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Review Article

Threat perceptions in use of e-wallet in customer's purchase intention: with extended UTAUT2 model

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ABSTRACT

This study uses the extended UTAUT2 model to examine how threat perceptions affect Indian consumer e-wallet purchasing intentions. Performance expectancy, effort expectancy, social influence, facilitating conditions, perceived uncertainty, trust, and service quality are examined. This empirical study used random sampling and a standardized 5-point Likert scale questionnaire. of 300 surveys, 280 were returned by active e-wallet customers. Correlation and regression were performed in SPSS 20 and Excel. Threat perception strongly influences e-wallet use, according to the study. Perceived uncertainty, trust, facilitating conditions, and service quality affect threat perception. E-wallet adoption intentions are indirectly affected by performance, effort, and social influence. This study emphasizes the necessity of resolving threat perceptions to boost e-wallet consumer confidence. Developers and service providers should reduce perceived risks to increase purchase intent and user adoption. Future research should use comprehensive models like UTAUT2 to examine these aspects. Time constraints and a small sample size don't properly represent India's diversity, thus the study only examines perceived e-wallet risk. To better understand e-wallet adoption trends, larger samples should be used in future studies.

1. Introduction

India is striving to shift from a primarily cash-dependent economy to a cashless one by utilizing digital technology like mobile wallets and digital money. Many companies have introduced their mobile wallet services, and individuals are rapidly using mobile wallets. The global proliferation of cashless transactions holds significant importance. Using cash as a payment method appears to be a dependable option to using cash. Conversely, the prevalence of mobile payment systems has experienced a substantial rise. Mobile payment serves as a substitute for the prevalent cashless payment technique, which is extensively utilized in several countries globally. Mobile phones have become an essential component of our daily lives in the modern world. The citation for the source is Chakraborty and Mitra (2018). Cell phones, smartphones, and other similar devices enable us to conduct transactions for products and services via mobile payment methods.[1–5] These wireless communication technologies enable electronic payments for various purposes, including tickets, fees, and wages. Mobile wallets facilitate a wide range of financial transactions. The citation "(Bhatt et al., 2021)" refers to a publication by Bhatt and colleagues in the year 2021. As of 2016, India boasts a staggering 500 million Internet users, positioning it as the second largest user base globally, only behind China. Panwar (2018) The proportion of individuals aged 25 who use smartphones has risen from 40% in 2013 to 54% in 2018. Hence, the population of Internet users in the base is projected to have a significant increase, surpassing 500 million by 2019. With the availability of mobile internet in India, it is projected

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that the number of users would increase to 829 million by 2022. The average monthly growth rates, calculated using data growth, show a compound annual growth rate (CAGR) of 129% between 2015 and 2018. The source of this information is the Government of India in the year 2020. The GSMA is a global organization that advocates for the interests of wireless operators. It has a membership of over 750 operators, which includes roughly 400 organizations involved in the wider wireless industry. This includes phone and hardware manufacturers, software companies, device suppliers, and internet companies. Additionally, it facilitates the collaboration of organizations operating in interconnected industrial sectors. The source of this information is the GSM Association, in the year 2021.

Cunningham conducted the initial investigation into the assessment of risk perception in 1967 (Marceda Bach et al., 2020).[6–12] Risk perception refers to an individual's cognitive evaluation of the likelihood of experiencing injury or incurring losses. This refers to a subjective assessment that individuals make regarding the qualities and seriousness of the threat. The risk level of a specific behavior is often determined by assessing the probability and potential implications of negative outcomes resulting from that conduct. Risk perception entails evaluating the likelihood and ambiguous outcomes. The three elements of perceived risk are as follows: perceived likelihood, which refers to the probability of an individual being exposed to danger; perceived susceptibility, which relates to the inherent vulnerability of the individual; and perceived severity, which denotes the extent of harm that the danger can inflict. The reference is from Molina's work published in 2013. Group identities can be defined as collective entities characterized by shared values, beliefs, attitudes, conventions, and patterns, which serve to establish distinctions between those who belong to the group and those who do not. (Rousseau & Garcia-Retamero, 2007) Dangers Perception plays a crucial role as an intermediate factor between the act of making a payment using an e-wallet and the subsequent response. If the threat is not comprehended, then, despite the presence of objective proof, there is no possibility of activating defense resources. The source cited is Cohen (2014). Several research have mostly focused on examining the influence of perceived risk on consumers' purchasing intention when it comes to accepting e-wallet payments. One of the variables that affects the low acceptance rate is the perceived risk associated with payment methods. The citation (Raihan et al., 2015).[13–16]

1.1. Types of consumer risk perception

The five categories of perceived risk are performance, physical, psychological, social, and financial risk. Simultaneously, Roselius subsequently included the concept of "time" into the danger factor. The citation (Balogh & Mészáros, 2020) is provided.

