

## Indian Shoppers Knowledge Outlook on Adoption of M-Wallet Services

**DR. Rambabu Lavuri**  
**DR. Ramlal Porika**  
**Mohan Megavath**

Department of Business management, Osmania University, Hyderabad,  
Telanagana, India.

Associate professor, **School** of Management National institute of technology (NIT), Warangal,  
Telanagna, India-506004

Ph.D-Research scholar, Dept. of Commerce, Osmania University

### ABSTRACT

The way people run their daily lives has undoubtedly changed with smartphones' introduction; life has become less complicated where all transactions and transfers take place on the web. This made it possible for the development of M-wallet services. The paper focused on understanding the Indian Shoppers' knowledge outlook on the adoption of M-Wallets. A sample of 228 (57.4%) shoppers selected from four districts of two states in India based on a random sampling process. Data analysis was evaluated using variance analysis, Pearson correlation analysis, and multiple regression analysis using 23.0 variants of the SPSS Package. The results show that exposure factors such as TV (31 percent) and peer group (22 percent) increase customer awareness of M-wallet services. Most customers (67 percent) use smartphones for online transactions; 29 percent use Google pay and are among the top five M-wallet providers. Customers use these M-wallets for food orders, travel tickets, and film tickets. Exposure information from different sources produces a positive view of M-wallet usage; likewise, shopper's experiences of M-wallet services positively affect their self-satisfaction after use.

**Keywords:** Knowledge, perception, M-wallet, Google Pay, Paytm.

### INTRODUCTION

The demonetization system in India has an incredible effect on a cashless transaction. It empowers debit cards, credit cards, digital transactions, and M-wallets to exchange money between the public. It has impacted Indian cashless transaction networks; therefore, M-wallets services have a significant impact on the increased use of cashless exchanges. M-wallets offer benefits through the organization, and people can use mobile applications to pay and receive payments. India has the largest Smartphone and mobile app segments on the global market for payment exchanges. Payment gateways and banks are moving towards a cashless transaction. In the meantime, mobile applications have a significant impact and one of the most extensive parts of the Government's "Cashless India" initiative; this will impact making India a cashless digital economy.

M-wallet service is a crucial catalyst for the development of the e-commerce market in India. Individuals can shop online, book movie tickets, flight or train tickets, and pay their bills using their credit and debit cards to make mobile payments. The total volume of M-payment transactions in India during the financial year (FY) 2016 was 2.9 billion and is expected to increase by 132 percent in the CAGR (compound annual growth rate) during the FY 2016 to the FY 2022 and to be approximately 460 billion before the end of 2022 (RBI report).

For more than one billion mobile users, India is convincing to open doors for mobile broadband, and the same expected for mobile payments and business transactions. India M-payment registered transaction value of INR 8.2 trillion in 2016 FY; and it is required to develop at CAGR 150 percent in FY 2016 TO FY 2022, contacting INR 2205 trillion. M-wallet is a relatively new concept in India and has gained notoriety in a limited capacity to focus time. The organization was offering M-wallet benefits essentially aimed at well-informed young people. M-wallet is incredibly valuable for moving cash from urban areas to provincial regions, even without a financial balance. M wallet shoppers appreciate the increased adaptability of secure transactions. In India, the M-wallet exchange amounted to about 20 times INR 206 billion in 2016, from INR 10 billion in 2013. M-wallet exchanges are among the fastest-growing paperless transaction modes, and most exchanges expect to go paperless in the next ten years (ASSOCHAM Report).

