


Customer Inclination on Mobile Wallets With Reference to Google-Pay and PayTM in Bengaluru City

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ABSTRACT

In this cashless economy era, information and communication technology (ICT) plays a vital role in making payments using various payment modes. The mobile wallet app is an innovative technology for avoiding the usage of physical cash. The mobile wallet records all kinds of transactions with a clear payment reference and makes it accountable for tax payments. There are countless reasons for using mobile wallets, which make service providers confused and leads them to offer unattractive features in the wallet apps, making the offer a failure. This paper attempts to collect the data from the mobile wallet users and provides a clear understanding of the reasons for using mobile wallets. Secondly, the customer preferences towards Google Pay and PayTm are analyzed in detail with primary data collected from mobile wallet users to suggest a model for improving the business. This research was conducted to understand the customers' inclination towards the use of mobile wallets.

KEYWORDS

Cashless Economy, Coinless Payment, Digital India, Mobile Wallet, Unified Payments Interface (UPI)

INTRODUCTION

"Cash; Pay cash, Theodore. It's safest unless you keep your wallet where someone can pick your pocket."- Jewel E. Ann, Scarlet Stone

India is one of the fast-developing countries to lead the world's economic growth in the global marketplace. The demonetization of two massive currency notes of Rs.500 and 1000 which helped to minimize corruption and money hoarding to a great extent. After demonetization in India, the government has taken many steps to eliminate corruption and black money, out of which, mobile

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wallet is one among them to solve the issues. The Digital India initiative was implemented with more priority to promote a cashless economy in the country. Digital transactions restrict illegal transactions, black money, and helps develop the economic growth of the country. Mobile wallets are one of the major cashless payment systems emerged in India. After demonetization, mobile wallets became a primary financial instrument to make a cashless payment. Initially, the mobile wallet apps were used only for making the recharge and paying bills, but now the mobile wallets are used to make most of the bank transactions and it even reduced the customer visits drastically. Mobile wallets are operated using Mobile apps that should be installed in android or IOS platforms, and also it should be linked with customers' bank accounts, and mobile numbers.

Nowadays mobile wallets are one of the financial instruments used for making all types of payments, transferring funds, recharging, and receiving the funds through bank accounts. Earlier in retail shops, petty shops, food corner, beverages shops, Bus Travel and other visiting places, customers were facing problems with shoppers to get change currency like one rupee or two rupees and five rupees. But right now this problem has been sorted out with the help of mobile wallets. The consumer adoption and learning of technology used in Digital payment system helps consumers to use e-commerce transactions in their day-to-day life (*Dahlberg et al., 2015*). At the present time, m-wallets are used to execute several financial transactions. In developing economies, m-wallets offer an opportunity to target a large population. According to the report of Economic Times, PayTm is the leading mobile wallet company shown an annual increase of 435% in the year 2019. The National Payments Corporation of India developed the Bharat Interface for Money (BHIM app) for transacting funds directly between the bank accounts (*Ghosh, 2017*).

REVIEW OF LITERATURE

Akhila Pai H. (2018) has pointed out that the Government of India initiated the concept of 'Digital India' to increase the usage of internet and mobile wallets which in-turn leading to cashless payments. *Anil Kumar.Punna & Mahesh Kumar. Punna (2017)* reveals that mobile banking is an essential instrument for transfer of funds from one account to another. Various payment methods like Debit/Credit cards, internet banking, mobile banking contributes only upto 10% of the total payments. According to *Pankaj Yadav (2017)*, The researcher has focused on users from all four directions in India i.e., east, west, north, and south. The data was collected from the customers who all are using the mobile wallet and its benefits/usefulness. The researcher has kept in mind the six factors in existing studies (i.e., perceived quality of service, perceived risk, perceived usefulness, perceived cost, observe ease of use, and trust) which leads to adaptation of mobile wallets. *Richa Goel et al. (2019)*, It is believed that the cashless economy is the key to the Indian economy which helps to restrict the flow of physical cash in the country. Cashless payments are made through virtual and app-based transactions, and it has been widely adopted by the people after the demonetization. *Vijayashri Mahindra Gurme (2017)*, the development of information technology through mobile devices generates novelty called "Mobile Wallet". The invention of mobile wallet payments releases growth and flexibility to banking and financial institutions as well as businesses. *FAIR Inc.* In spite of the technological and scientific development in Japan 70% of the population prefers cash payment over cashless payments. The Government of Japan envisions cashless Japan in the future by encouraging people to use digital payment methods like mobile wallet and online payment systems. From the literature reviewed related to mobile wallets, it was understood that there are no studies that analyze the reasons and competitiveness of PayTm and Google Pay. As on date, only these two wallets companies having large number of customers in India. Another research gap has been addressed in this study is that, many researchers have developed and tested the hypothesis on factors influencing the acceptance of mobiles, but this study concentrates on customers' confidence about the wallets on the basis of *Trust, Gain and Accountability*.