1.2. Functional risk

Pertains to the potential hazards linked to the functionality of a product. Perceived performance risks encompass worries over the characteristics, functionality, and perceived advantages of a product, including apprehensions about its quality.

1.3. Physical risk

Uncertainties regarding the secure utilization of the merchandise pertain to a tangible peril. A consumer's uncertainty over the safety of a specific product or service may lead to hesitation and careful consideration before making a purchase.

1.4. Financial risk

Risk of financial loss or harm to an individual or organization's finances. When customers evaluate return on investment, they perceive financial risk, which includes market volatility, credit risk, liquidity risk, and operational risk. Evaluate the value of the product you intend to purchase and determine if its benefits justify the cost. Consumers face financial risks when they are concerned that impulsive purchases could deplete their valued funds.

1.5. Social risk

Refers to the potential negative impact on individuals, communities, or society as a whole resulting from social factors or events. This risk is associated with the consumer's socioeconomic standing. Individuals who are part of the upper class or possess significant wealth have a preference for purchasing things that are accessible to their social circle. For instance, individuals may opt against purchasing an inexpensive automobile due to apprehensions of potential social rejection from their acquaintances or the potential impact on their social standing within their peer group.[17–22]

1.6. Time risk

If the product malfunctions or becomes damaged shortly after purchase and requires replacement, it poses a time-related risk. You must return to the store and endure the inconvenience of waiting in line in.

1.7. Perceived risk

Consumer purchasing decisions are greatly influenced by perceived dangers, leading marketers in different industries to find successful solutions to handle these concerns. Typical tactics involve providing assurances or warranties to ease consumer concerns. In 2003, Vankatesh et al. developed the Unified Theory of Adoption and

Use of Technology (UTAUT), which unified eight major technology adoption theories. Performance expectancy, effort expectancy, social influence, and enabling factors comprise the UTAUT paradigm. Vankatesh et al. (2012) modified this model to add hedonic incentive, price value, and habit in UTAUT2. Essentially, it is important to handle any risks that consumers may perceive, such as the inconvenience caused by product failures, in order to influence their behavior. The UTAUT and UTAUT2 models offer frameworks that assist marketers in comprehending and improving customer adoption of novel technology by effectively addressing these problems.

