

# A Demographic Study of Digital Payment Methods with Outlook of Receptiveness of M-Wallet in Customers of NCR Region

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## Abstract

In today's era of digitalization in each and, every stage of consumer life is full of technological advancements and technology-based. Now a day's human life is imperfect without technology and e-commerce because from early morning to late night individuals are going through the technical part. Thus, acclimatizing technology and the internet is now inseparable from an individual's life. Such adaptation of advancement in technology uses electronic gadgets and internet made human life too much faster and effortless especially on the part of connecting with the outside world with help on internet-enabled smartphones. Now a day's smartphones play a very smart role in certain fields especially in a monetary transaction worldwide. Now a day's business and payment methods are changing by uses of electronic payment and E-Wallets like Paytm, Google Pay, Phone Pay, Airtel Money, etc.

This paper deals with the changing paradigm of payment methods especially, the use of M-wallet to find out the magnitude of awareness level of the m-wallet users among different demographic variables and tries to reveal the perception level of the consumers towards uses of m-wallet. The research is based on the primary data collected through a structured questionnaire. The study used the chi-square test and found no significant relationship between the demographical factors (age, gender, educational level, annual household income, occupation) on the uses of m-wallet services.

## Keywords:

M-Wallet, Apps, Transactions, Online payment, Smartphone users.

## Introduction

Mobile Payment is a unique payment method in the retail arena where the customer uses their mobile phone for the transaction of money with the help of mobile applications by scanning the bar code to pay for goods and services. The services can be offered by a bank, a telecommunications company or by both. When any transaction is done in an electronic form with the help of an electronic device or internet termed as a digital payment whereas, the money is saved or stored electronically is called as an e-wallet.

Now, day's customer is doing a transaction or purchasing items online

using a Smartphone i.e. also known as Mobile Wallet. Digital wallets or M- the wallet is a form of e-commerce as a part of digitalization which can be used with the help of smartphones. It is a digital form of wallet that you can carry in your pocket and can be used for payment of utility bills, shopping, filling up of fuel and recharge, etc. With the help of M-wallet, an individual can be able to pay their bills online without delay, without having to pay by cash and without the use of credit or debit card all the time, due to which the mobile phone is now becoming an innovative tool that acts as a catalyst for instant payment mechanism.

The M-wallet has emerged as a new market for the digital payment system with user-friendly and innovative techniques. Some of the prominent providers are Paytm, Phone pay, Google pay, Mobikwik, Airtel money, etc. Now a day's India is considered as a developing market and opportunity in m-wallet commerce. The main attractions behind the acceptance and demand for the use of m-wallets are prompt transactions, time-saving, less costly, easy to access, etc. Apart from the affirmative aspect, there are some negative consequences of uses of M-Wallets such as security issues, maximum fund transfer limit, the necessity of the internet to do any transaction, etc. By considering the above negative consequences of uses of M-Wallets, it comes in the mind of the researcher to-do a comprehensive study and investigates the receptiveness of m-wallet customers in the NCR region of India.

### The Development of M- Wallets In India

The use of M-Wallets & Payment Gateways commercial transactions in India is growing with very high-speed. Particularly in the Indian market, it has been noticed that the trend of M-Wallets uses and Payments Gateways has grown exponentially in the last few couple of years. By Scanning QR Code in Petrol filling, cashback offer in online shopping, movie tickets, and even ordering foodstuffs, etc. M-wallet is now a highly demanding method and one of the best choices for most of the youth in India for transactions and paying with any fear and hesitation.

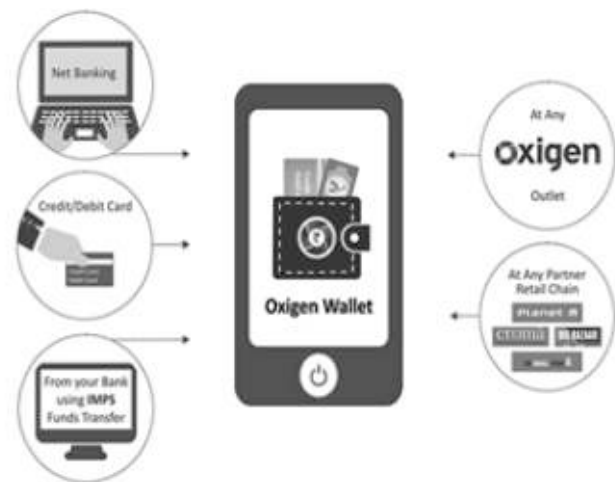
Before decades, this uses of this M- wallet payment was seemed to be unrealistic for Indian consumers, but due to an increase in uses of smartphones in India especially in youth has increased the faith that one day India will become the leader of M-Wallets users. By anticipating the opportunities in the Indian market so many m-wallet service providers come into existence now out of which Google pay and Paytm are came out as a significant player in the M-wallets service provider industry.