PROBLEM STATEMENT

A mobile wallet is one of the financial inclusion options available to access financial services. When people are running behind time, mobile wallet helps in time saving and helps in quick payments for doing various transactions like travel booking, hotel booking, bill payments and purchases. In India, many Indian and International mobile wallet companies compete to capture the Indian mobile wallet market. Globally, mobile wallet transactions have reached INR 2 trillion in 2019 and the survey revealed that 83.6% of the respondents are using mobile wallet transactions in India. All the mobile wallet brands are approved by the Reserve Bank of India and both private and public sector banks connect their UPI's with mobile wallets. Especially in Bangalore, most of the employees, students, homemakers, business people, retail shoppers, petty shoppers, and roadside vendors are adopting and using the mobile wallet for their day to day transactions. In India, around 20 brands of mobile wallets are available but in Bangalore, most people prefer PayTm & Google pay. Attempt is made to analyse the reasons for the success of these two brands of wallets among the various brands in Bangalore. Mobile wallet payments are the most convenient and fastest payment method in cashless payments. The mobile wallet provides more offers and discounts to the users and eliminates the use of banking cards, account numbers, IFSC, and passwords for making the transactions.

RESEARCH OBJECTIVES

1. To understand the primary reasons for using mobile wallets in Bengaluru city.
2. To analyze the customer preferences towards PayTm and Google Pay Wallets.
3. To analyze the trust and confidence level of PayTm and Google Pay Wallet users.
4. To suggest suitable solutions to the shortcomings identified for better service to the PayTm and Google Pay customers.

METHODOLOGY

This descriptive study discusses the customer usage on mobile wallets on Google Pay & PayTm. This research has been carried out with a systematic process like determining the sampling method, collecting data, analyzing the data, identifying the major findings and given the conclusions. Sampling is the process of identifying and choosing samples from the population for conducting research. As the population size is infinite the researchers have adopted snowball sampling under the non-probability sampling methods to collect data from the respondents. The researcher sent the google form and it has reached a heterogeneous group of 200 respondents who have given their opinion by filling the questionnaires. In that around 30 respondents are not using Google Pay, PayTm or both; and so those questionnaire responses were omitted for the data analysis process. At last, the researcher has taken 170 respondents for data analysis who were using PayTm and Google pay or both mobile wallets. The researchers used both primary and secondary data collected from respondents and other resources. Primary data collected with the help of a questionnaire in the form of a google form sent to the users, and the same was forwarded to their contacts. Secondary data was gathered from different sources such as articles published in different journals & newspapers, published books, periodicals, conference papers, working papers, and websites, etc.

PILOT STUDY & RELIABILITY ANALYSIS

The pilot study has been conducted to know the feasibility of doing this research. During the pilot study, pre-test was conducted to measure the questionnaire. Initially the data has been collected from 50 Respondents and analyzed the 23 items generated Cronbach alpha value of 0.842 which could be

considered as good and acceptable value, so the researcher has proceeded further for data collection and data analysis to be reliable and consistent. The detailed analysis of factor reduction, Cronbach alpha, composite reliability, and average variance extraction were made through pilot study which is shown in Table 7.

RESEARCH HYPOTHESIS

- H1:** There is a significant difference between educations level and customers learn to use the mobile wallet apps'
- H2:** There is a significant relationship between the Trust factor and Accountability in the mobile wallet app
- H3:** There is a significant relationship between the Accountability and benefits gain in the mobile wallet app
- H4:** There is a significant relationship between the Trust factor and benefits gain in the mobile wallet app

ANALYSIS AND DISCUSSION

The data was collected from the users of Paym, Google pay, and both. Totally 170 respondents have participated in this research, and based on their information, the researchers analyzed the data with the help of SPSS and AMOS software.

The above table no:1 reveals that the demographical factors of mobile wallet users in the Bengaluru rural area. Around 59.4% of respondents are female, and 51.8% of the respondents belonging to the age group is 21 to 30 years old, more than two-fifth (42.9%) of the respondent's educational qualification is post-graduate, and 52.4% of the respondents are students involved in the study, around 77.1% of the respondents are using both google pay and PayTm mobile wallet.

The above table no 2 shows the factors of mobile wallet. More than half (56.5%) of the respondents have started to use the mobile wallet after the demonetization in India, the majority (40.6%) of the respondents are telling that their friends recommended the mobile wallet to make the payment or transactions, 55.3% of the respondents are saying that they had gone through the instruction from the app how to use and make the payments, around 32.9% of the respondents are trusting mobile wallet in this digital transactions.