2. Literature Review

1. *Raihan et al. (2015)* investigated the perceptions of young individuals on the risks linked to electronic payment methods and the behaviors that accompany them. A notable disparity in perceived risk was discovered between cash and electronic payments. Curiously, the disparity was less noticeable when taking into account the quantity of sales.
2. *Chakraborty & Mitra (2018)* conducted a study to examine how customer demographics affect the inclination to use e-wallets in India. Their study sought to discover primary indicators of consumer acceptance and ascertain the presence of diverse customer segments within the market. The researchers found that various characteristics had a substantial impact on adoption, such as the perceived utility, usability, social impact, self-efficacy, personal innovation, contentment, attractiveness of options, and perceived value.[23–30]
3. *Teng (2018)* investigated the determinants that affect customers' inclination to utilize mobile payment services in Nanjing, China. The researchers discovered four crucial characteristics, namely perceived risk, perceived gain, subjective norm, and attitude, which had a significant impact on consumer behavioral intentions. Subjective norms were found to have a notably strong impact, especially when compared to the other variables examined.
4. *Zhang et al. (2019)* examined how the perception of security affects the ongoing utilization of mobile payment services. Their study aimed to comprehend the impact of certain security-related aspects, such as perceived control, user interface design features, and accuracy, on users' perceptions of security and subsequent usage behaviors. The researchers found that consumers' decisions to continue using mobile payment services are highly influenced by their perception of security. This emphasizes the crucial role of interface design and perceived control in influencing user trust and happiness.
5. *Routray et al. (2019)* conducted a study that examined the quality factors associated with the utilization of mobile wallets, specifically information quality, system quality, and service quality. Their study found that the caliber of information offered by mobile wallets has a substantial impact on the perceived utility among users. Nevertheless, they could not discover any substantial influence of system and service quality on perceived usefulness. Additionally, they emphasized that the quality of the system and the quality of the service had a substantial impact on users' perception of security. This perception, in turn, influenced their intention to continue using mobile wallets in a sustainable manner.
6. *Mahwadha (2019)* sought to determine the elements that influence customer acceptance of e-wallets as alternative payment methods for purchasing products and services. Their study highlighted the significance of perceived trust and perceived usefulness in affecting user attitudes towards the use of e-wallets, which in turn affects behavioral intentions. The participants engaged in a conversation about the concept of optimal moderation as a mediating factor, suggesting that the indirect impacts of variables had a stronger influence on user adoption behaviors compared to direct impacts.
7. *Wong (2019)* investigated the potential of mobile payment services in Hong Kong and analyzed the impact of perceived risk, perceived trust, perceived safety, and the model of technological acceptance on customer intent. Their research indicated successful approaches for improving the security systems of mobile payment platforms in order to promote increased acceptance and utilization by consumers.
8. *Nandhini & Girija (2019)* conducted a study to determine the factors that influence users to prefer e-wallets instead of traditional payment methods. The researchers examined client perspectives on the benefits and drawbacks of e-wallets. They found that a thorough comprehension and acceptance of e-wallets as easy, helpful, and necessary alternatives in the digital era were crucial elements that influenced their adoption.
9. *Kaur et al. (2020)* utilized the diffusion of innovation theory to examine the characteristics that affect individuals' inclination to use and endorse e-wallets among participants. Their research revealed that various criteria, including comparative advantage, compatibility with user needs, perceived complexity, and visibility, had a substantial impact on participants' inclination to embrace e-wallets. Nevertheless, the testability factor did not have an impact on the participants' intents to utilize or endorse e-wallets.
10. *Soodan & Rana (2020)* examined many aspects that affect the inclination to utilize e-wallets, such as customer perspectives on privacy, security,

value, advantages, and societal consequences. Their research revealed that motivations such as seeking pleasure, perceiving security, privacy concerns in public settings, convenience of use, performance expectations, perceiving savings, and social influence had a substantial impact on user intents to embrace e-wallets. In addition, they recognized that habitual behavior and perceived effort act as obstacles to the acceptance and implementation of the idea.

11. *Sentanu et al. (2020)* examined the risk-benefit factors that influence user concerns and behaviors associated with the use of e-wallets. Their research highlighted that user comfort had a notably favorable impact on customer retention and ongoing utilization of e-wallet services. In addition, it was observed that consumers took into account the financial risk associated with e-wallets, however it did not necessarily deter them from using them.
12. *Okeke (2020)* a study in Nigeria to assess customer preferences and perceived dangers related to several e-payment options. The study classified e-payment options according to the level of customer participation, distinguishing between high and low rates. The participation rates of methods such as ATM, debit cards, and credit cards were found to be high, with telephone banking and GSM-based transactions following closely behind. Conversely, respondents displayed a lesser inclination for techniques such as MasterCard, Visa, and internet banking. The survey emphasized that e-banking clients commonly experienced concerns around potential time loss and security threats. The study highlighted the significance of these parameters in categorizing e-payment users by discriminant structural analysis.
13. *Do & Do (2020)* examined the determinants that affect the choice of Generation Z to use e-wallets. Their study concentrated on distinct variables such as adherence, perceived suitability, credibility, reputation, perceived utility, user-friendliness, and social influence on user intention. The results suggested that factors such as compliance, perceived usability, trust, and social impact had an indirect effect on the intention to use e-wallets. This effect was mediated through perceived appropriateness, utility, and reputation. The study emphasized the crucial influence of perceived advantages in determining Generation Z's propensity to embrace e-wallets.
14. *Jin et al. (2020)* investigated the factors that affect consumers' intention to use mobile wallets in Malaysia. Their study emphasized that consumer behavior towards adopting and utilizing mobile wallets for purchases is significantly influenced by perceived usefulness, usability, social impact, and brand image.
15. *Daragmeh et al. (2021)* devised a comprehensive framework that combines the Correct Belief Model and Continuance Technology Acceptance Model to investigate the elements that affect the ongoing utilization of e-wallet services, particularly in the context of the COVID-19 pandemic. The researchers discovered that self-efficacy had a pivotal role in determining users' choices to persist in using e-wallets.
16. *Chaveesuk et al. (2021)* conducted an empirical study to investigate the potential for marketing and the behavioral intents associated with digital payment systems in Thailand. Their research uncovered that the perception of risk, circumstances of empowerment, expectations of performance, and attitude had a substantial impact on the intention to use digital payment innovations, which subsequently influenced the actual usage.
17. *Tran et al. (2021)* constructed and examined a research framework that centers on the factors (personal innovativeness, perceived risk, perceived ease of use, and long-term orientation) that influence perceived value in mobile wallets, as well as the resulting effects on commitment and recommendation. Their research revealed that the perception of value had a favorable effect on consumers' dedication to and endorsement of utilizing mobile wallets.
18. *Undale et al. (2021)* conducted a study on the safety concerns and comfort levels of utilizing e-wallets during the COVID-19 epidemic. They specifically investigated how demographic characteristics, such as gender and income, influenced these worries and comfort levels. A gender disparity was observed in e-wallet security concerns, with female users exhibiting higher levels of apprehension compared to males. Additionally, persons with middle-income levels displayed a stronger emphasis on digital payment security when compared to those in lower-income brackets.
19. *MN & Warningsih (2021)* examined how the perceived advantage, perceived danger, and confidence levels influence the desire of university students to utilize digital wallets. Their research uncovered that the perceived usefulness and reliability of digital wallets had a positive impact on the intention to use them, whereas perceived danger did not have a significant effect on intention.
20. *Xavier and Zakkariya (2021)* investigated the characteristics that can predict the intents of mobile wallet users to continue using the service. The researchers discovered that both favorable and unfavorable encounters had a substantial impact on consumers' intentions to continue using the product or service.