### Emergence of First M- Wallet In India

As per the official record of the government of India till

2018, it was approximately 15 mobile wallet companies exists out of which there are maximum of the companies are from Indian origin as well as Oxygen Wallet is considered as the first-ever e-wallet or mobile wallet launched in India in 2014 but due to certain reasons or due to lack of awareness and consumer's confidence as well as due to low trend of usage of smartphone amongst the Indian consumers at that time, it is not too much popularized.

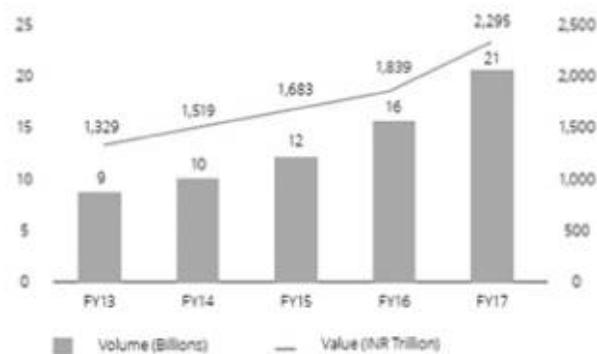
Now, in the current scenario, the users of smartphones in India are increased drastically and it seems that new changes in the Indian mobile market which has proved fascination for many m-wallet service providers. An increase in demand for smartphones in India acts as a catalyst growing demand and uses of m-wallet uses and also for the service providers to plots their innovative ideas into a picture of the real world.



**Source:** <https://magnetoitsolutions.com/wp-content/uploads/2019/05/First-Mobile-wallet-in-India.png>

### Trends of Mobile Wallet Adoption In India

Just after demonetization in India, it has seemed that Indians are inclined towards the digital payment and use m-wallet for money transactions has increased drastically. Indian youths who started trusting the internet also act as catalysts to increase the uses of M- wallet in India. By considering the growing trends of m- wallet users many innovative ideas, inventions and changes in m- wallet services have been introduced on the path of digital India to make the dream of "Digital India" into a reality.



Source: Reserve Bank of India data; Devotee Analysis

**Image Source:** <https://magnetoitsolutions.com/wp-content/uploads/2019/05/Mobile-Wallet-adoption-in-India.jpg>

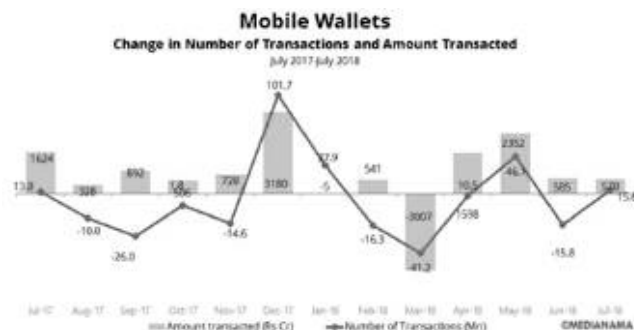
### Number of Mobile Wallet users in India

As per the study of some reputed market researcher agencies data it has been found that the users of m-wallet and mobile banking in India have positively knocked the Indian market in making the country the world's fastest-growing market, globally. As per the e-Marketer statistics, it is suggested that in the year 2017-18, 73.9 million people in India that account to be 7.6% of the whole population of the region are using mobile payments. That is a dramatic increase of 39.7% compared to previous year i.e. 2016-17

With the introduction of 4G internet service speed and competitive prices of smartphones in India making mobile phones one primary device for any transactions and payment. These devices are pretty much useful and handy, altering the way customer's search or purchase goods.