Source: Primary data

The table reveals that customers are using mobile wallets for multiple reasons such as; out of 170 respondents, 158 respondents are using the mobile wallet for making easy payments in retail shops or shopping places, and 169 respondents are using the mobile wallet for making recharges to mobile, Dish, Sun direct, etc., and 100% of respondents are mobile wallet adopt to transfer funds one to another or bank to bank, customer to the bank, etc., 94 respondents purpose of using mobile wallet customer don't want to carry the physical cash or physical wallets with them, 112 respondents are using a mobile wallet to exact amount to the shoppers' instance currency changing problems and finally 73 respondents are using mobile wallet are booking tickets in buses, movies, trains, and flights, etc.,

Problems and Issues in Mobile wallet

There are some issues and problems that are there in the mobile wallet app. Those problems are affecting the users psychologically and emotionally. The upcoming table clearly shows that what are the problems are facing by mobile wallet users and how those problems are turned into issues.

The above tables reveal that 74.7% of the respondents are said that while making the transactions, sometimes payment failed happened, and also amount has debited from the wallet in PayTm & Google

Table 1. Demographical profile

Variable	Respondents	Frequency	Percentage
Gender	Male	101	59.4
	Female	69	40.6
	Total	170	100.0
Age	Up To 20 Years	22	12.9
	21 to 30 Years	88	51.8
	31 to 40 Years	35	20.6
	Above 40 Years	25	14.7
	Total	170	100.0
Education	SSLC	12	7.1
	PUC/HSC	14	8.2
	UG	54	31.8
	PG	73	42.9
	Professional	17	10.0
	Total	170	100.0
Occupation	Student	89	52.4
	Private Employee	57	33.5
	Government Employee	8	4.7
	Business/ Profession	10	5.9
	Homemaker	6	3.5
	Total	170	100.0
App using	PayTm	18	10.6
	Google pay	21	12.4
	Both	131	77.1
	Total	170	100.0

Source: Primary Data

pay app. It is a big thing for the wallet companies because it happened due to network problems, bank server problems, and also wallet problems but the customers are not feeling good psychologically.

How much time has taken to refund the debited amount (days)?

According to the above analysis, once the transactions have failed but money debit from the wallet, that money has to refund by the wallet to the customers. The refund durations are taking the wallet companies 3 to 15 business days but it affects the users.

Have you lost any amount in this app? If yes means how much.

Out of 127 respondents, 18 respondents debited amount has not credited in their account, customers are lost their money because of using these wallets. And the remaining 10 respondents debited amount has to refund on the second or next time of debited amount. The amount lost from Rs. 1 to 500 from every customer.

Table 2. Mobile wallet factors

Variable	Respondents	Frequency	Percentage
Started using the Mobile Wallet Apps	Before Demonization	74	43.5
	After Demonization	96	56.5
	Total	170	100.0
Recommendations for the usage of Mobile Wallet	Friend	69	40.6
	Peers & Colleagues	37	21.8
	Shoppers	36	21.2
	Government	28	16.5
	Total	170	100.0
Learning source to use the App	Instruction from the APP	94	55.3
	Friends taught me	56	32.9
	Helped by existing users	20	11.8
	Total	170	100.0
Preference to choose a wallet	Unique	41	24.1
	Trustable	56	32.9
	Familiar in Bengaluru	37	21.8
	Brand name	28	16.5
	Share Market Value	8	4.7
	Total	170	100.0

