A R T I C L E

Factors Affecting Adoption of M – Wallets: Moderating role of Financial Incentives

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Abstract

This research has investigated the factors which has affected consumers attitude towards adoption of mobile wallet and it has explored that does attitude has any impact on consumers adoption towards mobile wallet? The study has evaluated the moderating effect of financial incentives between attitude and adoption of mobile wallet. The study uses the sample of 454 college-going students, professionals and non-professionals. Confirmatory factor analysis was done because the measurement tools had adapted one. Further, Structural Equation Modeling was used to validate the relationship between different variables. Moderator was assessed using PROCESS Macro where financial incentives have taken as moderator. The result of the study highlights that first, there is a significant impact between perceived ease of use, perceived usefulness, subjective norms, trust and situational factors on attitude of consumers. Second, it was evident from the result of the study that attitude has significant impact on adoption of mobile wallet. Third, it was also found that financial incentives have significant moderating effect between attitude and adoption of mobile wallet. The study is done with a sample of 454 with two types of people first, college students, professionals and non-professionals from Delhi–NCR Region only. The result of the study cannot be generalized in case of users belonging to other groups and places. The findings of the research suggest that as the number of people using smart phones are increasing, people are findings it easier to make payment through various mobile applications. These mobile apps can be customized keeping in mind the nature of users. Simplification of application and some visible incentives will definitely affect the attitude of people to use mobile wallet. The Uses of wallet can be popularized among people in B and C grades cities also. The current study has contributed in the domain of financial transactions. The study has added two new variables i.e., situational factors and financial incentives. The result of the study suggests that situational factors have significant impact on attitude whereas financial incentives have moderating effect between attitude and adoption of mobile wallets.

Key words: Mobile Wallet; Financial incentives; Trust; Attitude; Moderation.

1 Introduction

During the year 1990 advent of e-commerce has evolved a unique way to do business and satisfied the need of business world. Thereafter, rapid growth of e-commerce has taken place and have changed to a great extent and provided benefits to customers and business world all across the globe. Now a days a great number of organisations started doing business through this way. It is clear from the evidence of it that e-commerce has a promising and prosperous future ahead. Due to advent of its business started making huge number of benefits out of it. In case of e-commerce mode of electronic payment was considered as the spine of it. It was a very crucial aspect which
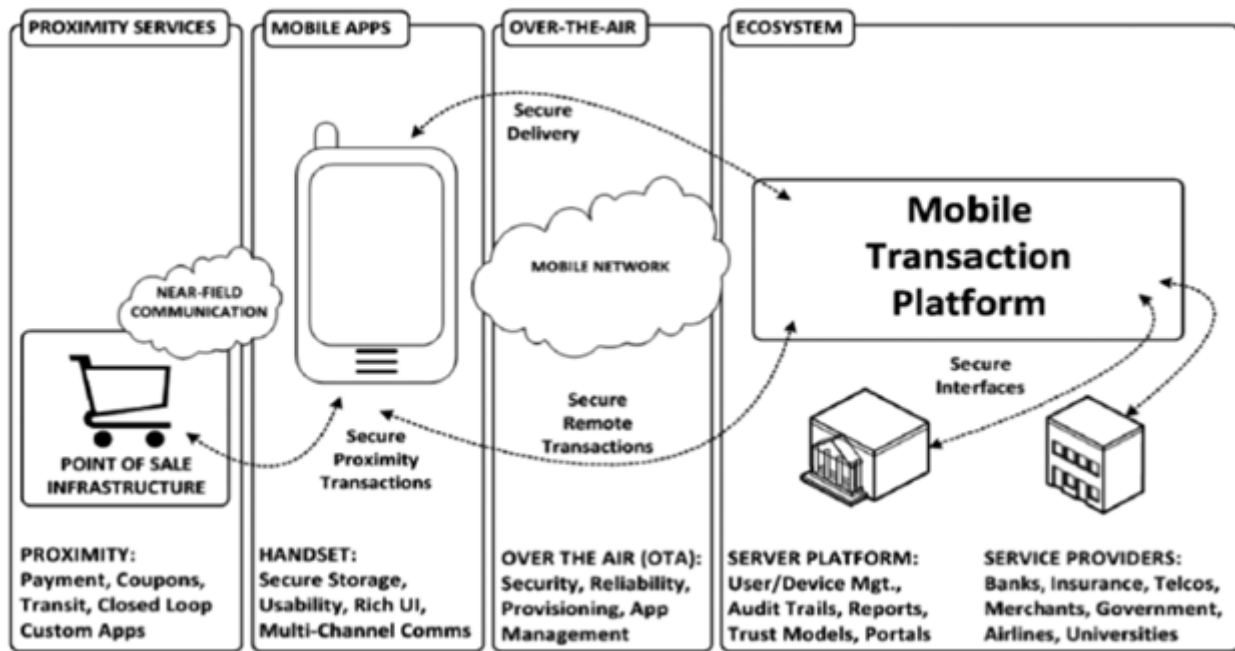
Figure 1. The official mobile wallet ecosystem
Source: Pitroda & Desai, 2010