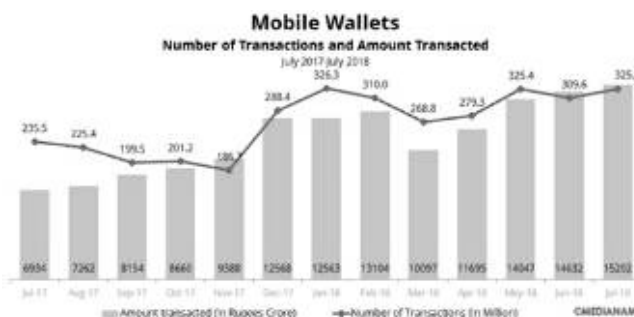


**ImageSource:** <https://images.dazeinfo.com/wp-content/uploads/2018/11/india-mobile-payments-2018-696x390.jpg>



**Image Source:** <https://www.medianama.com/2018/09/223-mobile-wallet-transactions-india-july-2018/>

The above image is showing the number of transactions for M-Wallets in India which indicates that it has grown by 15.6 million in July 2018, while the total amount transacted was up by Rs 570 crore. As per the above graph, it can be estimated that just before a month the number of transactions had decreased by 15.8 million, and the amount transacted had grown by Rs 585 crore.



**Image Source:** <https://www.medianama.com/2018/09/223-mobile-wallet-transactions-india-july-2018/>

As per the above image, it can be analyzed that there is too increase in uses of M-wallets uses, which increased 5% month on month to 325.2 million transactions from 309.6 million, and up 38% year on year from 235.5 million transactions in July 2017. It has been also observed that the amount transacted using Mobile Wallets increased 4% to Rs 15,202 crores from Rs 14,632 crores and grew 119% year on year from Rs 6,934 crores in July 2017.

### Pros & Cons of Uses of M-wallet

*Mobile wallets have emerged as a relatively new medium of transaction option (compared to cash and cheque) that can present some benefits to users.*

#### Pros of Uses of M- Wallet:

1. **Easy accessibility:** Day to day transactions with the help of mobile wallets is very convenient and easy to

use. It can be done easily with the help of a downloaded application on your smartphone that should be enabled with an internet connection with login ID & password afterward.

2. **Time Saver:** Payment can be done within a fraction of minutes with the help of a mobile wallet; you can pay quickly by scanning the bar code of shopkeeper.
3. **Benefits of Cashback & Reward Points:** Just like the plastic cards, certain mobile wallets also offer you some reward points and cashback on purchases of goods and services which can be stored in your m-wallet account.
4. **Security loss of money:** M—the wallet is also beneficial for security point of view related to the danger of losses of hard cash, the worry of enough money in bulky wallets.
5. **A range of uses:** Mobile Wallet can be said as the all-rounder player because we can do any type of transactions i.e. from paying utility bills to the booking of plane tickets.

#### *Pros of Uses of M- Wallet:*

1. **The need for Mobile network connectivity:** Without the internet, m- the wallet is useless. It can be used jointly only with the help of reliable and fast internet connectivity.
2. **Not always accepted:** While buying and selling any goods and services people accept hard cash in physical form without any hesitation because touching the physical cash in hand gives more satisfaction and increases the faith as compared to money received in m- wallet.
3. **Used in smartphones only:** It is tough to use a mobile wallet in simple cell phones because it can be used with help of smartphones and it does not support all the phones that are why it is considered as one of the major drawbacks of M-wallets.
4. **Payments are connected to your phone:** If your phone is lost or stolen or even if the battery dies, you are unable to make any payment or transactions. Some times in emergency it will be a very tough time form-wallet user.
5. **Not viable at every place:** M-wallet is replacing day-to-day transactions of physical cash but still it is not feasible in every situation.

#### **M-Wallets Services Providers in India.**

Many mobile wallets service providers are providing their services in India, but only a few mobile wallets are

preferred by the Indian m- wallet users which details are given below.