Source: Primary data

Figure 1. Reasons for using mobile wallets

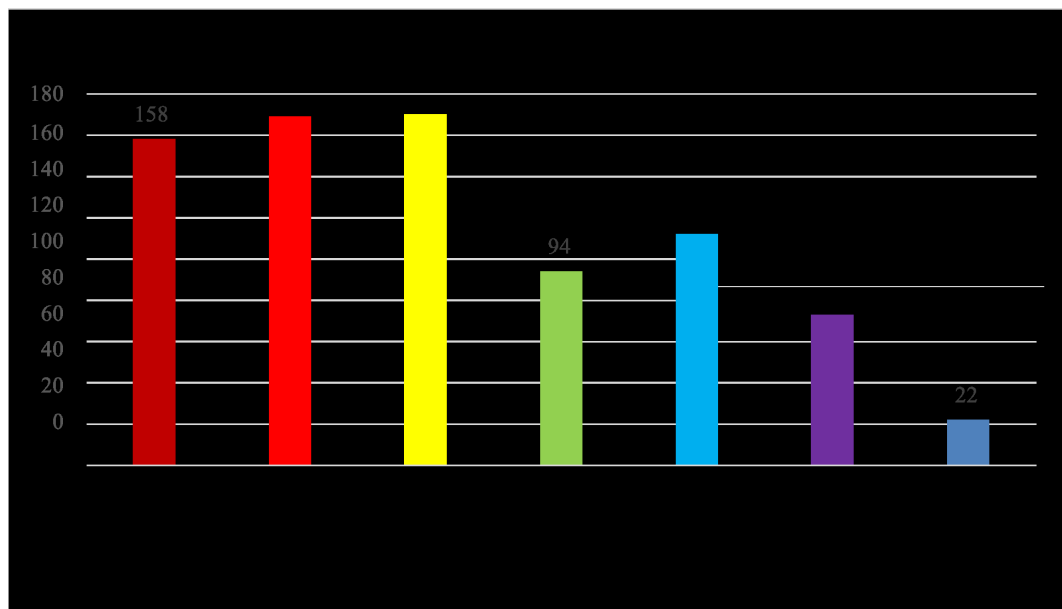


Table 3. Payment failed in App

Respondents	Frequency	Percentage
Happened	127	74.7
Not Happened	43	25.3
Total	170	100.00

Source: Primary Data *(127 Data has attached)

After losing the money have you continue to use this app. If yes means why?

The customers are continuing the use of the same mobile wallets even though they lost their money because customers' are mentioned that still, they are believing the mobile wallets, easy to use, more convenient, good wallet, and reliable, etc...

Analysis of the Education levels and Customers learning of app usage

H0: There is no significant difference among the different education levels on customers learning for using the mobile wallet apps'

H1: There is a significant difference among the different education levels on customers learning for using the mobile wallet apps'

The one-way ANOVA table indicates that the significant value is less than the 5% level of significance, hence it is concluded that the null hypothesis was rejected. There is a significant difference among the different education levels on customer's learning for using the app.

Customer Confidentiality Analysis – Google Pay

The confidence level about trust, accountability, and gain is analyzed with the help of factor analysis based on the data collected from Google Pay users. **Factor analysis** is a technique that is used to reduce a large number of variables into fewer numbers factors. This technique extracts maximum common variance from all variables and puts them into a common score. Here are the 12 variables with Likert scale type questions on user's opinions towards Google pay mobile wallet.

From the above table the extraction sums, associated with each linear component to determine the factor analysis "preference on google pay wallet" are rotated. All the 12 factors have been divided into 3 components with greater than 1. The rotated component shows a cumulative percentage of 68.968% of the total variance explained by the three common factors.

From the table in factor analysis, factors are divided into three components, under the first component variables are; Not Charging transaction fees in the Google pay app, the third party can't access your account in Google pay app, Google pay to provide security lock, Google pay is safest

Table 4. ANOVA

ANOVA					
Education	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.584	2	1.292	1.697	.048
Within Groups	127.187	167	0.761		
Total	129.771	169			

Source: Primary Data

Table 5. Total variance explained

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	5.311	44.261	44.261	5.311	44.261	44.261	3.613	30.107	30.107
2	1.608	13.404	57.665	1.608	13.404	57.665	2.966	24.720	54.826
3	1.356	11.303	68.968	1.356	11.303	68.968	1.697	14.142	68.968
4	0.865	7.207	76.176						
5	0.699	5.822	81.997						
6	0.517	4.309	86.306						
7	0.487	4.054	90.361						
8	0.323	2.694	93.055						
9	0.279	2.324	95.379						
10	0.240	2.000	97.379						
11	0.189	1.572	98.951						
12	0.126	1.049	100.000						
Extraction Method: Principal Component Analysis.									

Source: Primary Data

Table 5. Rotated component matrix

Rotated Component Matrix			
Particulars	Component		
	1	2	3
Not Charging transaction fee in the Google pay app	0.851	-0.031	0.103
Third-party can't access your account in the Google pay app	0.836	-0.103	0.186
Google pay providing security lock	0.727	0.392	0.245
Google pay is safest payment app	0.707	0.449	0.256
Google pay is very easy to use	0.685	0.367	0.266
Providing details of payment	0.385	0.767	0.086
Google pay is providing payment reference	0.316	0.761	0.142
Server problem is happening more in the Google pay app	-0.148	0.744	-0.121
Payment confirmation Notification	0.450	0.726	0.079
Refund the failed payment	0.426	0.551	-0.034
Getting more offers from google pay	0.150	-0.054	0.843
Received discounts from google pay	-0.134	0.094	0.834
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 6 iterations.			

Source – Primary Data

payment app, Google pay is very easy to use are named as **Trust** on mobile wallets. Whereas under the second component are; Providing details of payment, Google pay is providing payment references, Server problem is happening more in the Google pay app, Server problem is happening more in Google pay app, Refund the failed payment is named as **Accountability** in the mobile wallet. The remaining variables are; Getting more offers from google pay, received discounts from google pay are named **Gain** in Mobile wallet.

Confirmatory Factor Analysis [CFA] Model

The three predictors of this model are Trust, Accountability, and Gain which are the covariates of prefer to choose Google Pay Wallet. The unstandardized estimates model demonstrates regression weights, covariance, and variances. The standardized estimates model demonstrates standardized regression weights.