### REVIEW OF LITERATURE

Sujith et al., (2019) study focus on the tendency of energy customers towards M-wallets. The assessment reveals that most customers are thinking about m-wallets and using m-wallets to make an exchange. The organizations that have submitted m-wallet entries are satisfactory and lean towards m-wallets because of minute portions. Framework issues and security issues are significant issues addressed by m-wallets. Sarika & Vasantha (2019) illustrate M-wallets significantly impact

cashless exchanges using different types of portable wallets. The development of versatile apps and mobile wallets adds to financial development and cashless exchange. The study Sambaiiah and Sivakoti Reddy (2019) designed to investigate the elements that influence M-wallets' recognition in rustic India and how the variables investigated have seen esteem, usability, and certainty. Perceived security and self-sufficiency swayed by consumer loyalty to shopper's reliability. Shivangi Jaiswah and pankaj joge (2018) study reveal that to clarify the application and use of wallet cash received by different organizations and different elements that influence the purchaser's choice to receive a versatile wallet and the different hazards and difficulties faced by portable wallet shoppers. It argued that M-wallet's points of interest were the simplicity of exchanges, the verified profile, and accommodation in handling applications. Praiseya and Floence John (2018) have looked at factors affecting consumer preference over the M-wallet; it assumed that customers plagued common internet issues and have had trouble using a mobile wallet for small billing. Manikandan and Mary Jayakodi (2017) seek to explain the use and use of wallet cash supported by different organizations and components that influence the shoppers' choice of portable wallet and the different hazards and difficulties faced by versatile wallet shoppers.

Ramesh Sardar (2016) seeks to examine the urban population of Jalgaon City's inclination towards M-wallets and investigates the effect of segment factors on the use of M-wallets. The investigation found that instant transaction was a significant factor in the collection of mobile payments. Most respondents prefer to use M-Wallet Payment to move cash, followed by recharging mobile or DTH payments. Poonam Painuly and Shalu Rathi (2016) studied that the simplicity of exchange, the safety profile, and the consolation in taking care of the use yielded advantages of wallet cash and further inferred that business areas such as account, retail, cordiality excluding wallet cash and mobile transaction gadgets such as contactless and remote customer payment – organization and customer territory. Karminder Ghuman *et al.* (2016) concluded that variables such as security, accommodation, and innovation factors positively affect shoppers' M-wallet administration. "Special Mobile Wallet Integrated Model with Fully Accessible Characteristics to Create Structure (Hem Shweta, 2016 Neeharika *et al.*, 2014);" this study makes a vital contribution closer to the creation of cellular pockets that can paint across a variety of structures. As security is the primary issue in terms of technology-related documents, they have a look that addresses safety issues. Shwetu *et al.* (2014) have studied that factors such as accessibility, expressiveness, and belief that play a crucial role in promoting the acceptance of M-wallet schemes are the variables that drive the appropriation of M-wallets (Padashetty *et al.*, 2013). Rai *et al.* (2012) noted that M-wallets' security and payment protection enable customers to move away from traditional approaches. The Pousttchi and Dietmar G. Wiedemann (2009) study found a strong correlation between the apparent safety and security of the M-wallet installation and the perceived reliability. Four critical factors established have had an immediate impact on consumer expectations and lead use: easy-to-use, anticipation, social control, and stimulating conditions. The research Hsian Hui Lin *et al.* (2006) creates a sense of enjoyment that has no immediate effect on the decision to follow but a substantial effect on perceived ease and usability. The social effect reduces perceived risk, and more changes are made by suggesting that perceived enjoyment reduces perceived danger.

**OBJECTIVES AND HYPOTHESIS**

This research paper investigates the information outlook of Indian shoppers on M-wallet services; and the relationship between perception and satisfaction of M-wallet shoppers. Besides, this research investigated that the mean gap in the shoppers' demographic status would have an impact on their perception; and that it would have an impact on their satisfaction while using M-wallets. Hypotheses are focused on the study's objectives and on the exploration framework, prior affiliations established by the studies, and hypotheses formed to examine this investigation.