**Image Source:** <https://magnetoitsolutions.com/wp-content/uploads/2019/05/Best-Mobile-Wallets-in-India-2019.jpg>

- **Paytm:** After the demonetization phase, Paytm is a mobile wallet, is considered as the best and most popular mobile wallet in India by the Indian m-wallet users. It acts as an all-rounder player in the transaction in all fields. It's also famous for its punch line for doing payment i.e. "Paytm Karo".
- **PhonePe:** PhonePe started to provide his m-wallet services since 2015 and in just in few years only it has become the leading player in the m-wallet service industry it has been able to cross 100 million downloads marks. Its USP is the cashback offer.
- **Freecharge:** Freecharge came in existence in August 2010 in Gurugram, Haryana. It is used for recharge of mobile services & DTH or paying for mobile bills etc. That's why its name "freecharge" is also matched with recharge.
- **Mobikwik:** Mobikwik is one of the fastest-growing companies that provide a mobile phone-based payment system and digital wallet. This company also started to give small loans to consumers as part of its service
- **Google Pay:** Google Pay, formerly it was famous as Google Tez which was not a form of m-wallet. Google Pay allows its consumers to use their bank account to transfer money from one bank account to other bank accounts.
- **Amazon Pay:** Amazon Pay is the sister concern of Amazon.com shopping site. It is an online payments service that uses the consumer base of Amazon.com and focuses on giving users the option to pay with their Amazon accounts on the external merchant website.
- **Airtel Money:** Airtel is one of the popular cellular networks company in India. Airtel Payments Bank came into being intending to support the Indian Government's cashless revolution and introduced



numerous products and services to benefit its customers.

### Literature Review

**(Mallat, 2007)** research-based on qualitative aspects of the adoption of the mobile payment system by m- wallet users. The researcher observed that there is a comparative advantage of mobile payments in the various sense in which he specified adoption theories and includes various independence factors like period, place, availability, possibilities for remote payments, and dodging of wait in line. Furthermore, he found that the taking up of payments with m-wallet is dynamic, which depends on various circumstances and situations such as nonexistence of other payment methods, in case of the emergent situation, etc. He also identified numerous other hurdles for the adoption of uses of M- wallets like premium pricing, complexity, a lack of critical mass, and perceived risks.

**(Dahlberg & Oorni, 2007)** analyses about mobile payment services and found that mobile payment or m-wallet is successful to attract consumers. The researcher in his paper tries to investigate generic technology adoption models and tried to elucidate various factors that consumers may consider when they decided to adopt a new payment method. Researchers concluded that m-wallet has failed to meet consumers' payment needs and suggested to service providers that to launch the mobile payment system successfully, there is a need for a deeper understanding of consumer utility and convenience.

**(Srivastava, et.al, 2010)** discussed the consumer adoption of mobile payment (m-payment) solutions and found that adaptation of uses of m- the wallet is low as compare to the acceptance of cash payments. Research in his research also tested a "trust-theoretic model for adoption of m-payment systems by consumers as well as identifies the facilitators for consumer trust in mobile payment systems. Based on the pragmatic approach and validate test by the sample of m-wallet adopters in Singapore city, he proposed two broad dimensions of trust facilitators: "mobile service provider characteristics" and "mobile technology environment characteristics." He concluded that there is very much significance of "consumer trust in m-payment systems" as compared to other payment methods factors and highlighted the significance of confidence of M- wallet uses for different user sub-groups.

**(Kafsh, 2015)** has worked on an adaptation of mobile wallet in Canada and focused on the types of the transaction with m- wallet and also tries to find out different essentials that determine the acceptance of e-wallets users. He found that there is a strong correlation between utilization of m-wallet, security risk factors at some point in the usage of M-wallet.

**(Rathore, 2016)** studied the various factors that can affect a consumer's decision while opting for m-wallet as a mode of digital payment. Apart from this, she also done the effort to find out the various risks and challenges faced by m- wallet users. The researcher has applied an ANOVA test to get the statistic results and outcomes of respondents. Finally, she concluded that m-wallets are becoming the best mode of online payment because of the convenience and ease of use.

**(Singh & Rana, 2017)** study to understand consumer's perception of digital payment and the importance of digital payment in the Delhi area. Researchers have applied the ANOVA and frequency analysis to analyze the responses of consumers. Their results and findings indicate that there is no significant variance in consumer perception based on the demographic factors However education was found to significantly influence the adoption of digital payment.