3. Factors Affect the Consumer's Intention Use of E-wallet

3.1. Performance expectancy (PE)

Venkatesh et al. (2003), performance expectancy pertains to the way consumers perceive the improvement of their online transaction experiences through the use of electronic payment systems, such as mobile wallets. This improvement is achieved by offering advantages such as increased speed, enhanced security, and added convenience. Consumers are more inclined to embrace mobile wallets if they perceive them as providing benefits that beyond those of traditional payment methods.

3.2. Effort expectancy (EE)

Slade et al. (2010), effort expectancy refers to the level of simplicity and convenience that consumers perceive while using electronic payment systems for online transactions. It refers to the degree to which consumers may comprehend and utilize the system without requiring specialized expertise. When it comes to mobile wallets, having a user-friendly design and a simple registration process is quite important in determining whether consumers will accept the technology.

3.3. Social influence

Refers to the effect that other opinion and recommendations have on customers' choices to utilize electronic payment system. Consumers are more inclined to embrace mobile wallets if they obtain favorable endorsements from influential individuals or groups within their social networks, such as family, friends, or trusted organizations.

3.4. Facilitating conditions (FC)

Refer to customers' impressions of the resources and support that are available to assist them in efficiently utilizing technology, as defined by Nawaz and Mohamed (2020). This encompasses technical assistance and the sufficiency of infrastructure required for optimal operation of the system. The presence of dependable technical assistance and a strong infrastructure can greatly impact consumers' inclination to using mobile wallets.

4. Perceived Service Quality (PSQ)

Perceived Service Quality is the evaluation made by consumers regarding the overall quality of service they have got, in relation to their initial expectations. Within the domain of e-services, which include features related to mobile wallets, PSQ (Perceived Service Quality) plays a pivotal role in influencing customer happiness and the acceptance of these services. Consumers' trust and contentment with the mobile wallet provider are improved by a high perceived service quality.

4.1. Perceived trust (PT)

Wong (2019), perceived trust refers to the degree of confidence that consumers have in the security and privacy policies of mobile wallet providers. Trust plays a vital role in cultivating effective relationships between consumers and service providers, especially when it comes to safely managing personal and financial information. Consumers' inclination to embrace mobile wallets is enhanced by favorable opinions of reliability.

4.2. Perceived risk (PR)

Perceived Risk is the term used to describe consumers' worries about the potential negative outcomes that may arise from utilizing mobile payment services, as emphasized by Piarna et al. (2020) and Ye (2004). Potential hazards encompass potential violations of privacy, concerns regarding the security of data, and financial perils associated with deceitful transactions. To enhance consumer confidence and promote widespread usage of mobile wallets, it is crucial to address and mitigate perceived dangers.