The goodness of fit is given for the model being tested (the *default model*), for the saturated model (the just-identified model), and for the independence model (all correlations among variables are zero). The fit of the default model will lie somewhere between the extremes represented by the other two models. In other words, a comparative interpretation is called for. The first index we refer to is CMIN is 127.824 and DF is 51, the value is 2.506 which indicates the fitness of the model the likelihood ratio Chi-Square. The value of NFI is 0.892 and CFI 0.930 (normally it should be between 0 to 1) which reveals that this model is quite good and fit. Then another set of fit statistics refers that the RMSEA (root mean square error of approximation) index is one of several measures that evaluate the extent to which a model fails to fit the data per degree of freedom, and tends to favor more complex models. It is considered a mediocre fit (0.094) Which suggests that the fit is very good. There is much-competing goodness of fit indices to choose from and, as no one index is considered preferable in all respects, it is usual to consider a number. If the indices all lead to the same conclusion, it can be reasonably confident in selecting three representing different types, in a report of the results of a path analysis. The relationship between the Trust and Accountability of Google Pay mobile wallet is (**H2:0.73**) positively correlated, whereas Accountability and Gain Google Pay mobile wallet is (**H3:0.51**) positively correlated, Trust and Gain Google Pay mobile wallet is (**H4:0.62**) positively correlated.

Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV);

The reliability value(CR>0.7) indicates through Gain: 0.882, Accountability: 0.835, and Trust: 0.778, which means all three factors are more suitable for CFA. The Convergent Validity value (AVE > 0.5), based above table the Gain -0.789, Accountability- 0.520, and Trust 0.528, which fulfill the above constructs.

Table 6. Goodness-of-fit indicators of confirmatory factory analysis

Particulars	Calculated Value	Recommend value	Reference
C-Min	127.824	<3	(Ingram et al., 2000)
Degrees of Freedom(d.f.)	51		
C-Min / d.f.	2.506		
Root Mean Square Error of Approximation (RMSEA)	0.094	<0.8	(Hu & Bentler, 1999)
Comparative Fit Index (CFI)	0.930	>0.9	(Bentler & Dudgeon, 1996)
Normalized Fit Index (NFI)	0.892	>0.8	(Bentler & Dudgeon, 1996)

Table 7. Factor loadings

Constructs	Variables	Factor	AVE	CR
Trust	T1	0.851	0.528	0.778
	T2	0.836		
	T3	0.727		
	T4	0.707		
	T5	0.685		
Accountability	A1	0.767	0.52	0.835
	A2	0.761		
	A3	0.744		
	A4	0.726		
	A5	0.551		
Gain	G1	0.721	0.789	0.882
	G2	0.649		

Source: Primary data

Table 8. Model fit for gain, accountability, and trust in the use of mobile- wallet

	CR	AVE	MSV	MaxR(H)	Gain	Accountability	Trust
Gain	0.882	0.789	0.379	0.882	0.888		
Accountability	0.835	0.520	0.533	0.894	-0.511	0.721	
Trust	0.778	0.528	0.533	0.934	-0.616	0.730	0.694

Customer Confidentiality Analysis

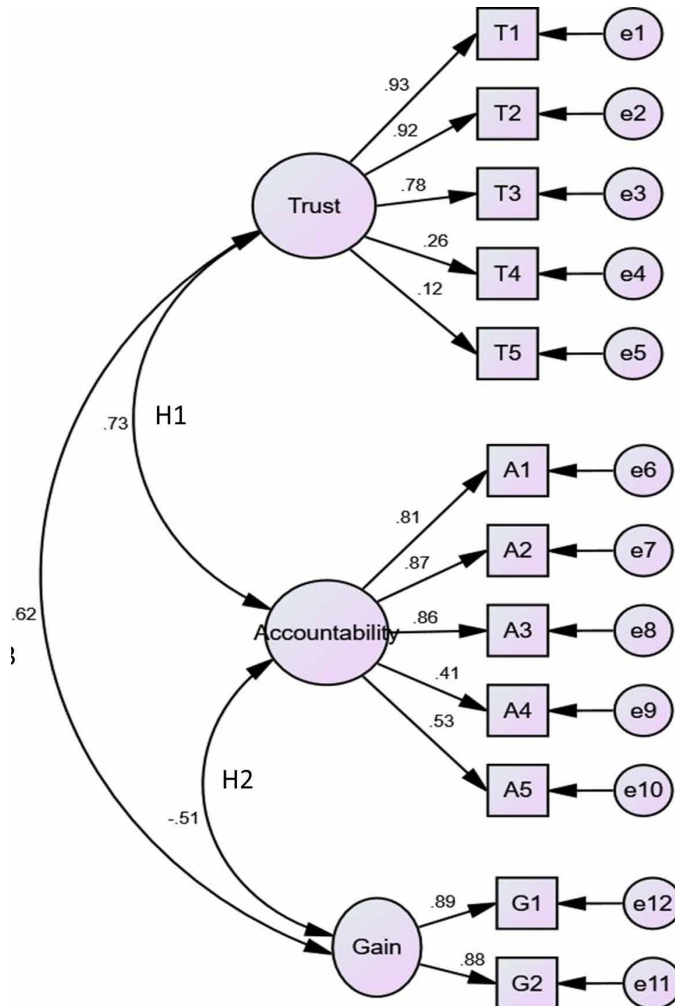
Data collected from the PAYTM customers are analyzed to understand the confidence level of the customers regarding trust, accountability, and risk factors of the PAYTM app. Factor analysis is a technique that is used to reduce a large number of variables into fewer numbers factors. This technique extracts maximum common variance from all variables and puts them into a common score. Here are the 11 variables with Likert scale type questions on the user's opinion towards PayTm mobile wallet.