was associated with this. These payment services take the help of information and communication technologies (Bezovski, 2016). Now a days, smartphones are the essential parts of human life. Because of easy availability and cheaper price of its users have increased drastically (Doan, 2014). If we look back in history, mobile wallet is created from the idea of "digital wallet". In the year of 1996, the founder of digital wallet has filed the patent in USA. That patent was known as "Sam Pitroda Patents). The idea of digital wallet is consisting of a kind of liquid crystal display which is not bigger than plastic cards of the bank. Which was having a touch sensitive screen and a very simple UI that helps the user to flip through these wallets as we do in case of our leather wallet (Pitroda and Desai, 2010). Here are two probable opinions that are associated when we see the ecosystem of wallet. The developer has introduced an extensive ecosystem of wallet which has sound basis of technology (Pitroda and Desai, 2010).

The technology-based payment system has demonstrated the needs of consumer that can be real or perceived, their adoption of particular mobile payment system will become benchmark for other consumers.

It is found that Japan is always at the forefront where these kinds of technology are successfully developed and have integrated mobile payment system since very early as compared to any other part of the world. Domestic companies have played important role into it (Amoroso and Magnier-Watanabe, 2012; Nassuora, 2013). Technology like mobile have become widespread available and it has great advantage of reaching to customers in the remotest place. That has made firms to reach customers easily. It has lots of advantages in comparison to other technologies. That make it possible to connect with anyone in anywhere. The information which are provided are of customized information and services used at individual level. Which provides quick answer to the users (Dastan and Gurler, 2016; Aydin and Burnaz, 2016). There is an important concept which is associated with mobile wallet that is carriers. They are the mobile service providers. It varies from country to country. Different countries have different carriers. In most of the countries they are deciding the nature of software and hardware will be used in the mobile devices which enables to connect with the network (Stringer, 2014).

Uses of mobile payment is a new application in the form of mobile wallet which has functionality to supplement traditional wallet or anything else whichever was used for payment. M-wallet is a very advanced multi-purpose application which includes various elements like loyalty cards, membership cards, travel cards and most important one is transaction by it. It has essential quality which stores some sensitive and important information like pin codes, credit cards details, passports, various online shopping account, details about insurance policies etc. it is having multipurpose and multi uses quality. In most of the Asian countries' wallets have become an important phenomenon (Shin, 2009; Liebana-Cabanillas et al., 2014b).

The technology adoption model is very much influenced by the theory of reasoned action. Where it has been explained that behavioural intention gets impacted by subjective norms and attitude towards any action and in totality, it explains that how people choose to act. The TAM was a kind of efforts which tries to apply psychological factors on IT and computer adoption. It is believed that perceived usefulness and perceived ease of use play an important role in influencing an individual's attitudes with regard to use of technology. Therefore, these are associated with actual use of technology (Davis, 1989; Doan, 2014). Now a day's Smart phones have taken important

place in individuals' life. Which has become a convenient tool for any kind of digital payments. Due to increasing the number of smart phones and their uses, it is believed that digital wallets are going to play an important role in the stride of cashless society Apanasevic (2013); Yadav (2017). (Chen, 2008) examined which determinants affected consumer use of mobile payments (m-payments). Consumer acceptance was determined by four factors: perceived use, perceived ease of use, perceived risk, and compatibility. (Shin, 2009) examined mobile wallet adoption by using the UTAUT model and proposed four additional constructs of security, trust, social influence, and self-efficacy.

The motivation for this research has come from different factors. Firstly, it is the demonetization of the currency in the year 2016. (Kaur, 2017) in her study concluded that because of demonetization, Nov 2016, India is taking a step forward for the digital money. It was a major step for making Indian Economy as Indian Card Economy. Chauhan (2017), in her study also narrated that demonetization have provided new opportunities in every sector of the economy to use digital mediums, the sector which benefited the most is the banking sector. Secondly, mobile wallet is currently a new word. In other words, we can say it is a trending phenomenon. The discussion regarding this topic has taken place in technical forums and by financial service providers. People are coming across this word so frequently but have very less knowledge about mobile wallet.

At the time of research, the researcher has explored that how consumers are perceiving the idea of mobile wallet and using new technological services. As a smart phone user even, we would like to explore the full potential of our smart phones. These desires are very much similar among other smartphone users too. With the integration of existing theories of TAM and theory of reasoned action, the current study tries to empirically assess the research model in case of mobile wallet adoption. The whole world is witnessing a rapid development in the area of e-commerce in current years. Extensive use of mobile phone devices has an important role in the expansion of e-commerce businesses. It is directly associated with the increase of trade volume, introduction of various types of devices, emergence of different new products. One of the latest such product is wallet i.e., mobile wallet. There is a need to understand and uncover the various factors which are affecting customer attitudes with regard to adoption of mobile wallet. Keeping in mind the above-mentioned thoughts, the researcher would like to explore the factors playing important role towards adoption of mobile wallet. Also, various studies done by researchers, like the one undertaken by Singh and Rustagi (2018) wherein they concluded that there is a significant difference in the adoption pattern for mobile wallets among the different age groups. Another finding of the study stated that there also exists a difference in the adoption rate of mobile wallets and other sources of the cashless payment modes between students and businessmen. So, it is important to study the adoption pattern of the mobile wallets. The current study has examined the factors affecting attitude of customers of mobile wallet users and whether attitude has any significant impact on adoption of wallet. So, in order to understand the factors and how financial incentives work as a moderator between attitude and adoption of a customer.

