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ORIGINAL ARTICLE

An Empirical model of continuance intention towards mobile wallet services in India

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Abstract

Purpose: A significant increase in smartphone adoption in India has resulted in consumers availing various services through it. Due to the affordable rates of mobile internet, coupled with various other factors, the demand for mobile wallet services for instance, has surged in the past few years, increasing competition. This study aims to investigate some of the important determinants of continuance intention of mobile wallet customers in India. **Methodology:** We collected 325 responses through an online survey. We adopted all the measurement items of the variables (i.e. both independent dependent) from extant literature, and modified them to suit our study's purpose. We adopted statistical tools, using IBM SPSS, to empirically validate the proposed research model. **Findings:** Largely, the results revealed that 'consumer satisfaction' was indeed a major determinant of continuance intention. Besides, perceived ease of use, perceived usefulness, and perceived enjoyment had significant influence on continuance intention too. **Implications:** This study highlights the need for understanding the significant determinants of continuance intention of using mobile wallets, and it also discusses the need for distinguishing mobile wallet users based on their 'usage intensity', which effectively would help practitioners better understand the market segments, and thereby increase profitability through customer loyalty. **Originality:** This study is unique, as it not only proposes a research model, measuring the post-adoption behavior of mobile wallet users in India, but also confirms its practical applicability through empirical data validation techniques.

Key words: Continuance intention, mobile wallet, perceived enjoyment, perceived mobility, satisfaction
JEL Classification: Research Paper

INTRODUCTION

Mobile technologies have had tremendous impact on various business operations and consumers' social lives. Businesses have been provided with enormous opportunities to understand their target market, create, and communicate their personalized offerings at individual levels. Thus, businesses can deliver differential value through mobile platforms, while customizing their products and services, resulting from a better understanding of behavioral patterns of their target market. There is substantial effect in the ways marketers have been designing their marketing strategies to deliver a superior value to their target customers. For instance, consumers have access to information on their fingertips and have up-to-date knowledge about the various offerings available in the market, since they spend greater amount of time in the digital and mobile platforms. As they are highly connected to each other, resulting in increased peer pressure, and quickly adapting/changing their lifestyle habits, by adopting new technology products and services.

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Under these circumstances, marketers must ensure not mere digital presence but deliver a delightful customer experience through omnichannel communication on 24/7 and 365 bases.

Mobile technologies have had profound impact on strategies used by marketers, as consumers in this day and age are virtually hooked on to their smartphones. According to a report by Statista (2021), in 2020, the number of smartphone users in India was 748 million; this is expected to reach 1.5 billion in 2040. Further, it was reported that there were 749 million internet users in India, out of which, 744 million users use the internet through their smartphones. Continual innovation of mobile technologies coupled with rapid advancements in IT, such as artificial intelligence (AI), augmented reality (AR), among others has further fueled penetration of technology among the consumers. However, it does have its own set of challenges, especially for marketers. For instance, as consumers are more empowered now with technology, they have information at their fingertips, due to which, their 'switching intentions' have also increased significantly. Secondly, the other challenge that marketers face today is ensuring that consumers actually feel a 'brand's presence', through which they remain engaged with the brand. In other words, marketers often need to make an extra effort so that the brand is able to create an emotional bonding between them and consumers. In fact, it has been noted that many marketers find it challenging to create an engaging brand content on a variety of mobile platforms, such as Short Messaging Service, mobile websites, and mobile applications.