**Table 1 Hypotheses Construction**

<b>Hypotheses</b>	<b>Description</b>
H01	There is no significant mean difference between demographic status and their perception towards using M-wallet services.
H02	The exposure information does not positively affect the shoppers' perception of M-wallets' use.
H03	Customer perception has no good correlation with their Satisfaction with the use of M-wallets.
H04	Shoppers' perception (CP) and Satisfaction do not affect the usage of M-wallets.

## METHODOLOGY AND DISCUSSIONS

The present research study was conducted to evaluate the level of knowledge of the shoppers for the adoption of M-wallet services. A standardized questionnaire was created and circulated M-wallets users. Researchers used offline, online-surveys, and interview methods to test and evaluate the hypothesized relationship in this analysis. A random sampling method was used to collect data from Hyderabad city. After the pre-test, the questionnaire was finalised. The questionnaire consists of three sections. First section has five questions relating to demographic status of respondents, six general questions related to M-wallets usages in the second section, and the third section has 19 questions, those were divided up into four major variables, such as media exposure, Shoppers's perception, satisfaction and adoption of wallets. Five shoppers were related to the impact of exposure information on shoppers in order to raise awareness of M-wallet services; five items were used in the evaluation of shoppers' perception of M-Wallet services, and five items were designed to understand the degree of shopper's satisfaction with M-Wallet services; and four questions related to M-wallets adoption. Each question measured the different shopper's perceptions of the respondents towards M-Wallet services. The researcher used the Likert five-point scale to measure shoppers knowledge on adoption of M-wallets services in the four research variables with the scale of 5= strongly disagree, to 1= strongly agree on each factor to assess the perceptions of respondents. Overall, 397 questionnaires distributed under random sampling in Hyderabad; and 57.4 per cent (429) of the respondents were able to provide feedback (see table 1). The following techniques, such as descriptive statistics, ANOVA, Pearson correlation and multiple regressions were used to evaluate the research sample. The researcher used version 23.0 of the SPSS software to analyze the results; the MS word and Excel for tables and the editing of extracting data from SPSS production.

### Shoppers's demographic status

This section reveals that shoppers' status from the selected sample size and status reveals about the gender, income level, occupation status, educational profile, and age of the shoppers in the research study.

**Table 3 Shoppers Demographic status**

<b>Shoppers demographic status</b>	<b>F* (%)</b>
<i>Age in years (n=228)</i>	
<b>Below 20 years</b>	25 (11.0)
<b>20-35 years</b>	100 (43.8)
<b>35-45 years</b>	60 (26.3)
<b>45-55 years</b>	33 (14.5)
<b>55 and above</b>	10 (4.4)
<i>Gender (n=228)</i>	
<b>Male</b>	133 (58.3)
<b>Female</b>	95 (41.7)
<i>Education (n=228)</i>	
<b>Intermediate</b>	24 (10.5)
<b>Degree</b>	97 (42.5)
<b>Post-Graduation</b>	63 (27.7)
<b>PG and Above</b>	44 (19.3)
<i>Occupation (n=228)</i>	
<b>Students</b>	50 (22.0)
<b>Govt. Employees</b>	64 (28.1)
<b>Private Employees</b>	68 (29.9)
<b>Business</b>	46 (20.0)
<i>Family Income (Annual) (n=228)</i>	
<b>Less than 3 Lakhs</b>	30 (13.1)
<b>3 Lakhs to 4 Lakhs</b>	76 (33.4)
<b>4 Lakhs to 5 Lakhs</b>	78 (34.2)
<b>More than 5 Lakhs</b>	44 (19.3)

F\*: Frequency

## CONSEQUENCES AND DISCUSSIONS

Before the test hypotheses, there is a need to test reliability and validity test. Reliability checking is very significant, particularly in quantitative research. It is helpful to define the internal consistency of factors used to measure the independent variables and dependent variables.

