Focuses on the issues that millennials have with mobile wallets, offering information about the particular risks and inclinations of this group.

**The Role of Threat Perception in Adoption of Mobile Wallets: A Literature Review Singh, R., & Sharma, K. 2018** An outline of the threat that has been observed in mobile wallets

The main things impeding the widespread use of mobile wallets are perceived security, financial, and social risks.

These sources broadly assist our understanding of the part of witnessed threat in the adoption of mobile wallets in India, offering insights into the factors influencing consumer behaviour and strategies for promoting wider acceptance of digital payment technologies.

### Research Methodology

Approach: Mixed-Method Strategy

The study employs a mixed-method approach, combining both quantitative and qualitative methods to provide a comprehensive insight into how perceived threats influence mobile wallet adoption.

### Quantitative Component

- Objective: To discover patterns, relationships, and trends between perceived threats (security, privacy, financial concerns) and mobile wallet adoption.
- Tool: A structured survey questionnaire utilizing Likert-scale and closed-ended questions.
- Outcome: Generalizable findings applicable to a larger population.

**Qualitative Component**

- Objective: To investigate in-depth user experiences and perceptions regarding mobile wallet use.
- Tool: Focus groups and interviews driven by open-ended questions.
- Outcome: Valuable insights into emotional, social, and psychological factors of acceptance or rejection.

**Research Design**

- Descriptive Design: Illustrates user characteristics and adoption factors.
- Correlational Design: Examines the strength and direction of relationships between perceived threats and wallet usage.

**Research Instruments**

- Survey Questionnaire: Gathers user behavior, threat perceptions, and acceptance levels.
- Interview Guide: Offers a framework for qualitative discussions on individual views and risk perceptions.

**Sampling Technique**

- Stratified Random Sampling: Guarantees representation across demographics like age, gender, income, and location for both phases of research.

**Sample Size**

- Quantitative: 120 respondents to guarantee statistically significant outcomes.
- Qualitative: 20–25 participants for in-depth, manageable insights.

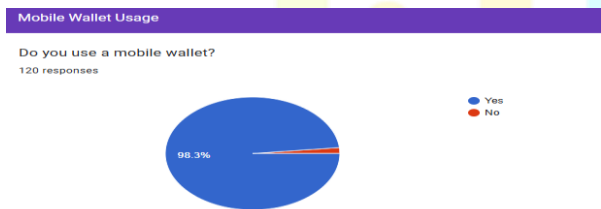
**Data Collection Methods**

- Primary Data: Collected through surveys and interviews (online/in-person).
- Secondary Data: Involves literature and existing research on mobile wallet adoption and perceived risks for theoretical support.

**Data Analysis Techniques**

- Quantitative: Utilizes statistical tools like correlation and multiple regression analysis to discern relationships between threats and adoption behavior.
- Qualitative: Employs thematic analysis to reveal key patterns and themes in user experiences and perceptions.

**Data Analysis**

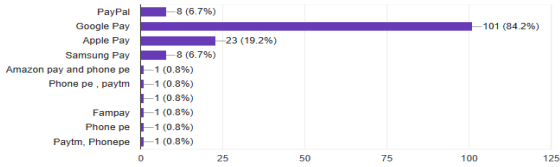


Use	Respondents	Percentage
Yes	118	98.3
No	2	1.7

If yes, which mobile wallet(s) do you use? (Select all that apply)

120 responses

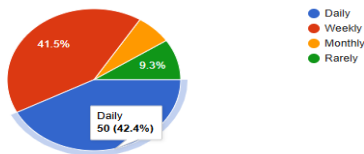
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Mobile wallet	Respondents	Percentage
Pay pal	8	6.7
Google pay	101	84.2
Apple pay	23	19.2
Samsung pay	8	6.7
Amazon pay /Paytm	1	0.8
Fam pay/ Phone pay	1	0.8
Paytm	1	0.8

How frequently do you use mobile wallets?

118 responses



Frequency of usage	Respondents	Percentage
Daily	50	42.4
Weekly	49	41.5
Monthly	8	6.8
Rarely	11	9.3

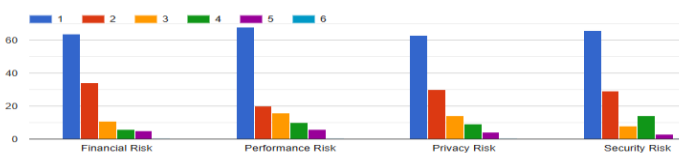


Type of transactions	Respondents	Percentage
Online shopping	56	46.7
In-store purchase	55	45.8
Bill payments	58	48.3
Money transfers	64	53.3