Mobile wallet (m-wallet) applications, among the most recent in mobile technologies, offer various benefits and advantages to both consumers and businesses. M-wallet, also known as digital wallet or electronic wallet (e-wallet) is used either as an alternative or a supplement to conventional physical wallets. Investopedia defines m-wallet as "a mobile wallet that stores payment card information on a mobile device." With the help of m-wallet, consumers can perform multiple transactions on their smartphone, such as online recharge, bill payments, and fund transfer, both with ease and speed. Due to this, several m-wallet service providers have mushroomed in the recent past. India being one of the fastest growing world economies has seen an upward trend in the usage of m-wallet services. In 2019, the value of digital transactions in India was estimated to be over INR 69 trillion, and is expected to reach INR 238 trillion in 2021 (PWC, 2021). Additionally, it may also be noted that transactions through m-wallets alone, were worth INR 37 trillion in 2020, and is expected to cross INR 100 trillion by 2024. The rapid penetration of e-commerce and m-commerce, increased user base of smartphones, introduction of payment banks, and Unified Payment Interface platform have been some of the major drivers of the m-wallet market in India. Competition within this market has intensified with many significant players, such as Paytm, Google Pay, PhonePe, Amazon Pay, BHIM, and e-wallets from banks. Given this backdrop, it is important to uncover the factors that motivate m-wallet users to become loyal customers, and identify the behavioral differences between customers based on their usage patterns.

Literature Review and Conceptual Framework of the Study

This section highlights extant literature, explaining both users' pre-adoption and post-adoption behavior in various technological contexts. Multiple studies from the past focused on elucidating the motivations behind people adopting and using different technologies. In 1989, Davis had introduced the Technology acceptance model (TAM), identifying two significant predictors of consumers' behavioral intention to use technology; they include perceived usefulness (PU) and perceived ease of use (PEOU). We adopted TAM, PU and PEOU for this study, and affirm thereby the positive and substantial effect of behavioral intention on users' actual usage behavior toward technology. Then, Bhattacharjee (2001) developed an expectation-confirmation model (ECM) model that illuminates the post-adoption behavior of using a technology. He further identified important determinants of user's continuance intention to use a technology. Basing ourselves on the ECM mode, we develop a research model of our own, aiming to identify some of the potential determinants of continued usage intention of m-wallet services in India (Fig. 1).

Earlier, Arvidsson (2014) studied factors that motivate consumers to adopt mobile payment (m-payment) services in Sweden. Tang et al. (2014) stated that trend of using contactless communication technology, that is, near-field communication (NFC), rose tremendously, an innovative NFC-based technology has been invented, that is, mobile wallets. In fact, in their study, they conducted a survey of Gen Y smartphone users in Malaysia, looking to understand the determinants of m-wallet adoption. The results of their study indicated that performance expectancy, effort expectancy, facilitating conditions, hedonic motivation, and habit were some of the significant influencers in determining the behavioral intention of Gen Y users. The following year, Pal et al. (2015) compared the behavioral pattern of early adopters and late adopters for m-payments

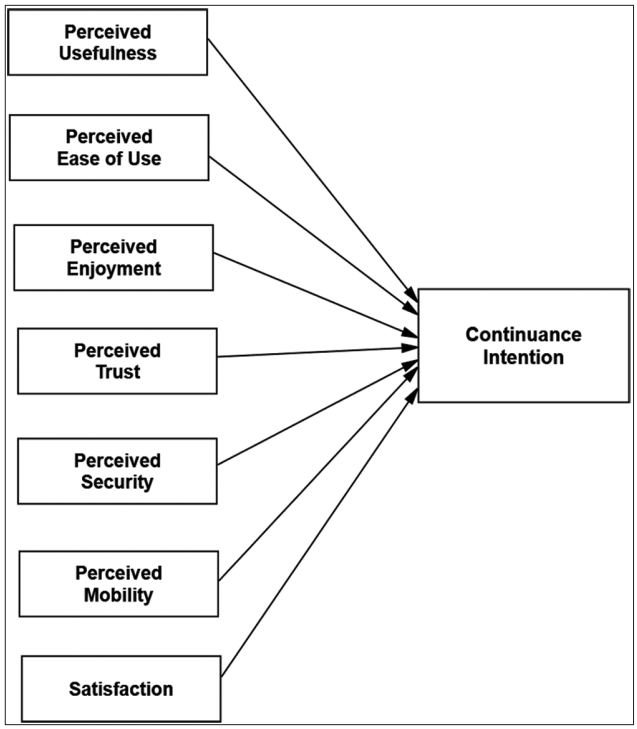

Figure 1: Conceptual framework

services. The results of their study showed that system knowledge, mobility, reachability, personal innovativeness, and convenience were the influencing factors of perceived usefulness and perceived ease of use.