**Table 4 Reliability and Validity**

S.No	Dimension	Shoppers	Cronbach's alpha	Mean	Std. Deviation
1	Exposure Information	5	0.771	3.5541	.92578
2	Shoppers perception	5	0.795	3.7061	.99283
3	Shoppers satisfaction	5	0.780	3.6345	.96078
4	Adoption of M-wallets	4	0.801	3.6827	.93357

Alpha values calculated one after the other for each variable for measuring validity and reliability of the destiny take a look at. The Cronbach's alpha values for Exposure Information, Shoppers's perception, satisfaction, and adoption of M-wallets were observed to be 0.771, 0.795, 0.780, and 0.801. The result values disclose all variable research data have good validity and reliability. So, this data helpful and could be used for research hypothesis testing.

**Table 5 Study variables and sources**

Factors	Source
Shoppers Perception (CP)	Praiseya and Floence John (2018); Sujith T S., Sumathy M., Anisha T (2019).
Shoppers Satisfaction (CS)	Sambaiah and Sivakoti Reddy (2019); Akhila Pai H. (2018); Praiseya and Floence John (2018).
Adoption of M-wallets (AMW)	Bott and Milkau (2014). Sambaiah and Sivakoti Reddy (2019); Akhila Pai H (2018); Praiseya and Floence John (2018)

**Table 6 Shoppers awareness and preference about M-Wallet**

Items	F* (%)
Which type of exposure is creating awareness about mobile wallet (N=228)	
<b>TV</b>	71(31.1)
<b>Newspaper and Magazine</b>	22 (9.6)
<b>Outdoor</b>	51 (22.4)
<b>Internet</b>	17 (7.5)
<b>Peer Groups</b>	67 (29.4)
Making payment online by usage of smart phones (N=228)	
<b>Yes</b>	153 (67.1)
<b>No</b>	75 (32.9)
Problems faced while using the M-wallet (N=228)	
<b>Yes</b>	97 (42.5)
<b>No</b>	131 (57.5)
Knowledge and preference among providers of M-Wallet services (N= 228)	
<b>Paytm</b>	50 (21.9)
<b>Mobikwik</b>	14 (6.1)
<b>PhonePe</b>	60 (26.3)
<b>Freecharge</b>	36 (15.8)
<b>Google pay</b>	68 (29.8)
Preferably to use M-wallets services to complete the transition below (N=228).	
<b>Recharge</b>	16 (7.0)
<b>Utility Bill Payments</b>	42 (18.5)
<b>Transportation</b>	68.(29.8)
<b>Food/Movie tickets</b>	65 (28.5)
<b>Online Shopping</b>	37(16.2)
Rate of recurrence of M-Wallet services per month (N=228).	
<b>Once</b>	12 (5.3)
<b>Twice</b>	30 (13.1)
<b>Thrice</b>	83 (36.4)
<b>More than thrice</b>	103 (45.2)

### **The results of Hypothesis testing**

#### **Results of ANOVA**

**H01: There is no significant mean difference between demographic status and their perception towards using M-wallet services.**

**Table 7 ANOVAs Results**

		Sum of squares	DF	Mean square	F	Sig.
<b>Age</b>	Between Groups	11.448	8	1.431	1.423	.090
	Within Groups	220.284	219	1.006		
	Total	231.732	227			
<b>Gender</b>	Between Groups	2.325	8	.291	1.199	.301
	Within Groups	53.092	219	.242		
	Total	55.417	227			
<b>Education</b>	Between Groups	2.871	8	.359	1.860	.000
	Within Groups	42.269	219	.193		
	Total	45.140	227			
<b>Occupation</b>	Between Groups	19.451	8	2.431	1.640	.005
	Within Groups	324.759	219	1.483		
	Total	344.211	227			
<b>Family Income</b>	Between Groups	12.343	8	1.543	3.420	.001
	Within Groups	98.799	219	.451		
	Total	111.142	227			

Table 7 reveals that ANOVA results show that shoppers' demographic status like age and gender were statistically meaningful in their perception of using M-wallet. F distribution value of age and gender is 1.423, 1.199, and their statistical values are more than significant. So this indicates that there is a mean difference of the Shoppers's age and gender with their perception towards using the M-wallet. The remaining demographic status like education, occupation, and family income means was not statistically significant because its statistical values were smaller than the significant value. Finally, this evidence reveals that Shoppers' demographic statuses have significant mean differences in education, occupation, and family income.