Perceived Risk Factors

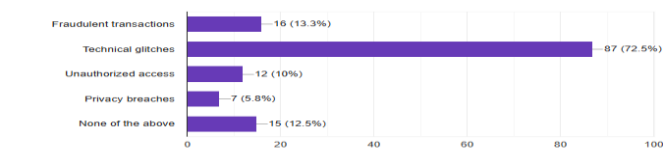
On a scale of 1 to 5, how concerned are you about the following risks when using a mobile wallet? (1 = Not concerned, 5 = Very concerned)

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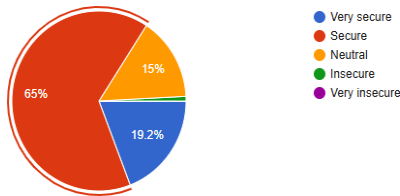
Risk	1	2	3	4	5
Financial risk	1:64	2:34	3:11	4:6	5:5
Performance risk	1:68	2:20	3:16	4:10	5:6
Privacy risk	1:6	2:30	3:14	4:9	5:4
Security risk	1:66	2:29	3:8	4:14	5:3

Have you ever experienced any of the following issues with mobile wallets?  
(Select all that apply) [Copy chart](#)



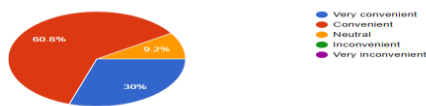
Issues	Respondents	Percentage
Fraudulent transactions	16	13.3
technical glitches	87	72.5
Unauthorised access	12	10
Privacy breaches	7	5.8
None of the above	15	12.5

How do you rate the overall security of mobile wallets?  
120 responses



Rate overall security	Respondents	Percentage
Very secure	23	19.2
Secure	78	65
Neutral	18	15
Unsecure	1	0.8
Very unsecure	0	0

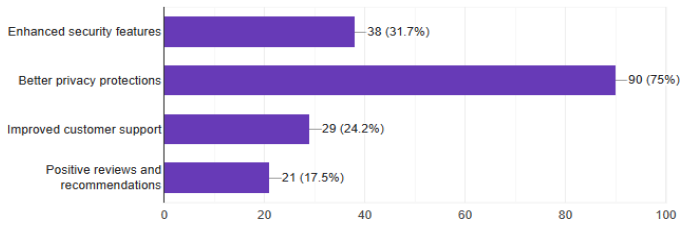
How do you rate the overall convenience of mobile wallets?  
120 responses



Rate overall convenience	Respondents	Percentage
Very convenient	36	30
Convenient	73	60.8
Neutral	11	9.2
Inconvenient	0	0
Very inconvenient	0	0

What factors would increase your trust in mobile wallets? (Select all that apply) [Copy chart](#)

120 responses

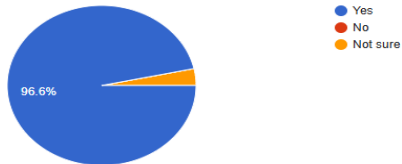


Factors increase trust	Respondents	Percentage
Enhanced security features	38	31.7
Better privacy protection	90	75
Improved customr support	29	24.2
Positive reviews & recoomendations	21	17.5

### Behavioral Intentions

Do you plan to continue using mobile wallets in the future?

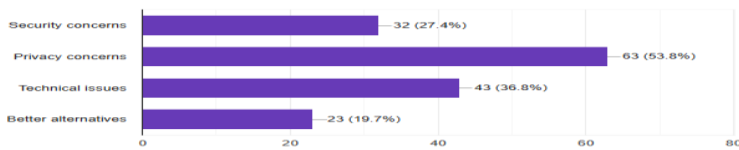
118 responses



Plan to continue use	Respondents	Percentage
Yes	114	96.6
No	0	0
Not sure	4	3.4

What would make you stop using mobile wallets? (Select all that apply) [Copy chart](#)

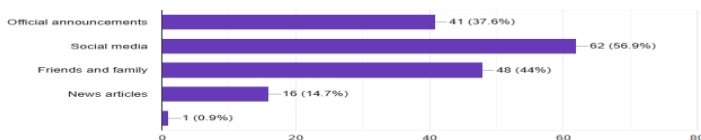
117 responses



Make you stop using wallet	Respondents	Percentage
Security concerns	32	27.4
Privacy concerns	63	53.8
Technical issues	43	36.8
Better alternatives	23	19.7

How do you usually learn about new mobile wallet features or updates? (Select all that apply) [Copy chr](#)

109 responses



Know about new updates through:-	Respondents	Percentage
Official announcements	41	37.6
Social media	62	56.9
Friends and family	48	44
News articles	16	14.7

What is your primary reason for using mobile wallets?  
119 responses



Primary reason for using is:-	Respondents	Percentage
Convenience	34	28.6
Security	35	29.4
Speed of transactions	42	35.3
Rewards and offers	8	6.7