Hampshire (2017) conducted a study to determine the impact of trust and risk on m-payment service behavior of UK consumers. The study collected both qualitative and quantitative data about consumers' beliefs of mobile payments, that is, risk, trust, and perceived usefulness. The results showed that perceived trust for instance, does have a strong and positive influence on perceived usefulness, while perceived risk was found to have negative impact on perceived usefulness. Further, perceived usefulness was found to also have a strong influence on attitude toward m-payment services. Bailey et al. (2017) conducted a study, based on TAM; they identified that perceived ease of use and perceived usefulness had significant impact on the adoption of m-payment services in the U.S. Srivastav and Mittal (2016) conducted an exploratory study, and focused on the influence of various internet banking services on banking customers' satisfaction in India. The study revealed that better quality of service, proper customer service, proper guidelines, and security concerns were important to increase customers' satisfaction and trust. Nagdev and Rajesh (2018) proposed a technology adoption model in internet banking in India. Even here, they found that perceived usefulness, perceived ease of use, trust, and perceived quality were some of the significant determinants of internet banking adoption in India. Kumar et al. (2018) aimed at identifying the motivations behind the usage of BHIM app – a mobile banking application, among Indian users. They collected the opinions of 87 users of this application in Telangana, and identified two distinct usage patterns. These include motivations among users to transact using smartphones, and drawbacks of using BHIM app. They also proposed a model to increase the motivations of using this application.

Singh et al. (2020) developed and empirically validated a research model measuring the customers' intention, satisfaction, and recommendation to use m-wallet applications in India. They found that ease of use, usefulness, risk, and attitude have significant impact on users' intention, which further impact their satisfaction and recommendation to use m-wallet services in India. The study also revealed that moderating effect of stress to use and social influence on the hypothesized relationships was significant.

Trust and security have been two important features, considered as important by mobile technology users, and the same were found to influence users' preference and usage of m-payment systems (Chandra et al., 2010; Duane et al., 2011; Hampshire, 2017). Perceived enjoyment and perceived mobility have been distinctive features of mobile technology; they have been widely studied (Zmijewska et al., 2004; Park and Kim, 2013; Zhou, 2013; Marinkovic and Kalnic, 2017). Finally, satisfaction has been identified as one of the most important determinants of continuance to use m-payment services (Dlodlo, 2015; Marinkovic and Kalnic, 2017).

From this literature review, we see that there seems to be dearth of studies measuring the post-adoption behavior of m-wallet services, especially in the context of emerging markets, such as in India.

Thus, we incorporated various seminal constructs, culled from extant literature to measure both the motivators and inhibitors of consumers' attitude toward adopting m-payment services. The results of our study suggest that factors, such as ease of use, relative advantage, trust, age, and income do tend to have strong and positive influence on the attitude toward adopting m-payment services. Specifically, we aim to fill the research gap by proposing a research model that captures this behavior in the Indian context. The research framework given in Figure 1, has

been structured based on previous literature and seven constructs, namely, perceived usefulness, perceived ease of use, perceived enjoyment, perceived trust, perceived security, perceived mobility, and satisfaction; these were used as independent variables. Continuance intention to use m-wallet applications was used as a dependent variable. Additionally, we also measured the varying effects of these relationships among two types of users, (i.e. light versus heavy users).

Objectives of the Study

The primary objective of this paper is to empirically validate the proposed research model explaining the post-adoption behavior of m-wallet customers in India. Further, the study also aims to explore the post-adoption behavioral differences among m-wallet users, based on their usage patterns.