**H02: The exposure information does not positively affect the shoppers' perception of M-wallets' use.**

**Table 8 ANOVAs Result**

		Sum of squares	DF	Mean square	f	Sig.
<b>Exposure information</b>	Between Groups	14.260	8	1.782	2.949	.004
	Within Groups	132.381	219	.604		
	Total	146.641	227			

Table 8 discloses that exposure information has a statistically significant effect on shoppers' perception regarding using M-Wallet services. F distribution value of exposure information had 2.949 and sig. value is less than the p-value. Finally, the outcome shows that exposure information has a positive effect on the perception of shoppers.

**H03: Customer perception has no good correlation with their Satisfaction with the use of M-wallets.**

**Table 9 ANOVAs Result**

		Sum of squares	DF	Mean square	F	Sig.
<b>CP</b>	Between groups	23.647	8	2.956	5.559	.000
	Within Groups	116.449	219	.532		
	Total	140.096	227			

Table 9 discloses that the result of the ANOVA analysis. The test significance value of the correlation of Shoppers' perception and their satisfaction is .000; this is smaller than 0.05. Thus, Shoppers' perception has a good association with their satisfaction while using M-Wallet. Here, Alternative hypotheses firmly rejected, and strong probabilistic evidence exists to accept the Null hypotheses.



**H04: Shoppers' perception and Satisfaction do not affect the usage of M-wallets.****Table 10 ANOVAs Result**

		<i>Sum of Squares</i>	<i>DF</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<b>CP</b>	Between Groups	44.081	12	3.673	3.461	.000
	Within Groups	228.225	215	1.062		
	Total	272.306	227			
<b>CS</b>	Between Groups	22.519	12	1.877	2.516	.004
	Within Groups	160.345	215	.746		
	Total	182.865	227			

Table 10 shows that the perception of the shoppers (CP) has a significant effect on the adoption of M-wallets services, the F value of CP is 3.461, and the significance value is .000, which is lower than the p-value. Thus, the null hypothesis was rejected, and the alternative hypothesis is accepted. The shoppers' satisfaction is also statistically significant; the significance value of the test is 0.04, which is lower than the p-value. Therefore, Customer satisfaction has a significant impact on the adoption of M-wallets.

**Results of Pearson Correlation****Table 11 Correlation construction**

	<i>EI</i>	<i>CP</i>	<i>CS</i>	<i>AMW</i>
<b>EI</b>	1	.655** S	.566** S	.575** S
<b>CP</b>		1	.637** S	.503** S
<b>CS</b>			1	.657** S
<b>AMW</b>				1

\*\* :  $p < 0.001$ ; S: significant.

A person analysis was used to measure the quality of a direct relationship between selected variables such as EI, CP, CS, and AMW; these methods used in this research analysis were accurate with a coefficient ranging from 0.503 to 0.657 for variables at the 1% significance level. The results of the Pearson correlation ( $n=228$ ) between the four selected variables were shown. The correlation coefficient statistics reflect the degree of association between each variable constructs. EI had a significant impact with CP ( $r = 0.655^{**}$ ;  $p < 0.001$ ) and AMW ( $r = 0.575^{**}$ ;  $p < 0.001$ ) at 1% of the significance level. In the same way, CP had a degree of influence on CS ( $r = 0.637^{**}$ ;  $p < 0.001$ ); and AMW ( $r = 0.503^{**}$ ;  $p < 0.001$ ) at 1% of the significance level. CS had a good impact with AMW ( $r = 0.657^{**}$ ;  $p < 0.001$ ) at 1% of the significance level.