From the above table the extraction sums, associated with each linear component to determine the factor analysis “preference on google pay wallet” are rotated. All the 11 variables have been divided into 3 components with greater than 1. The rotated component shows a cumulative percentage of 67.126% of the total variance explained by the three common factors.

From the table in factor analysis, factors are divided into three components, under the first component variables are; Getting more offers & Discounts from PayTm App, PayTm is providing payment reference, PayTm providing the details of payment, Payment confirmation notification, and Refunded the failed payment are named as **Accountability** in the mobile wallet. Whereas under the second component are; PayTm is the safest payment, PayTm providing a security lock, PayTm is very easy to use are named **Trust**. The remaining variables are; Third-party can access your account in PayTm Charging transaction fee, Server problem is happening more in PayTm app are named **Risk** in Mobile wallet.

Partial correlation is a measure of the strength and direction of the linear relationship between three continuous variables whilst controlling for the effect of one or more other continuous variables

Figure 2. Amos output



also known as covariate and control variables. Here continue variables are Trust, Accountability, and Risk in PayTm Mobile wallet. The controlling variable is the preference of the mobile wallet. There are a positive correlation .326 relationships found in between the Trust on Wallet and Accountability, and little negatively correlated (-0.001) Trust and Risk. it means the Trust and Accountability factors prefer to choose the mobile wallet. Whereas the Accountability and Risk positive correlation (0.193) relationships found in between the Accountability and Risk of Mobile wallet.

SUMMARY FINDINGS

- Mobile wallets are used by well-educated people and who know the English language.
- Most people have started using the mobile wallet payment app after demonetization only, hence, the intention of the government is getting fulfilled.
- The majority of the respondents are using the mobile wallet for multiple reasons like doing Recharge, Making Transactions, and making easy payments, etc...but very few of them using the mobile

Table 9. Total variance explained

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	4.020	36.545	36.545	4.020	36.545	36.545	3.273	29.754	29.754
2	1.895	17.227	53.772	1.895	17.227	53.772	2.298	20.889	50.642
3	1.469	13.353	67.126	1.469	13.353	67.126	1.813	16.483	67.126
4	1.000	9.088	76.213						
5	0.664	6.036	82.249						
6	0.447	4.065	86.314						
7	0.415	3.770	90.084						
8	0.360	3.277	93.361						
9	0.304	2.762	96.123						
10	0.250	2.272	98.395						
11	0.177	1.605	100.000						
Extraction Method: Principal Component Analysis.									

Source: Primary Data

Table 10. Rotated component matrix

Rotated Component Matrix			
Variables	Component		
	1	2	3
Getting more offers & Discounts from PayTm	0.881	0.125	0.035
PayTm is providing payment reference	0.880	0.121	0.103
PayTm providing the details of payment	0.839	0.090	0.167
Payment confirmation notification	0.722	0.246	-0.070
Refunded the failed payment	0.570	0.188	0.418
PayTm is safest payment	0.126	0.857	0.075
PayTm providing security lock	0.125	0.850	0.073
PayTm is very easy to use	0.251	0.809	-0.090
Third-party can access your account in PayTm	-0.123	-0.073	0.865
Charging transaction fee	0.228	-0.113	0.750
Server problem is happening more in PayTm app	0.100	0.180	0.514
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

Source: Primary Data

Table 11. Correlations

Correlations					
Control Variables			Trust	Accountability	Risk
Preference of Mobile Wallet	Trust	Correlation	1.000	0.326	-0.001
		Significance (2-tailed)		0.000	0.994
		Df	0	166	166
	Accountability	Correlation	0.326	1.000	0.193
		Significance (2-tailed)	0.000		0.012
		Df	166	0	166
	Risk	Correlation	-0.001	0.193	1.000
		Significance (2-tailed)	0.994	0.012	
		Df	166	166	0

Source: Primary Data

wallet for online shopping purposes. The awareness level of online shopping options available with PayTm is very less.