Recently adoption of wallet in India has become a common norm among people. The researchers want to know that as financial incentives play an important role in case of purchasing other products/services, similarly it happens with adoption of wallet or not. This factor has become the motivation behind conducting this study.

Here in this study, the main research question is that whether financial incentives have any significant moderating effect between attitude and adoption of M-wallet? As the research gap is concerned it is found that Indian customers are giving preference to the services and products where financial incentives are provided. It is evident from the previous researches that attitude has significant impact on adoption of any products and services. Therefore, this study has examined the moderating effect of financial incentives which is none of the previous studies have been explored. This study is new keeping in mind Indian customer base.

The current research will be of great use of people involved with business to have more market shares. It will also be useful for individuals like professionals, service man, students to increase the knowledge regarding mobile wallets and its uses. The current study has done keeping in mind technological advancement w.r.t. financial services in India in 21st century and attitudinal changes happening with consumers.

2 Literature Review

2.1 Perceived Ease of Use and Perceived Usefulness

It was found that the factors consumers' perceived usefulness, perceived ease of use, trust and the relative advantage has significant impact on consumer adoption with respect to mobile wallet. (Marumbwa and Mutsikiwa, 2013; Zhong et al., 2013) Some other studies which also has found that ease of use and usefulness helps in developing attitude among consumers. It was also clear from the study that security concerns have less influence on effect of consumer attitude. It was also observed that social influence has insignificant impact on consumer's attitude. Aydin and Burnaz (2016); Yang and Jolly (2009); Liebana-Cabanillas et al. (2014a,b); Dahlberg et al. (2015); Thakur and Srivastava (2014); Madan and Yadav (2018) evaluated numerous studies on mobile payment systems and initiate that perceived ease of use and perceived usefulness were the utmost powerful aspects to regulate behavioural intentions of consumers.

Hypothesis 2.1. *There is significant role of perceived usefulness in the attitude development towards m-wallets.*

Hypothesis 2.2. *There is significant role of perceived ease of use in the attitude development towards m-wallets.*

2.2 Trust

It is found that mobile wallet has made peoples life comfortable for 24x7 online transaction process. Security and privacy were found important components of trust. Trust is a very important factor which determine the adoption of mobile wallet. (Sarika and S., 2018; Verkijika, 2018; Thakur and Srivastava, 2014; Madan and Yadav, 2018; Hemchand, 2016; Upadhyay and Chattopadhyay, 2015) The empirical findings of the studies have explored that trust, mobility and attitudes have significant positive impact on the adoption of Mobile Payment System. Whereas it was evident from the study that perceived usefulness and perceived ease of use have no significant impact on adoption of MPS. Moreover, perceived reputation has significant positive impact on trust. (Dastan and Gurler, 2016). It was evident from the result of the study that attitudes and intentions are positively impacted by security and trust. In the extended model. Furthermore, it was found that demographics have moderating relations among the factors found significant. (Shin, 2009; Pahwa, 2020) in his study stated that one of the major factors which affects the growth level of digitalized payment method system is the trust even in the rural regions. (Kumar et al., 2018) through their study proposed that trust is the important factor which affects the satisfaction level of the users.

Hypothesis 2.3. *There is significant role of trust in the attitude development towards m-wallets.*

2.3 Situational Variables

Situational factors in the current study includes the influence of environment on consumers towards payment. Like the customers has no option of payment rather than using wallet at the shop. Accepting money thorough wallet only. Like payment during covid at metro station was done through e- modes only. It is a study which is done in Indonesia, that has explored individual habits which has significant positive impact on individual behavioural intention towards uses of mobile wallet. (Rathore, 2016; Lee et al., 2015; ?) in their study have suggested that Technology Acceptance Mode provides a sound ground to explain the adoption of mobile wallet.

Hypothesis 2.4. *There is significant role of situational variables in the attitude development towards m-wallets.*

2.4 Subjective norms

The result of the study has indicated that social influence, performance expectancy, perceived risk, facilitating conditions, perceived values have significant impact on adoption of mobile wallet. It was also observed that effort expectancy was found insignificant in case of mobile adoption. (Madan and Yadav, 2016) The result of the study also revealed that subjective norms and behavioural control have significant impact on adoption of mobile wallet. (Bhatti, 1970; Yang and Jolly, 2009; Liebana-Cabanillas et al., 2014b; Yang et al., 2012; ?) in their study explored different attributes that have the capability to predict the adoption of interbank mobile payment service in a better way. Amongst them, intricacy, trialability, consequence certainty, community support, cost and communicability are significant factors which predict the intention of the users for the usage of mobile payment service. (Gupt, 2018; Mallat, 2007; Yang, 2015; Karjaluoto et al., 2010; Schierz et al., 2010; Teo, 2015) stated that social norms /influence affects the adoption rate.