**Results and findings:-**

**Summary of Results and Findings:**

- i. Demographics: The majority of users fall within the age range of 18–24 (41.7%); 60% are women.
- ii. Employment: A total of 42.2% are in employment; the remainder consists of students (25%) and those who are self-employed (20%).
- iii. Usage: A significant 98.3% utilize mobile wallets, with Google Pay being the primary choice (84.2%).
- iv. Frequency: About 42.4% use these wallets on a daily basis; 41.5% use them on a weekly basis.
- v. Common Uses: The primary applications are for money transfers (53.3%), bill payments (48.3%), and online shopping (46.7%).
- vi. Concerns: Financial (1.64%), performance (1.68%), privacy (1.63%), and security (1.66%) issues are the main sources of concern.
- vii. Issues Faced: A total of 72.5% encounter technical problems; 13.3% experience fraud.
- viii. Security Perception: Some 65% consider mobile wallets to be secure; 19.2% believe they are very secure.
- ix. Convenience: Approximately 60.8% deem them convenient; 30% classify them as very convenient.
- x. Trust Boosters: A major 75% appreciate enhanced privacy protections; 31.7% prefer improved security measures.
- xi. Future Use: About 96.6% plan to keep using mobile wallets, although 53.8% might discontinue due to privacy worries.

**Conclusion:-**

Convenience engagement and retention. efficiency have pushed the use of mobile wallets in recent years, but observed risks continue to play a major role in user Young adults with a variety of job statuses make up the majority of users, especially women. Despite the high adoption rate, user trust is impacted by worries about security, privacy, and financial risks as well as technical issues and fraudulent transactions. The majority of participants believe that mobile wallets are safe, but in order to boost user confidence, security and privacy protection must be improved. One significant benefit that contributes to high satisfaction is convenience. Adoption is still expected to grow in the future, but long-term success will depend on resolving privacy and technical issues.

**Implications:-**

**Theoretical Implications**

Expanding Knowledge of Witnessed Threat Dimensions. Behavioral Economics and Consumer Decision Making

**Practical Implications for Businesses**

Threat Mitigation Strategies, Product Development and Innovation, Brand Trust and Marketing Strategies

**Policy Implications**

Regulatory Standards for Digital Payments, Consumer Education and Awareness Campaigns, Promoting Digital Inclusion

**For Financial Institutions and Fintech Companies**

Security Enhancements and Compliance, Building Ecosystems for Mobile Wallets

**For Future Research**

Exploration of Other Threat Factors, Cross-cultural and Regional Studies, Post-adoption and Loyalty Studies

**Limitations:-**

Summary of Limitations:

1. Geographic and Demographic Constraints: Results may not be universally applicable due to variations in culture and infrastructure.
2. Self-Report Bias: Survey answers might be affected by inaccuracies in recall or the desire to appear favorable.
3. External Factors Overlooked: Economic, regulatory, or technological developments might not be fully accounted for.
4. Behavioral Complexity: The emotional and psychological factors influencing adoption are not thoroughly examined.
5. Platform Limitation: Concentrating on one specific application (e. g., Google Pay) could restrict applicability to other platforms.

**Future Research directions:-**

## 1. Longitudinal Studies on Evolving Threat Perceptions

Future investigations could follow users over time to see how their comfort with mobile wallets affects their threat perceptions. As individuals become more at ease, worries related to privacy and security may lessen. Such investigations can provide valuable insights into maintaining trust and promoting long-term usage.

## 2. Impact of External Factors and Trust-Enhancing Strategies

It's essential to investigate how economic fluctuations, regulatory modifications, and market circumstances influence perceived risks. Research might also look into trust-promoting strategies—such as clear policies, robust security measures, and consumer protections—that providers may implement to lessen perceived threats and boost user confidence.

## 3. Post-Adoption Threat Perception Analysis

Instead of solely concentrating on pre-adoption anxieties, future research should analyze user experiences post-adoption. Challenges like hidden fees, system malfunctions, or new threats might affect ongoing usage and satisfaction, providing a more comprehensive view of user concerns.

## 4. Role of Technological and Behavioral Innovation

Innovative technologies like AI, blockchain, and biometrics, combined with findings from behavioral science, may alter how users perceive and respond to threats. Integrating these advancements could create more effective methods for building trust and promoting adoption.

## 5. Contextual Understanding of Perceived Threats

Risk perceptions differ across cultural, economic, and geographical settings. Future research should investigate how local elements—like infrastructure, educational background, and societal norms—shape users' perceptions of mobile wallet threats, allowing providers to customize solutions for specific areas or demographics.

Conclusion:

By examining these future research avenues, academics and developers can attain deeper understanding of the evolving nature of perceived threats. This would aid in crafting targeted strategies to alleviate risks and encourage wider, more sustained use of mobile wallets.

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