4.3. Perceived technological uncertainty (PTU)

Technological uncertainty pertains to the inherent unpredictability of technological advancement, the volatile technological landscape, and the uncertainty around the functions and outcomes of the technology. Consumer buying decisions for high-tech products may be influenced by their views of technological uncertainty. Perceived technological uncertainty refers to the way consumers perceive the uncertainties regarding the stability, dependability, and security of mobile payment systems, as well as uncertainties regarding the loading, responsiveness, and connectivity of wireless networks. The impression of IT security by consumers is considered a significant factor in the level of uncertainty they experience during online transactions (Pavlou et al., 2007). The wireless network is inherently more susceptible to unauthorized access and security breaches compared to the wired network. Additionally, customers may lack a comprehensive understanding of the technological intricacies of the system. Therefore, individuals may harbor significant skepticism over the dependability, connectedness, and consistency of the technology, which can give rise to apprehensions about possible negative consequences.

4.4. Relationship between threat perception and consumer adoption of e-wallet

Threat perception is a barrier that prevents people from using electronic wallets. Consumers are often risk

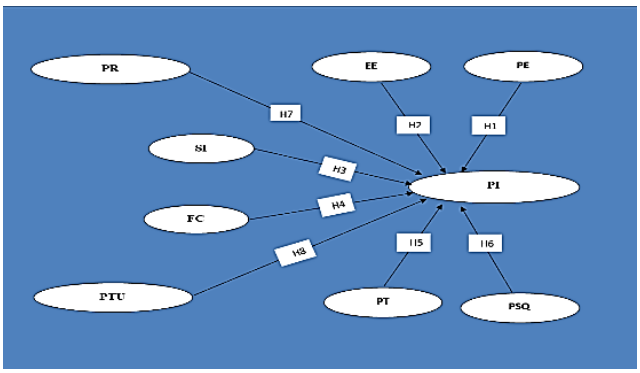
apprehensive and are reluctant to utilize electronic wallets due to the privacy and security concerns that are associated with use of such payments. Despite the fact that consumers' perceptions of threats have a negative impact on their adoption of electronic wallets, service providers are compelled to improve the functionality of electronic wallets and make them more secure and user-friendly. Applications that are equipped with digital capabilities are being upgraded on a regular basis as a result of the rapid pace of technological advancement, and as a result, customers are adopting them in big populations.

5. Objectives

1. Analyze factors influencing consumer adoption of e-wallets.
2. Establish the relationship between threat perception and e-wallet adoption.
3. Assess the impact of various factors on threat perception related to e-wallet usage.

5.1. Conceptual framework

In order to provide an explanation of the conceptual framework, the components that were significant and their relationship to intention to use were individually selected. The purpose of the research work is to determine the extent to which certain variables from the study, such as performance Expectancy (PE), effort Expectancy (EE), social influence (SI), facilitating conditions (FC), perceived service quality (PSQ), perceived Trust (PT), perceived Risk (PR), and perceived technological uncertainty (PTU), have an impact on the intention to use.



6. Research Methodology

A web-based questionnaire consisting of two components was constructed in order to conduct an empirical investigation to assess the research hypotheses. The initial segment centered on the demographic information of the participants. The second portion comprised 18 items that were employed to assess the model constructs. The measures were evaluated using a five-point Likert scale that ranged from 1, representing "strongly disagree," to 5, representing "strongly agree." All constructs were assessed using two or three items. The measurements of the constructs were derived from existing literature and adjusted somewhat to suit the specific circumstances of this investigation.

6.1. Data collection

The survey was distributed using electronic channels such as email, LinkedIn, Facebook, and Instagram in order to collect data from the participants. The researchers conducted a pilot test with a sample size of 40 participants to evaluate the reliability and consistency of the instrument. The results indicated a high level of consistency, as seen by the Cronbach's alpha coefficient surpassing 0.70 for all structures. The results provided additional confirmation of the consistency of the constructs, as there was no correlation observed among the items. A total of 280 questionnaires were collected from the research population. The demographic statistics revealed that 52.9% of the participants were male, whereas 47.1% were female. The age of 35 or younger was reported by 61.1% of the respondents. The responses demonstrated a spectrum of educational achievement. Around 75% of the respondents own either a bachelor's or a master's degree, and more than 20% hold a PhD.