Hypothesis 2.5. *There is significant role of subjective norms in the attitude development towards m -wallets.*

2.5 Attitude

It is observed from the previous studies that attitude, ease of use and usefulness have significant impact on users' intentions. Which has further influenced the adoption and satisfaction among consumers towards mobile wallet (Singh et al., 2020).

Hypothesis 2.6. *There is a significant role of attitude towards adoption of m-wallets.*

2.6 Financial Incentives

Islam et al. (2011) in their study have explored that pricing and cost, security and privacy and rich & fast information have significant impact on adoption of M-commerce. It was also evident in the study that Self-efficacy works as a moderator in the process of adoption of M-commerce. it is found that income and having bank accounts play an insignificant role in the use of mobile money services (Maradung, 2013) in their study found that financial incentives are crucial and have a positive influence on the adoption intention of NFC mobile payment mechanism. Wallet Thulsiram (2016) concluded in his study that customers pay low attention to various price related variables like discounts, cost savings etc. It has been stated that with the use of fines or incentives, one can control the customers externally regulated actions internally (Ryan and Connell, 1989). Apparent paybacks are similarly a significant feature; thus, the study proposes that ground-breaking announcement and valuing strategies must be introduced to attract more price conscious consumers, including cost reduction Nitin Nayak et. al. (2014).

Hypothesis 2.7. *There is a significant role of the financial incentives as a moderator in the relationship between the attitude and adoption of m-wallet.*
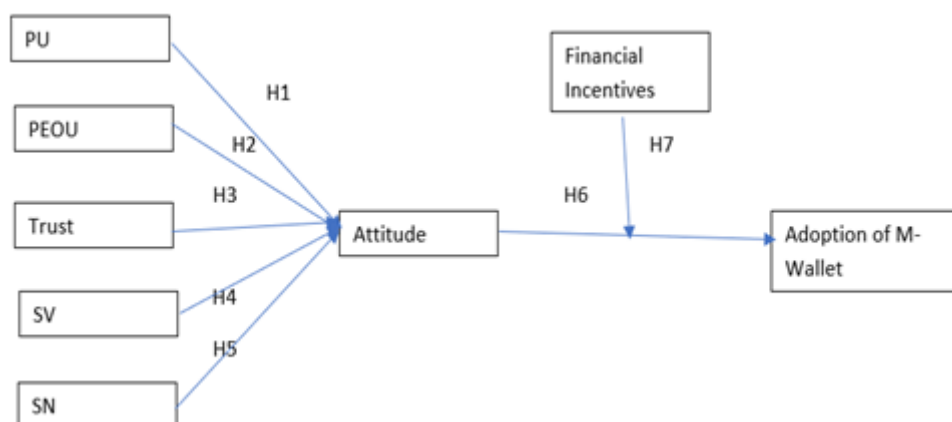

Figure 2. Hypothesised Model

Source: Researcher's own Model
Notes: PU; Perceived Usefulness, PEOU; Perceived Ease of Use, Trust, SV; Situational Variables, SN; Subjective Norms.

2.7 Methodology Adopted

Figure 1, shows the relationship between different variables used for the study and direction of relationship among the said variables. In the current study, eight variables namely, perceived ease of use, perceived usefulness, trust, situational variable, subjective norms, trust, adoption, financial incentives are used. This empirical study has been conducted to explore the factors which help in development of a positive attitude towards m – wallet which in turn helps in adoption of the m-wallets. A well-structured adapted questionnaire consisting of four major constructs and 29 statements was used to collect the responses via online survey method. Convenient sampling method has been used in this study. Most of the respondents of this study is college going students. They are millennials and having enthusiasm towards using m-wallet for the purpose of any kind of transaction. Since demonetisation younger generation or college going students are more prone to use m- wallets. That is why this study has deliberately targeted college going students and convenient sampling methods have been used for this purpose. To find the answer to objectives used in this study it was required to get the data from the college going students majorly. Though other groups also have been added and their opinion have been used. But for specific outcome desired respondents were needed for the purpose of this study. So, convenient sampling has been used for the same.

The hypothesized model in the study was tested using AMOS Software. The sample of the study constituted the residents (students / working / non -working professionals) of the Delhi-NCR region. The sample for this study includes both male and female candidates of all age. Data were collected from all regions of Delhi say north, east, west, south and central. Here 454 responses were collected. Standardized questionnaire was used for collection of the data. Out of the 600 questionnaires circulated, 525 questionnaires were received back. Out of 525 questionnaires, only 454 were found suitable for the purpose of this study and these questionnaires were completed in all respect. Convenient sampling was used for the collection of data.

To find the moderating effect of financial incentives which was asked as a dichotomous question, on the attitude and adoption of mobile wallets we have applied PROCESS macro by Andrew F. Hayes through SPSS.