Thus, we propose the following hypotheses:

- H1: Perceived usefulness positively influences continuance intention of m-wallet applications
- H2: Perceived ease of use positively influences continuance intention of m-wallet applications
- H3: Perceived enjoyment positively influences continuance intention of m-wallet applications
- H4: Perceived trust positively influences continuance intention of m-wallet applications
- H5: Perceived security positively influences continuance intention of m-wallet applications
- H6: Perceived mobility positively influences continuance intention of m-wallet applications
- H7: Satisfaction positively influences continuance intention of m-wallet applications
- H8: The effects of determinants on continuance intention would significantly vary between light users and heavy users.

RESEARCH METHODOLOGY

We collected the empirical data through an online survey, using a leading online/mobile survey website in India. The survey questionnaire comprised different parts, such as demographic information, general technology behavior, and specific behavior towards m-wallet applications. The target respondents of the survey included existing customers of m-wallet services. The survey resulted in 325 usable responses, and the same was used for further analysis. The measurement scales of the constructs were drawn from previous technology adoption and usage literature, and modified based on this study's context. For instance, indicators for measuring both PU and PEOU were taken from Davis (1989); items of perceived enjoyment were adopted from studies of Thong et al., (2006); Lin and Bhattacharjee, (2008). Questions of perceived trust were adopted and then modified from Gefen et al. (2003) and Kim et al. (2009). Items of perceived security were adopted from Cheung and Lee, (2006) and Susanto et al., (2013). Indicators of perceived mobility with the use of m-wallet applications were drawn from Baek et al. (2011) and Wang and Li (2012). Finally, items of satisfaction and continuance intention were adopted and further modified from Bhattacharjee (2001). Notably, the items measuring all constructs were based on a 7-point Likert scale, with anchors ranging from 1 (strongly disagree) to 7 (strongly agree). The data analysis was performed with the help of most used statistical package, that is, IBM SPSS Version 18.0.

Among the sample respondents, 58.8% were men, while the rest were women. Most (63.7%) of the respondents were within the age group of 18–35 years. Further, 69.5% of the participants were either graduates or post-graduates; 77% were salaried, while 42.8% belonged to the income group of Rs. 40,000–Rs. 80,000 per month. Most participants (77%) used smartphones with an Android operating system. Further, it may be noted that debit/credit cards, along with internet/mobile banking services (with 64.3%) were the most frequently used payment methods, followed by m-wallet applications (24.0%). 34.8% were using m-wallet services for more than 2 years, and 45.8% believed that m-wallet applications could be a complete and feasible alternative for cash transactions. Online recharge, ticketing, bill payments, and shopping were some of the primary purposes of using m-wallet services. Finally, about 49.2% of the respondents spent <Rs. 2000 (monthly average) on their preferred m-wallet services.

RESULTS AND DISCUSSION

We employed factor analysis as a primary tool to confirm the factor item loading, and assess the reliability of the measures. Notably, before conducting factor analysis, the requirement of minimum number of sample size must be achieved, that is, a recommended ratio of 1:10, at least 10 observations for each item to be used. This was met, as the total usable sample cases were exceeding the minimum requirement. In addition, it is recommended that the constructs used should be correlated, to execute factor analysis, and the same was confirmed as given in Table 1.

Table 1: Component correlation matrix

Variables	PERC_USF	PERC_EOU	PERC_ENJ	PERC_TR	PERC_SEC	PERC_MOB	SATSFN	CONT_INT
PERC_USF	1							
PERC_EOU	0.426**	1						
PERC_ENJ	0.403**	0.377**	1					
PERC_TR	0.391**	0.599**	0.374**	1				
PERC_SEC	0.164**	0.161**	0.226**	0.182**	1			
PERC_MOB	0.504**	0.535**	0.546**	0.488**	0.296**	1		
SATSFN	0.395**	0.462**	0.395**	0.408**	0.241**	0.453**	1	
CONT_INT	0.499**	0.569**	0.445**	0.489**	0.187**	0.520**	0.551**	1

PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy	0.874	
Bartlett's test of sphericity	Chi-square	10,162.940
	df	325
	Sig.	0.000