6.2. Data analysis

The study utilized IBM SPSS 20 statistical software to perform a thorough analysis of the data. This involved producing descriptive statistics to summarize the attributes of the variables being examined. The Reliability Statistics were computed to verify the internal consistency of the measurement scales, whereas the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test were employed to examine the suitability of the data for factor analysis. The correlation structure of the variables was refined by computing the inverse of the correlation matrix and the anti-image correlation. A correlation matrix was developed to analyze the associations between factors and total variance. The explanation provided insights into the total variance explained by the factor analysis. Communalities were evaluated to measure the amount of variability in each variable that is explained by the factors. Coefficients were calculated to ascertain the magnitude and orientation of associations between variables. Ultimately, the study utilized ANOVA testing to investigate notable distinctions among groups in regards to the variables of interest.

Table 1: KMO and bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.683**
Bartlett's Test of Sphericity	**Approx. Chi-Square**	**4353.225**
	Df	231
	Sig.	.000

Table 2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	248	51.2	51.2	51.2
	Female	229	47.3	47.3	98.6
	Transgender	7	1.4	1.4	100.0
	Total	484	100.0	100.0	

Table 3: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-25	114	23.6	23.6	23.6
	25-35	157	32.4	32.4	56.0
	35-45	113	23.3	23.3	79.3
	45 & above	100	20.7	20.7	100.0
	Total	484	100.0	100.0	

Table 4: Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under 12	99	20.5	20.5	20.5
	UG	172	35.5	35.5	56.0
	PG	123	25.4	25.4	81.4
	Others	90	18.6	18.6	100.0
	Total	484	100.0	100.0	

Table 5: Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	134	27.7	27.7	27.7
	Farmers	103	21.3	21.3	49.0
	employee	144	29.8	29.8	78.7
	businessman	103	21.3	21.3	100.0
	Total	484	100.0	100.0	

Table 6: Descriptive statistics

	Mean	Std. Deviation	Analysis N
PE	3.4773	1.12863	484
EE	2.6632	1.06235	484
SI	2.7924	1.19859	484
FC	3.4742	1.02598	484
PT	3.5062	1.13798	484
PR	3.5444	1.17452	484
PSQ	3.3760	1.07682	484
PTU	2.9762	1.27362	484
PI	3.3926	1.15686	484

Table 7: Reliability statistics

Cronbach's Alpha	N of Items
.755	18

Table 8: Inverse of correlation matrix

	PE	EE	SI	FC	PT	PR	PSQ	PTU	PI
PE	1.438	-.127	-.270	-.331	-.223	.125	-.220	-.210	-.194
EE	-.127	1.336	-.084	-.061	.146	-.163	.006	-.567	-.116
SI	-.270	-.084	1.221	-.043	-.220	-.080	-.126	.281	.012
FC	-.331	-.061	-.043	1.412	-.150	-.338	-.306	.370	.039
PT	-.223	.146	-.220	-.150	1.294	-.277	-.013	-.197	-.038
PR	.125	-.163	-.080	-.338	-.277	1.340	-.175	-.207	-.029
PSQ	-.220	.006	-.126	-.306	-.013	-.175	1.351	-.291	-.079
PTU	-.210	-.567	.281	.370	-.197	-.207	-.291	1.500	.079
PI	-.194	-.116	.012	.039	-.038	-.029	-.079	.079	1.067

Table 9: Anti-image correlation

	PE	EE	SI	FC	PT	PR	PSQ	PTU	PI
PE	.748[a]	-.091	-.204	-.232	-.164	.090	-.158	-.143	-.157
EE	-.091	.641[a]	-.065	-.044	.111	-.122	.004	-.400	-.097
SI	-.204	-.065	.701[a]	-.033	-.175	-.062	-.098	.207	.011
FC	-.232	-.044	-.033	.673[a]	-.111	-.246	-.221	.254	.032
PT	-.164	.111	-.175	-.111	.758[a]	-.210	-.010	-.141	-.033
PR	.090	-.122	-.062	-.246	-.210	.748[a]	-.130	-.146	-.024
PSQ	-.158	.004	-.098	-.221	-.010	-.130	.793[a]	-.204	-.065
PTU	-.143	-.400	.207	.254	-.141	-.146	-.204	.522[a]	.063
PI	-.157	-.097	.011	.032	-.033	-.024	-.065	.063	.725[a]

Measures of sampling adequacy(MSA)a

Table 10: Residual[b]