Table 1 presents the demographic characteristics of the respondents. 75% of the respondents of the study are male while only 25% are female. Majority of the respondents belong to the age category of 24-30 years of age, representing nearly 41.9% of the total category. Another age group who has second largest frequency is of 30-40 years, which represent 249% of the total frequency. Respondents belonging to the age group of 24-30 years are only 14% while 18% of the respondents belongs to the category of above 40 years of age. Nearly 26% of the respondents belong to the category of earning more than 10 lakhs of annual income while nearly 18% belong to the income category of 7.5-10 lakh of annual income. The respondents earning less than 5 lacs annually are 27.8% of the total respondents while 27.3% belong to the category of earning between 5 lacs to 7.5 lac annually. The usage of internet is another factor studied in the study and nearly 49.5% of the population is having more than 15 hours week usage of internet while 22% belongs to the category of more than 5 hours but less than 10 hours of weekly usage. Only 8.3% of the respondents have the less than 5 hours /week internet usage. Around 19.8% of the respondents have more than 10 hours but less than 15 hours per week internet usage. 34% of the respondents of

Table 1. Demographic Profile of the Respondents

Demographic	Frequency	Percentage Frequency
Education		
Intermediate	94	20.07
Graduate	155	34.14
Postgraduate	130	28.63
Other	75	16.51
Gender		
Male	341	75.1
Female	113	24.9
Age		
Between 18–23	66	14.5
24–30 years	190	41.9
30–40 years	113	24.9
Above 40years	85	18.7
Income (Per annum)		
below 5 lakhs	127	27.97
5.0–7.5 lakh	124	27.3
7.5–10.0 lakh	84	18.5
Above 10lakh	119	26.2
Internet Usage per week		
Less than 5 hours/week	38	8.39
More than 5 but less than 10 hours/week	101	22.24
More than 10 but less than 15 hours/week	90	19.82
More than 15 hours/week	225	49.55

Source: Research's own output

the study are graduate degree holders whereas nearly 28% are post graduate.

Table 3 contains the values of Convergent/Discriminant validity along with reliability values of the different variables. As Kenny & Kashy (1992) recommended, the convergent validity of the construct can be observed with the help of coefficients statistical patterns while to ensure about the discriminant validity of the constructs, one need to check the statistics of co-variances between the different traits.

If the coefficient of correlation value is above 0.50 one can say that the convergent validity is present although the usually accepted and recommended value is above 0.70 (Carlson and Herdman, 2012). The terminology "discriminant validity" is used in ensuring whether constructs which are assumed to be unrelated are actually unrelated or not, as per Cronbach and Meehl, 1955 the concept actually stems out with the help of different theoretical approaches.

In case of conversant validity, the value of CR is more than 0.7, AVE is more than 0.5 and CR value is more than AVE whereas in case of discriminant validity *AVE > MSV* and *AVE > ASV* (Byrne & Barbara 2010). Table 3 fulfil the criteria of conversant validity whereas it fails to fulfil the criteria of discriminant validity. The values of Cronbach alpha for all the variables fall in the bracket of suggested criterion.

Table 4 contains the value of mean scores and value of standard deviation along with their correlation values. Table 4 highlights the highest mean values of variables which are Adoption, trust, situational variables. The values are 4.1036, 4.10 and 4.19 respectively. This table also highlights the value of r (coefficient of correlation) of the variables used in this study. The correlation between variables, attitude and adoption (.909) situational variable and attitude (.931) situational variable and trust (.910) subjective norms and trust (.917) subjective norms and situational variables (.889), perceived usefulness and trust (.824) perceived ease of use and perceived usefulness (.927) etc. The structural model was found to be a good fit having CMIN/DF = 2.176 (As high as 5.0, Kline, 1998), GFI = .897 (>.80, Mac Callum & Hing, 1997) CFI=.955 (>.90 , Hu & Bentler, 1999),TLI = .949 (>.90, Hooper et al., 2008) RMSEA = 0.051 (<0.07, Stinger, 1990 and between 0.08 to .10, Mac Callum et al., 1996). The proposed structured model of the study indicates that all paths are significant statistically as p-value of all are less than 0.05. First, from the Table 6 it is evident that perceived usefulness, perceived ease of use, trust, situational variable, subjective norm has significant impact on attitude Where β = (0.902), (.882), (.878), (.852), (.849), *se* = (0.015), (.021), (.016), (0.19), (.023)