Then, we conducted the Bartlett's sphericity test to evaluate the appropriateness of factor analysis. The results given in Table 2 indicate that sufficient correlation does exist among the constructs used. Further, the results of KMO measure of sample adequacy and the inter-correlations among the constructs were 0.874, which exceed the recommended value of 0.50. Additionally, it may be noted that the method used in factor analysis was principal component analysis and varimax as a rotation method. With the above criterion, eight factors were extracted, explaining the total variance of 83.07%, as given in Table 3. The results of rotated component matrix, as given in Table 4, reveal that loading of most of the items belonging to eight factors was above the recommended value of >±0.70, except for six items which were excluded for further analysis.

The reliability measures of constructed used in this study are given in Table 5. We used multiple regression to test whether the constructs identified are indeed significant predictors of m-wallet users' intention to continue, using their preferred m-wallet applications.

In this analysis, we performed a standard multiple regression with seven constructs (PERC_USF, PERC_EOU, PERC_ENJ, PERC_TR, PERC_SEC, PERC_MOB, and SATSFN) as independent variables and continuance intention as the dependent variable. The F-test was found to be significant, indicating that the hypotheses of $R^2 = 0$ can be rejected. Table 6 shows that R^2 of 0.499 was obtained; and three constructs were found to be insignificant in influencing continuance intention of m-wallet users. PERC_USF, PERC_EOU, PERC_ENJ, and SATSFN were identified as important factors influencing user's intention to continue, using m-wallet applications. The coefficient table [Table 6] provides insights on how each variable contributes to the explanation of continuance intention.

Satisfaction was the most important influencing factor of continuance intention, contributing 25.5% of variance in continuance intention ($\delta\zeta = 0.255$, $P < 0.001$) followed by perceived ease of use which accounts for 23.3% ($\delta\zeta = 0.233$, $P < 0.001$). Perceived usefulness contributed 17.6% of variance in continuance intention ($\delta\zeta = 0.176$, $P < 0.001$) followed by perceived enjoyment which accounted for 10.1% ($\delta\zeta = 0.101$, $P < 0.05$).

Perceived security, perceived mobility, and perceived trust did not contribute significantly. The statistical results above support the four major hypotheses (i.e. H1, H2, H3, and H7). Meanwhile, the assumed significant effects of perceived security, perceived mobility, and perceived trust cannot establish relationship on continuance intention; hence, H4, H5, and H6 were not supported. Next, the need for evaluating the differences between light users and heavy users on their post-adoption behavior was evaluated with the help of independent sample *t*-test, by comparing mean scores of predictors and continuance intention for these two groups.

Table 7 reveals that all constructs varied significantly between the two studied groups with $P < 0.001$. The t-statistic given in negative for all constructs implies that the mean scores for Group 2 (heavy users) were higher than the mean scores for Group 1 (light users). Hence, heavy users are characterized on average of having higher level

Table: 3: 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	10.803	36.011	36.011	10.803	36.011	36.011	4.369	14.562	14.562
2	3.305	11.016	47.027	3.305	11.016	47.027	3.546	11.819	26.382
3	2.790	9.300	56.326	2.790	9.300	56.326	3.160	10.533	36.914
4	2.412	8.040	64.367	2.412	8.040	64.367	3.106	10.352	47.266
5	1.824	6.080	70.446	1.824	6.080	70.446	3.069	10.231	57.498
6	1.510	5.034	75.480	1.510	5.034	75.480	2.922	9.739	67.237
7	1.163	3.877	79.357	1.163	3.877	79.357	2.757	9.189	76.426
8	1.114	3.712	83.069	1.114	3.712	83.069	1.993	6.643	83.069