**Results of Multiple Regressions**

Table 12 Multiple Regression Analysis									
<i>M</i>	<i>IV</i>	<i>DP</i>	<i>R</i> <sup>2</sup>	<i>F</i>	Unstandardized coefficients		Standardized Coefficients	<i>t</i>	<i>Sig.</i>
					<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	EI	CP	<b>.243</b>	71.380	<b>.382</b>	.045	.378	8.449	<b>.000</b>
2	CP	CS	<b>.382</b>	41.208	<b>.305</b>	.048	.297	6.419	<b>.000</b>
3	CP	AM	<b>.404</b>	76.317	<b>.624</b>	.054	.602	11.509	<b>.000</b>
	CS	W			<b>.109</b>	.046	.125	2.384	<b>.008</b>

**Note: M: Model; IV: Independent Variable; DP: Dependent Variable; EI: Exposure information; CP: Shoppers perception; CS: Shoppers's satisfaction.**

This section reveals that the summary of multiple regression. Three models were developed to evaluate the association between predictors and dependent shoppers in the research study. Table 12 indicates that both three models' F-values were statistically significant at 71.380 (M-1), 41.208, (M-2) and 76.317 (Concerningnce to model 1, it illustrates that the EI from the different sources positively influences shoppers' perception towards M-wallet services ( $b = 0.382$ ,  $p \leq 0.001$ ); with 24.3 percent of the variance explained by the predictors. It helps to create more awareness among the shoppers about M-wallets adoption. Hence, exposure information had a positive effect on shoppers' perception. Model 2 implies that the shoppers' perception shown had a positive impact on their satisfaction level when used M-wallet services; and it was statistically significant ( $b = 0.305$ ,  $p \leq 0.001$ ) 38.2 percent of the variance caused by the independent shoppers on dependent variables. Finally, Model 3 showed

that CP ( $b=0.624$ ,  $p \leq 0.001$ ), and CS ( $b=0.109$ ,  $p \leq 0.001$ ) positively impacted AWW and that it was statistically significant, 40.4 percent cent of the variance caused by predictors.

## CONCLUSIONS, IMPLICATIONS AND FUTURE RESEARCH

Shoppers' attention to innovation is evolving rapidly, and growing awareness of innovation contributes to the increased use of M-wallet services in India. The study was performed to examine the understanding and happiness of shoppers regarding the use of M-wallets. Researchers were considered four key factors to assess the knowledge of Indian shoppers, such as Exposure information (EI), Shoppers perception (CP), Shoppers satisfaction (CS), and Adoption of the M-wallets (AMW). As per the research study findings, peer group and TV exposures increase the awareness and accessibility of M-wallets among shoppers. Current research study has shown that, among other M-wallets providers, Google pay is driving; most shoppers use M-wallets for transport purposes; a significant proportion of shoppers use M-wallets more than three times a month. The hypotheses concluded that age and gender have a substantial difference in perception regarding M-wallets' use; Exposure information has a significant effect on shopper's perception towards adopting-wallets services. It has played a pivotal role increase the awareness and accessibility of M-wallets among Indian shoppers. Similarly, shoppers have a positive relationship between their perception and the level of satisfaction with the adoption of M-wallet services. Finally, Shoppers' perception and level of satisfaction have a significant impact on adopting M-wallets services.

## FUTURE DIRECTIONS

Both those restrictions nor those of the past applied to the M wallet service undertaking. This study discussed the Indian Shoppers' knowledge perspective on the adoption of M-wallet services. The research inquiry was limited to shoppers from India's recently formed province of Telangana. A comparable form of research should be accessible, geographically, city-wise, state-savvy, and nationally. Future work can be performed on specific M-wallet applications. A near-report can perform on comparative M-wallet applications; and an extension to M-wallet administration to explore the psychological perception of the different demographic status of shoppers (age, sex, education, and salary levels).

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