Table 2. Reliability Statistics of Measurement Items

Construct	Measurement Items	Cronbach Alpha	Source	Factor loadings	Mean	SD
Perceived Ease of Use	PEOU1	0.921	Davis (1989)	.667	4.28	.938
	PEOU2			.744	4.18	1.050
	PEOU3			.721	4.24	.932
	PEOU4			.673	4.24	.932
	PEOU5			.690	4.24	.938
	PEOU6			.670	4.10	1.019
Perceived Usefulness	PU1	0.866	(Davis (1989), Kim et al., 2010)	.569	4.18	1.028
	PU2			.588	4.20	1.006
	PU3			.617	4.04	1.021
	PU4			.480	4.24	.917
	PU5			.586	4.13	1.005
Subjective norms	S1	0.862	(Fishbein & Ajzen, 1975; Taylor and Todd, 1995)	.731	4.24	.959
	S2			.718	4.31	.937
	S3			.731	4.33	.898
Adoption	Adop1	0.7	(Kim et al., 2010)	.814	3.6762	.89320
	Adop2			.800	3.6762	.91275
	Adop3			.645	4.0198	.79015
	Adop4			.624	3.6960	.89646
Attitude	A1	0.863	Gardner, 1985; MacKenzie and Lutz, 1989, Singh, Sinha and Liebana-Cabanillas, 2020;	.574	4.09	.983
	A2			0.767	3.90	1.107
	A3			.633	4.11	1.003
	A4			.567	4.06	1.029
Situational Variables	SV1	0.876	Chocarro, R., Cortiñas, M., & Villanueva, M. L. (2013)	.613	4.18	.985
	SV2			.660	4.28	.943
	SV3			.653	4.18	.999

Source: Researcher's own output

Perceived Usefulness. PU was measured through a 5-items scale. Out of original 7 items 5 items were used for current study which measured the perceived usefulness. Results revealed that coefficient of Cronbach's α = 0.866.

Perceived Ease of Use: PEOU was measured through a 6-items scale. Out of original 8 items 6 items were used for current study which measured the perceived ease of use. Results revealed that coefficient of Cronbach's α = 0.921.

Subjective Norms: SN was measured through a 3-items scale. Out of original 5 items 3 items were used for current study which measured the subjective norms. Results revealed that coefficient of Cronbach's α = 0.862.

Adoption: Adoption was measured through a 4-items scale. Out of original 6 items 4 items were used for current study which measured the subjective norms. Results revealed that coefficient of Cronbach's α = 0.7.

Attitude: Attitude was measured through a 4-items scale. Out of original 5 items 4 items were used for current study which measured the attitude towards mobile wallet. Results revealed that coefficient of Cronbach's α = 0.863.

Trust: Trust was measured through a 4-items scale. Out of original 7 items 4 items were used for current study which measured the trust. Results revealed that coefficient of Cronbach's α = 0.906.

Situational Variables: Situational variables was measured through a 3-items scale. Out of original 4 items 3 items were used for current study which measured the situational variables. Results revealed that coefficient of Cronbach's α = 0.876.

$t = (59.889), (41.975), (46.324), (54.33), (36.715)$ and $p < 0.05$ respectively . Hence the hypothesis Hypothesis 2.1, Hypothesis 2.2, Hypothesis 2.3, Hypothesis 2.4 and Hypothesis 2.5 are supported. Second, it is evident from the Table 5 that Attitude has significant impact on Adoption of m-wallets. Where $\beta = (0.936)$, $se = (0.020)$, $t = (46.332)$ and $p < 0.05$. The attitude is explaining a variation of 82 percent in the adoption of m-wallet. Hence the Hypothesis 2.6 is supported.

Table 7 highlights the moderation role of the financial incentives in the relationship between attitude and adoption of the m -wallets. The interaction effect that is the impact of financial incentives as a moderator is significant as the t value is 3.4181 and the p-value is also equal to 0. The lower limit of confidence level and upper limit of confidence level is also positive. The change in variation is as follows, $\Delta R2 = 0.0044$, $\Delta F = 11.68$, $p = 0.007$. Thus, the moderator variable (financial incentives) does have a significant effect on the relationship between attitude and

Table 3. Reliability and Validity Matrix

Construct	CR	AVE	Cronbach Alpha
Attitude	.865	.616	.863
PEOUSE	.922	.664	.921
PU	.866	.565	.866
SubNm	.862	.675	.862
SV	.879	.707	.876
Trust	.908	.712	0.906
Adop	.707	.396	0.7

Source: Research's own output

Table 4. Correlation Table

Variables	Mean	S.D.	Finance Incentives	Age	adop	Attitude	Trust	SV	SubNm	PU	PEOUSE	Gender
Finance Incentives	1.5705	0.49555	1									
Age	2.7357	1.24865	−0.341**	1								
adop	4.1036	0.74606	−0.126**	0.64	1							
Attitude	3.8271	0.72417	−0.092	0.043	0.909++	1						
Trust	4.1036	0.74606	−0.126**	0.064	1.000**	0.909++	1					
SV	4.1976	0.79129	0.133**	0.069	0.910**	0.931**	0.910++	1				
SubNm	4.0934	0.73853	−0.105*	0.058	0.917**	0.865**	0.917**	0.889++	1			
PU	4.1907	0.75632	−0.099*	0.031	0.928**	0.942**	0.928**	0.861**	0.852++	1		
PEOUSE	3.9723	0.73263	−0.119*	0.058	0.931**	0.892**	0.931**	0.842**	0.853**	0.927++	1	
Gender	1.5705	0.49555	1.000**	−0.341**	−0.126**	−0.092	−0.126**	−0.133**	−−0.105*	−0.099*	−0.119*	1

Source: Researcher's own output

adoption of m– wallet.