	PE	EE	SI	FC	PT	PR	PSQ	PTU	PI
PE									
EE	-.028								
SI	-.056	.145							
FC	-.093	.078	-.232						
PT	-.104	-.081	-.097	-.158					
PR	-.228	-.085	-.088	-.002	-.029				
PSQ	-.095	-.124	-.088	-.037	-.156	-.100			
PTU	-.002	-.211	.080	.010	.070	-.065	-.031		
PI	.007	-.026	-.052	-.088	-.078	-.105	-.065	-.105	

Extraction Method: Principal Component Analysis.Reproduced communalities$_a$

Residuals are computed between observed and reproduced correlations. There are 27 (75.0%) nonredundant residuals with absolute values greater than 0.05.$_b$

Table 11: Correlation Matrixa [2]

	PE	EE	SI	FC	PT	PR	PSQ	PTU	PI
PE	1.000	.222	.306	.349	.322	.189	.354	.206	.217
EE	.222	1.000	.064	.081	.071	.237	.192	.449	.135
SI	.306	.064	1.000	.240	.272	.171	.209	-.084	.078
FC	.349	.081	.240	1.000	.275	.336	.341	-.068	.082
PT	.322	.071	.272	.275	1.000	.330	.235	.170	.102
PR	.189	.237	.171	.336	.330	1.000	.311	.237	.090
PSQ	.354	.192	.209	.341	.235	.311	1.000	.259	.141
PTU	.206	.449	-.084	-.068	.170	.237	.259	1.000	.047
PI	.217	.135	.078	.082	.102	.090	.141	.047	1.000

Determinant = .237

Table 12: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.635	20.194	20.194	3.635	20.194	20.194	2.542	14.123	14.123
2	1.991	11.060	31.255	1.991	11.060	31.255	2.286	12.699	26.822
3	1.790	9.947	41.202	1.790	9.947	41.202	1.939	10.772	37.594
4	1.546	8.587	49.789	1.546	8.587	49.789	1.684	9.353	46.947
5	1.313	7.293	57.082	1.313	7.293	57.082	1.586	8.809	55.756
6	1.139	6.327	63.409	1.139	6.327	63.409	1.378	7.653	63.409
7	.964	5.358	68.767						
8	.853	4.740	73.507						
9	.739	4.106	77.613						
10	.641	3.563	81.176						
11	.583	3.237	84.413						
12	.526	2.920	87.333						
13	.484	2.688	90.021						
14	.423	2.349	92.370						
15	.398	2.212	94.582						
16	.357	1.984	96.566						
17	.331	1.841	98.408						
18	.287	1.592	100.000						

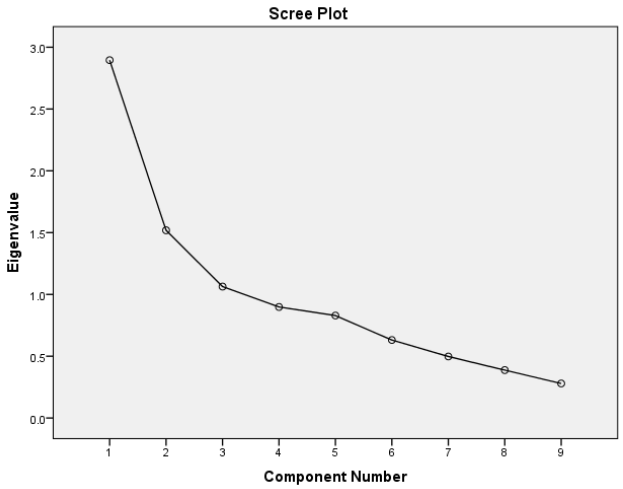
Extraction Method: Principal Component Analysis.

Table 13: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.895	32.169	32.169	2.895	32.169	32.169	2.779	30.872	30.872
2	1.519	16.875	49.044	1.519	16.875	49.044	1.618	17.976	48.848
3	1.063	11.816	60.861	1.063	11.816	60.861	1.081	12.012	60.861
4	.898	9.982	70.843						
5	.829	9.210	80.053						
6	.631	7.009	87.062						
7	.498	5.531	92.593						
8	.387	4.305	96.898						
9	.279	3.102	100.000						

Extraction Method: Principal Component Analysis.