Table 4: Rotated component matrix

Items	Component							
	PERC_USF	PERC_SEC	PERC_ENJ	CONT_INT	PERC_EOU	PERC_TR	PERC_MOB	SATSFN
PERC_USF1	0.861							
PERC_USF2	0.892							
PERC_USF3	0.880							
PERC_USF4	0.923							
PERC_USF5	0.762							
PERC_EOU1					0.799			
PERC_EOU2					0.769			
PERC_EOU3					0.823			
PERC_ENJ1			0.836					
PERC_ENJ2			0.798					
PERC_TR1						0.940		
PERC_TR2						0.956		
PERC_TR3						0.944		
PERC_MOB1							0.847	
PERC_MOB2							0.853	
PERC_MOB3							0.893	
PERC_SEC1		0.928						
PERC_SEC2		0.929						
PERC_SEC3		0.930						
PERC_SEC4		0.889						
CONT_INT1				0.717				
CONT_INT2				0.804				
CONT_INT3				0.811				
SATSFN1								0.658
SATSFN2								0.788
SATSFN3								0.754

PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention

Table 5: Reliability statistics

Measurement items	Original number of Items	Number of items retained in this study	Cronbach's alpha
PERC_USF	5	5	0.955
PERC_EOU	4	3	0.813
PERC_ENJ	4	2	0.921
PERC_SEC	4	4	0.949
PERC_TR	4	3	0.966
PERC_MOB	4	3	0.959
SATSFN	4	3	0.767
CONT_INT	3	3	0.893

PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention

Table 6: Results of multiple regression statistics

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B	Std. error	Beta		
1					
(Constant)	2.222	0.745		2.983	0.003
PERCMOB	0.091	0.056	0.091	1.619	0.106
PERCUSF	0.135	0.037	0.176	3.636	0.000
PERCTR	0.121	0.065	0.096	1.843	0.066
PEOU	0.299	0.070	0.233	4.269	0.000
PERCENJ	0.115	0.056	0.101	2.062	0.040
PERCSEC	–0.012	0.065	–0.008	–0.186	0.852
SATSFN	0.372	0.071	0.255	5.270	0.000

PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention

Table 7: Independent *t*-test

Construct	Mean	Standard deviation	t-value	η^2	*P*-value
PERC_USF	17.9938	3.48984	–7.020	0.136	0.000*
PERC_EOU	9.2892	2.08523	–4.938	0.187	0.000*
PERC_ENJ	8.7938	2.36695	–5.069	0.074	0.000*
PERC_TR	9.1938	2.12770	–4.068	0.092	0.000*
PERC_SEC	6.4585	1.74509	–3.519	0.017	0.000*
PERC_MOB	9.0246	2.68616	–6.139	0.114	0.000*
SATSFN	9.3908	1.83196	–6.288	0.133	0.000*
CONT_INT	13.7815	2.67562	–6.195	0.118	0.000*

*Significant at *P*<0.01 level, PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention

of perceived usefulness, perceived ease of use, perceived enjoyment, perceived trust, perceived security, perceived mobility, and continuance intention, as compared to light users. However, the statistical significance may not necessarily reveal that the differences are realistic and practically relevant.

Further, to measure the magnitude of the differences of mean scores, the ω^2 was calculated in SPSS. Based on the interpretation schemes given by Cohen (2013), for the ω^2 value, the effect size was smaller for perceived security, perceived enjoyment, and perceived trust with $\omega^2 < 0.10$, implies that <10% of the variance in perceived security, perceived enjoyment, and perceived trust can be explained by user types. However, the differences were found to be large for perceived mobility, continuance intention, satisfaction, perceived usefulness, and perceived ease of use, where ω^2 values were ranging between 0.114 and 0.187, that user groups can account for 11–18% of variance in the respective variables.

Finally, multivariate analysis of variance (MANOVA), a type of multivariate analysis, was used to test the hypotheses regarding the effect of one or more independent variables on two or more independent variables (Hair et al., 2006). In this research, we performed MANOVA to statistically test the significant differences between two user types on a linear combination of dependent variables. Table 8 shows that Wilks ●, most used statistics to assess the significance of difference between groups, was at higher significant levels for all linear relationships ($P = 0.000$).