3 Findings and Discussion

The result of the study reflects that several variables are playing a significant role in the building of attitude towards m –wallets. Further attitude has significantly positive impact on adoption of m – wallet. The study finds that perceived usefulness is the most important factor that helps in the developing an adoption attitude towards m –wallet. The result so obtained in in consonance of previous studies Marumbwa and Mutsikiwa (2013); Zhong et al. (2013) Perceived usefulness is the ease with which a user is able to use m–m wallet for multiple functions like booking of e ticket, paying bills, recharging phones, bank transfers, online shopping etc. The more the user is able to use m –wallet the greater will be its usefulness. The next important variable in the adoption of m – wallet is the situational variable as highlighted in the present study. Situations play a very important role in adoption of any technology. When the user has no option to pay but only to use digital money, then he takes a step towards this digital money. The importance of situational variables is also highlighted by the previous studies of researchers like Rathore (2016); Lee et al. (2015); ?.

After the role of situational variable, the another most element is the trust factor. Trust is the positive or optimistic expectations which a user hold for the service provider. Usage of digitalized money demands the trust within the user community that their concerns, problems will be resolved by the service provider promptly, thus holds a very important place in adoption of digital money. In the study, there is a significant relationship between the trust and adoption attitude as found in various studies Sarika and S. (2018); Dastan and Gurler (2016); Shin (2009); Pahwa (2020); Kumar et al. (2018).

Another factor responsible for m-wallet adoption is the perceived ease of use i.e., the technology we are using

Table 5. Model Fit Indices

Fit Index	Goodness of Fit Index (GFI)	Comparative Fit Index (CFI)	Tucker– Lewis Index (TLI)	Chi–square/ degrees of freedom (CMIN/DF)	Root Mean Square Error of Approximation (RMSEA)
Achieved Value	.897	.955	.949	2.176	.051
Accepted Threshold Levels	>0.80	>0.90	>0.90	As high as 5.0	<0.07
	(Mac Callum & Hing, 1997)	(Hu and Bentler, 1999)	(Hooper et al., 2008)	(Kline, 1998)	(Stinger, 1990)

Table 6. Regression Results

		β	se	t	P	Durbin Watson
Model 1						
R^2 = .888	Constant	.046	.064	.712	.477	2.187
Dependent variables: Attitude	perceived Usefulness	.902	.015	59.892	.000	
Model 2						
R^2 = .796	Constant	.324	.085	3.822	.000	
Dependent variables: Attitude	Perceived Ease of Use	.882	.021	41.975	.000	2.089
Model 3						
R^2 = .867	Constant	0.25	0.067	3.726	0	2.066
Dependent variables: Attitude	Situational Variables	0.852	0.016	54.33	0	
Model 4						
R^2 = .826	Constant	.207	.079	2.605	.009	2.146
Dependent variables: Attitude	Trust	.878	.019	46.324	.000	
Model 5						
R^2 = .749	Constant	.354	.096	3.678	.000	1.921
Dependent variables: Attitude	Subjective Norm	.849	.023	36.715	.000	
Model 5						
R^2 = 0.826	Constant	.520	.079	6.608	.000	2.043
Dependent variables: Adoption	Attitude	.936	.020	46.322	.000	

Source: Researcher's own output
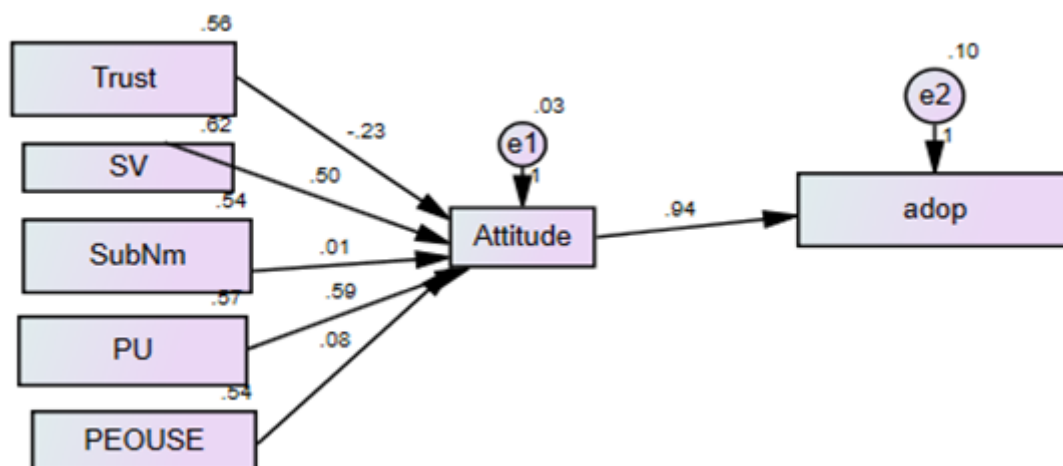
Figure 3. SEM Model