7. Results and Discussions



7.1. Suggestions and implications

These results provide significant insights for digital wallet firms aiming to improve their comprehension of the elements that influence adoption decisions among Indian customers, with a specific focus on the criteria that motivate end-users to adopt their services. This research provides significant insights to the mobile telecommunications sector, marketers, decision-makers, and academics about the variables that drive consumers to choose mobile payment solutions. It highlights the need for service providers to give priority to customer privacy and security while consistently adjusting and improving service offers and features. The

Table 14: Communalities

	Initial	Extraction
PE	1.000	.629
EE	1.000	.698
SI	1.000	.662
FC	1.000	.644
PT	1.000	.400
PR	1.000	.532
PSQ	1.000	.421
PTU	1.000	.767
PI	1.000	.725

Extraction method: Principal component analysis.

Table 15: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.274	8	3.659	2.098	.036[b]
	Residual	472.575	271	1.744		
	Total	501.849	279			

a. Dependent Variable: PI

b. Predictors: (Constant), PTU, PT, PSQ, PR, PE, EE, FC, SI

Table 16: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.716	.379		7.158	.000	1.969	3.462
	PE	.060	.095	.052	.626	.532	-.128	.247
	EE	.195	.081	.166	2.400	.017	.035	.355
	SI	.164	.103	.133	1.587	.114	-.039	.368
	FC	-.023	.097	-.018	-.234	.815	-.214	.168
	PT	-.011	.073	-.011	-.157	.875	-.155	.132
	PR	-.073	.076	-.068	-.970	.333	-.222	.076
	PSQ	.057	.079	.050	.724	.469	-.098	.212
	PTU	-.186	.072	-.191	-2.594	.010	-.327	-.045

a. Dependent Variable: PI

Table 17: Hypothesis results (H_1)

H_1 : There is a positive relationship between PE and purchase intention to use e-wallet	Accepted
H_2 : There is a Negative relationship between EE and their purchase intention to use e-wallet	Accepted
H_3 : There is a positive relationship between SI and their purchase intention to use e-wallet	Accepted
H_4 : There is a positive relationship between FC and their purchase intention to use e-wallet	Accepted
H_5 : There is a positive relationship between PSQ and their purchase intention to use e-wallet	Accepted
H_6 : There is a positive relationship between PT and their purchase intention to use e-wallet	Accepted
H_7 : There is a Negative relationship between PR and their purchase intention to use e-wallet	Accepted
H_8 : There is a positive relationship between PTU and their purchase intention to use e-wallet	Accepted

results of this study can be advantageous for consumers, banks, mobile carriers, and future researchers by extending the capabilities of services, improving the security of transactions, and protecting personal data. Furthermore, it acts as a fundamental reference for politicians and businesses seeking to encourage the implementation of mobile payment services through specific initiatives. It is essential to conduct additional study in order to have a deeper understanding of this field, namely by investigating reported enjoyment and attitudes. The findings have important implications for service providers and policymakers, offering practical recommendations to improve the quality of e-payment systems. This research is crucial for mobile wallet businesses such as Paytm, Google, and Amazon to understand the complex connections between many factors that impact the adoption of mobile wallets. It enables these organizations to make well-informed marketing decisions and provide customized mobile wallet solutions that prioritize consumer security and satisfaction, therefore promoting better acceptance and adoption among consumers.

8. Conclusions

The findings of this study highlight the significant impact that a number of factors have on consumers' intentions to use electronic wallets. These factors include Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Trust (PT), Perceived Service Quality (PSQ), Perceived Risk (PR), and Perceived Technological Uncertainty (PTU). According to the findings of an analysis of primary data, there is a negative link between the perceived risks associated with online shopping, which include product risk, time risk, and privacy risk, and the intention to make a purchase. Having this understanding is essential for online marketers who are attempting to navigate the competitive world of online buying. Product risk, which is especially common in the garment sector, is a reflection of customer reluctance to purchase fashion items simply based on virtual impressions. This is because they believe that the tactile experience is more important than the virtual impression. This negative correlation highlights the difficulty that online retailers face in overcoming the distrust that customers have regarding the quality of products and how well they fit to their bodies when they shop online. According to the findings of the survey, customers do not universally consider online shopping to be extremely easy, despite the fact that online platforms promote ease and time-saving benefits. This perception is influenced by a number of factors, including concerns regarding the lengthy cancellation and return procedures, as well as uncertainties regarding the promptness of locating the appropriate product. Taking effective action to address these difficulties has the potential to boost consumer confidence and inspire a bigger percentage of people to engage in online buying habits.

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11. Conflict of Interest

None.

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