The m-wallet customers' post-adoption behavior, that is, continuance intention, was found to be significantly varying based on their usage. In the table above, tests of between-subjects effects provide information on whether significant differences also apply to each of the dependent variables. The results show that significance level for all relationships was ≤0.001; thus, it may be concluded that light users and heavy users differ significantly on all variables. Hence, the corresponding hypothesis H9 is supported.

Table 8: MANOVA statistics

Source	Multivariate test		Between-subjects effects	
Dependent variable	**Wilks λ**	**Sig.**	**F**	**Sig.**
Type of user				
PERC_USF	0.840	0.000	49.284	0.000
CONT_INT			38.375	0.000
Type of user				
PERC_EOU	0.884	0.000	24.381	0.000
CONT_INT			38.375	0.000
Type of user				
PERC_ENJ	0.874	0.000	25.690	0.000
CONT_INT			38.375	0.000
Type of user				
PERC_TR	0.889	0.000	16.546	0.000
CONT_INT			38.375	0.000
Type of user				
PERC_SEC	0.876	0.000	12.385	0.000
CONT_INT			38.375	0.000
Type of user				
PERC_MOB	0.861	0.000	37.691	0.000
CONT_INT			38.375	0.000
Type of user				
SATSFN	0.861	0.000	39.537	0.000
CONT_INT			38.375	0.000

*Significant at $P<0.01$ level, PERC_USF: Perceived usefulness, PERC_EOU: Perceived ease of use, PERC_ENJ: Perceived enjoyment, PERC_TR: Perceived trust, PERC_SEC: Perceived security, PERC_MOB: Perceived mobility, SATSFN: Satisfaction, CONT_INT: Continuance intention, MANOVA: Multivariate analysis of variance

CONCLUSION

The objective of this study was to identify the significant determinants of m-wallet users' continuance intention, and how this behavior differs among light and heavy users. The proposed research framework was empirically validated through multiple regression analysis; and we found that about 50% of the variance on continuance intention are actually explained by four significant predictors, namely, perceived usefulness, perceived ease of use, perceived enjoyment, and satisfaction. Thus, it may be affirmed that the research model does exemplify good explanatory power to meet the research objectives. It is also clear that this study has been unique in its approach, by not only proposing a research model measuring the post-adoption behavior of m-wallet customers in India, but also confirming its practical applicability through empirical validation of data using multivariate statistical techniques (factor analysis, multiple regression, and MANOVA).

This study contributes significantly to the post-adoption behavior of mobile technology literature. This model was developed based on various theories such as TAM and ECM and also based on various research studies focusing on post-adoption behavior of various technological systems in general and mobile technology in particular. The study confirmed the significant impact of perceived usefulness, ease of use, enjoyment, and satisfaction on customers' intention to continue using mobile wallet services in India. Finally, the study also offers key insights into m-wallet service providers by highlighting the need for understanding varying degree of customers' perceptions and the influence of their perceptions on continued usage intention of mobile wallet applications. The study clearly highlights the need for understanding significant determinants of continuance intention of m-wallet customers in India, which would possibly help marketers of these services to be more focused, and thereby design their strategies accordingly. Further, it clearly states the need for distinguishing m-wallet users, based on their intensity of usage, which would help practitioners to understand the market segments better and increase profitability through customer loyalty.

SCOPE FOR FUTURE RESEARCH

Although, the study's sample size is relatively large, the study did not capture the differences in responses from rural, semi-urban, urban, and metropolitan cities across the country. Future research should identify the variances in post-adoption beliefs of m-wallet customers, based on geographical (rural vs. urban), educational (high vs. low), income (high vs. middle vs. low), psychographic characteristics (personality and attitude), etc. This study was primarily cross-sectional in nature, and did not capture the varying level of perceptions of m-wallet users from time to time. Future studies could be extended by focusing on understanding the perceptions of m-wallet users during different points of time through longitudinal study, with an objective of uncovering the changes in their post-adoption behavior.

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CONFLICTS OF INTEREST

This is to bring to your kind consideration that this research work has no conflicts of interest.

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