Table 7. Moderation Results of Attitude

	Coeff	se	t	P	LICI	ULCI
constant	1.593	0.2944	5.41	0	1.0141	2.1712
attitude	0.686	0.0747	9.1894	0	0.5395	0.833
financial incentives	−0.63	0.1679	−3.756	0	−0.9606	−0.3007
Interaction effect	0.146	0.0428	3.4181	0	0.0622	0.2306
R^2 = .0044, Change in F statistics = 11.68, p = .007						
Finance	effect	se	t	P	LLCI	ULCI
1	0.824	0.0353	23.574	0	0.7632	0.9021
2	0.979	0.0242	40.52	0	0.9314	1.0266

Source: Researcher's own output

will not require any additional hard work. Like other studies, our study also states that there exist a positive and significant relationship between adoption attitude and perceived ease of use. Subjective norm is another variable which plays a significant role in adoption of m- wallet as also mentioned in the previous researches like Marumbwa and Mutsikiwa (2013); Zhong et al. (2013).

Presence of financial attitude played a major role in building of attitude and adoption of m- wallet. Presence of financial incentives encourages users to adopt m- wallets more efficiently and effectively. Financial incentives are playing a significant role as moderator between the relation of attitude development and adoption of m-wallets. This is the major finding of the current study. The study finds that presence of incentives in monetary terms significantly strengthen the relationship between attitude and adoption of m- wallets. The presence of financial incentives boosts the confidence of the user for usage of m-m wallet.

4   Conclusion

The advent of new technology-based payment is addressing the real needs of consumers. The adoptions will decide whether any specific payment mode is required or not. The current research proposed a comprehensive model for evaluating various constructs on mobile payment adoption attitudes in India. We have extended this model using one new variable i.e., situational factors and it is evident from the result of the study that it has significant impact on mobile adoption attitude (Figure 2). The result of the study indicates that perceived usefulness is the most influencing determinant of mobile payment adoption in Delhi and NCR region of India. Other factors are perceived ease of use, situational factors, trust and subjective norm respectively. Indian are experiencing new type of technology in the area of making transaction through wallets. Paytm has become a standard here in India and people started using it for transactions. This research enables us to understand why and how consumers are using mobile wallet. There is a significant relationship found between constructs like perceived ease of use, perceived usefulness, trust, situational variable, subjective norms, trust, adoption, financial incentives are used and attitude of consumers towards adoption of mobile wallet. This study is based on the theory of technology acceptance model. Various constructs of this model have been explored extensively. In the current study the model includes situational variable in Indian context. Where it is found that this factor has strong consideration for adoption of mobile wallet. While exploring the relationship between variables explains the variances among constructs. In future studies, it can be evaluated that how entire mobile payment ecosystem works for having meta understanding for key players engaged in it. This ecosystem includes many players. It is also important to find out that how cultural factors are affecting adoption of customers to mobile wallet.

5   Implications of the study

With the demonetization in effect in the year 2017, the usage of digital wallet has seen an uprising trend. Seeing this uprising trend, most of the banks have come up with their e-wallets and also strengthen their e-services i.e., net banking services. Many e – wallets have been come up in the system. Existing m-payment service providers are also introducing innovative services to attract new users. As India can be seen as the evolving budding market for m-payment, this study provides a better understanding of the factors which help in easy adoption of the m-payment adoption attitude. The use of wallets is increasing day to day in the country. The academicians and researchers can explore the possibility of using m-wallets to pay against any kind of transaction. Researchers have huge opportunity to investigate in details regarding the adoption of mobile wallets in the country against traditional methods of payment. It is needed to understand the perception and usages behaviour of people from all walk of life. This research will help academicians and researchers to understand the behaviour of people living in metropolitan cities in the country. Keeping in mind similar practices it can be explored in the rural areas too. The study will also

be helpful for the managers of the digital money industry as they will get an insight about what is the area of focus for them. Managers in companies can devise their payment plan keeping in mind the usages of wallet. This will help them to attracts a major chunk of millennials, who are looking for such kind of payment options. Managers need to know the factors to which customers give due importance. Accordingly, they can plan for promotion of their products and will accordingly design their m-wallets. Policy makers in the country can consider it as a tool to bring transparency in the process of transaction in the country. The habit of using wallets can be promoted by policy makers to bring financial inclusion. This practice will be effective enough and bring more transparency in the transaction process.

6 Limitations and Future Scope for Study

The study was conducted in the region of Delhi-NCR and with a sample size of 454 respondents only. Most of the respondents were college going students and the findings of the study cannot be generalised in general. The study is conducted with the sample who is literate, thus the attitude of illiterate or semi -literate population is not added. This study can be conducted with large number of samples and with diverse backgrounds. This study is having huge potential to be explored in future as well. Many newer constructs can be added and moderation of demographic variable can be tested. Demographics of population play an important role in adoption of wallet. Studies can be conducted to explore the impact of demographics on adoption of wallet among samples. Adoption practices in rural area can also be explored. The further researches can be undertaken to know the adoption rate in a different culture or social beliefs.

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