- The majority of the respondents are telling that while making the transactions, sometimes the transactions are failing, it reduces the reputation of the wallet
- Few consumers have mentioned that they lost their money because of the failed transaction and the money did not come back to their account at all.
- According to the ANOVA test, there is a significant difference between different levels of education that determines how the customers learn to use these mobile wallet apps.
- According to the correlation table, Trust and accountability in PayTm mobile wallet have correlated negatively, it indicates that customers feel that there is a risk in using a mobile wallet, still, they use it because of its benefits.

MANAGERIAL IMPLICATIONS

The study has the following implications to the Policy makers of PayTm and Google Pay for increasing the promotional aspects of Mobile wallet usage in India. Inclusion of regional languages in a mobile wallet will help to maximize the number of users in India, which would motivate the potential users with lower levels of education. Organizations can also provide a valuable offer for the 1st time install or user of mobile wallet. The tolerance level of servers on the network issues is to be improved as more cases of failed transactions received from the customers. Companies need to put some efforts for quick refund in case of failed transactions and using advanced technologies and higher bandwidth for better connectivity and zero downtime of the servers. The can provide pay Spilt bills option, which can help the customers to use more than one app or partly the wallets and currency. Companies can also offer credit facilities to their loyal customers for very low rate of interest. Apart from that wallet companies can also provide an EMI (Equated monthly Instalment) option in their wallet, which can help the customers buy high-value items with installment scheme payment with the help of the mobile wallet itself. Security is another important concern; wallet companies can include face authentication for high-value transactions. Wallet companies need to introduce RFID (Radio-Frequency Identification) & NFC (Near-Field Communication) payment methods, it will be more secure to the users without providing card details and other information.

Both PayTm and Google Pay should get into online shopping to tap the huge potential available in the retail market. The companies need to tie up with manufacturers and traders utilizing the existing

brand and capture the market/customers without much difficulty as the companies already have a huge customer base and customer loyalty. Finally, the PayTm can provide more attractive rewards and offers to their customers to encourage them to continue using PayTm, and Google pay can fix a minimum amount or grade points, minimizing the “Better luck next time” option, based on the type of transactions for which the reward gift can be offered with restrictions on repeated transactions.

CONCLUSIONS

According to Ms. Pranjali A. Shendge (2017), digital wallets can be easily traceable, so it restricts the illegal transaction of money transfer and the black money generation. Richa Goel et al. (2019) states that, many rural people are not aware of the cashless economy and many of the people are having a lack of faith and confidence in the mobile wallet. It is one of the facts found in this study, the study attempted to find out the reasons for preferring Google Pay and PayTm mobile wallet only in Bengaluru city. Before and after the demonetization in India, many mobile wallet brands have emerged and these brands are providing many offers and benefits to cover a wide range of users. In India more than 20 mobile wallet brands are available but a few brands like PayTm, Google Pay, Phonepe, MobiKwik, and Freecharge brands are familiar in India and also are user-friendly to their customers. In Bengaluru, Google Pay and PayTm are very familiar and it is used by a wide range of people for the reason that two apps are more trustworthy, less risky, and more familiar in Bengaluru. Despite experiencing the risks in terms of loss of money, a transaction failure, network issues, server down, etc., customers stick to these two brands Google Pay and PayTm due to their loyalty and other factors like convenience, ease to use, time-saving, and risk-free transactions.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

Based on the above research work, few limitations were identified which would give direction for upcoming research on mobile wallets. The study was conducted based on consumers' perception of Google Pay and PayTm mobile wallet users, and the results of the study may not be suitable to be used for other mobile wallets. It is possible that the other mobile wallet app with several technologies along with more benefits would be satisfied or preferred a lot.

Hence the number of mobile wallets and users are predominantly increasing in India (*Singh N, 2017*), finding the customers' preference based on 170 samples may not represent the Preference of mobile wallet in Bengaluru city. And also our respondents are a small heterogeneous group of the Bengaluru city population, the forthcoming research may analyze the different cultures with homogeneous respondents, which may focus on other dimensions. Another limitation of the study is that the samples were drawn from Bengaluru only. The next level of research with samples collected with a wider scope would give more elaborate results. Furthermore, As the Government of India is promoting and insisting on people to adopt digital inclusion in villages, towns, and cities, the usage of the apps would increase in the future. The success and failure of any innovation not only depend on consumer-related factors but also on the various elements of the ecosystem (*Chawla 2019*). This includes mobile wallet service providers, technology providers, government bodies, and financial institutions. Future studies can be carried out to study the preference and satisfaction levels of different stakeholders of digital ecosystem. Lastly, as trust and accountability seems to encourage user perception and preference towards mobile wallet adoption. Future researches involving sub-factors of Accountability, Gain, Risk, and trust would provide in-depth results.

REFERENCES

- Ahuja & Joshi. (2018). Customer Perception towards Mobile Wallet. *IJRDO-Journal of Business Management*, 4(1), 52-60.
- Akhila Pai, H. (2018). Study on consumer perception towards digital wallets. *International Journal of Research and Analytical Reviews*, 5(3), 385–391.
- Bentler, P. M., & Dudgeon, P. (1996). Covariance Structure Analysis: Statistical Practice, Theory, and Directions. *Annual Review of Psychology*, 47(11), 563-592. doi:10.1146/annurev.psych.47.1.563
- Campbell. (2017, December). A Study of Customer Innovativeness for the Mobile Wallet Acceptance in Rajasthan. *Pacific Business Review International*, 10(6), 7–15.
- Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India – An empirical study. *International Journal of Bank Marketing*, 37(7), 1590-1618. 10.1108/IJBM-09-2018-0256
- Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*. .2015.07.006<ALIGNMENT.qj></ALIGNMENT>10.1016/j.elerap
- Goel, Sahai, Vinaik, & Garg. (2019). Moving From Cash to Cashless Economy: A Study of Consumer Perception towards Digital Transactions. *International Journal of Recent Technology and Engineering*, 8(1), 1220-1226.
- Gurme, V. M. (2017, April). A Survey on Customer Acceptance of Mobile Wallet Payments with Reference to Kothrud Area, Pune, India. *International Journal of Research in Management, Economics and Commerce*, 07(04), 25–28.
- Hu & Bentler. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. 10.1080/10705519909540118
- Ingram, K. L., Cope, J. G., Harju, B. L., & Wuensch, K. L. (2000). Applying to graduate school: A test of the theory of planned behavior. *Journal of Social Behavior and Personality*, 15(2), 215-226.
- Kanimozhi & Kamatchi. (n.d.). Security Aspects of Mobile-Based E-Wallet. *International Journal on Recent and Innovation Trends in Computing and Communication*, 5(6), 1223 – 1228.
- Kumar, A. (2017, July). Money Transactions through Mobile (Anywhere, Anytime, Anybody, Any needs). *Asian Journal of Research in Banking and Finance*, 7(7), 233–239. doi:10.5958/2249-7323.2017.00079.7
- Lonare, A., & Yadav, A. (2018). E-Wallets: Diffusion and Adoption in Indian Economy. *Indian Journal of Commerce & Management Studies*, 9(2), 9-16. 10.18843/ijcms/v9i2/02
- Madan, K., & Yadav, R. (2016). Behavioural intention to adopt mobile wallet: a developing country perspective. *Journal of Indian Business Research*, 8(3), 227-244. 10.1108/JIBR-10-2015-0112
- Mathiraj, Deepa, Geeta, & Devi. (2019). Consumer Acuity On Select Digital Wallets. *International Journal of Scientific & Technology*, 8(12), 3551-3556.
- Pillai, Sandhya, & Rejikumar. (2019). Acceptance of mobile payments and UPI technology – Indian context. *International Journal Business Forecasting and Marketing Intelligence*, 5(3), 371-384.
- Podile, V., & Rajesh, P. (2017, July). Public Perception on Cashless Transactions in India. *Asian Journal of Research in Banking and Finance*, 7(7), 63–77. doi:10.5958/2249-7323.2017.00069.4
- Sharma, G., & Kulshreshtha, K. (2019). Mobile Wallet Adoption in India: An Analysis. *IUP Journal of Bank Management*, 18(1), 7–26.
- Shendge, Shelar, & Kapase. (2017). Impact and Importance of Cashless Transaction in India. *International Journal of Current Trends in Engineering & Research*, 3(4), 22–28. <http://www.ijcter.com>
- Singh, N., Sinha, N., & Liébana-Cabanillas, F. J. (2020). Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence. *International Journal of Information Management*, 50(October), 191–205.

Tang, C. Y., Chin, C. L., Law, C. W., Liew, M. C., & Phua, V. V. (2014). Examining key determinants of mobile wallet adoption intention in Malaysia: An empirical study using the unified theory of acceptance and use of technology 2 models. *International Journal of Modelling in Operations Management*, 4(3/4), 248–265. doi:10.1504/IJMOM.2014.067383

Unnisa & Kumari. (n.d.). Impact of Demonetization: Cash To Cashless-A Study Of Select Consumer. *IOSR Journal of Business and Management*, 34-40.

Yadav, P. (2017). Active Determinants for Adoption of Mobile Wallet. *i-Manager's Journal of Management*, 12(1), 7-14.

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