**(Singh, Srivastava & Sinha, 2017)** conducted the study with the specific objective to test the conceptual model of consumers' intention and satisfaction towards mobile wallets by using the UTAUT model which includes certain variables in it to test consumers' behavior in the context of mobile banking technologies. Statistical tests like Regression analysis & ANOVA are used to test the relationship among several dimensions such as perceptions, preferences, satisfaction and usage rate of mobile wallets users in North India. The result of the researcher shows that there is an existence of a significant association between consumers' perception, preference, usage, and satisfaction. Security, trust, and hedonism are few of the most influencing variables in the study. Researchers also found that the demographic variables also one of the influencing factors for the satisfaction of consumer m- wallet users.

**(Mittal, Saurabh, Kumar & Vikas, 2018)** analyzed the usage of mobile phones in emerging economies as unique opportunities to businesses. He analyzed that mobile phones provide innovative solutions to online payments and in-store purchases and focused that the reception of m-payments also helps the marketers in promoting their business and ease the business doing also. They found that the customers in India had been cautious with payments by credit cards and debit cards and found that customers are more attracts with deals, discounts and cash backs via m-wallets. The researchers also analyzed the various factors affecting the adoption of m-wallets by Indian customers and their preferences while selecting any m-wallet for payment services. In his findings, he found that m-wallet is a good initiative to attract customers because it eases the business and customers both.

**(Alaeddin, Rana, Zainudin, & Kamarudin, 2018)** explain an outstanding thing for digital payment methods,

in which he examines that the consumer is now a day's switching their payment decision towards a digital way. The main aim of his research is to investigate the mind-set and purchase intention of customers from the traditional payment system by using the cash, plastic and by using mobile apps for doing any transactions. He has done a survey i.e. total of 140 m-wallet users and with the help of a structured questionnaire and found results that perceived usefulness and perceived ease of use are effective factors into consumer intention towards switching. Also found that there is a relation between the attitude and the intention is significant while the perceived risk pulls down the level of the effect.

**(Sharma & Kulshreshtha, 2019)** has analyzed Mobile Wallet Adoption in India. The researchers analyzed that, in India, almost 94% of the people possess mobile phones which increased the usage of digital payments by m-wallet and highlighted that in India, m-wallet services are growing because of its various advantages. They have attempted to explore the various factors affecting the intention to use m-wallets in India, with the help of relevant literature and by applying exploratory factor analysis. After the analysis of their results, they had given some suggestions to the policymakers as well as marketing strategists to design more customized m-wallets and advised to m-service providers to add some features in their m-wallet services to increase the acceptability of M-wallet users in forthcoming days.

**(Reddy & Rao, 2019)** in his study researchers have tried to gain an understanding of those factors which influence the satisfaction of the mobile wallet customers as well as tried to find out the motivations behind the continued usage of a specific service provider. Further, they had identified the differences in behavioral characteristics of mobile wallet users based on their sex. They found that there is a certain key factor that motivated mobile wallet users to continue using a particular mobile wallet application. Finally, they stated that there is no co-relation of gender on the hypothesized relationships.

**(Kumar, Nayak & Shekhr, 2018)** have done the study of m-wallet especially the BHIM App which was introduced by the Indian government at the time of demonetization. He has done his study on two clear patterns of responses among the respondents about the BHIM app - one pattern of motivation to use the BHIM app, and the other pattern was the drawbacks of using the BHIM app. They used PCA Method to analyze the responses of BHIM App users and found that there is no correlation between the two variables and it is independent of one another and also framed a model to solve the drawbacks of BHIM app uses while doing any m-wallet transactions.

**(Kotishwar, 2018)** has done his study with reference to demonetization in India and focused on the impact of technology on select banks with respect to transactions pertaining to online or digital transactions as well as measured the impact of internet on during the uses of Online banking and m-wallet services and their contribution towards the business per employee of the selected banks and found the positive correlation between the dependent and independent variables in his study.

**(Naryanaswamy & Muthulakshmi, 2017)** focused on various events that happened after demonetization and its implications. He found that after the demonetization in India, India is moving towards becoming the cashless economy and transactions through electronic modes and m-wallets are increased eventually.

### Research Methodology

**Data Collection Procedure:** The study is based on the Primary data collected through the structured questionnaire.

**SAMPLE:** Study targeted 200 people from the urban areas of the NCR region based on the convenience sampling technique. Out of 200 targeted people we received 177 responses of which seven responses were not complete so in the study, we have considered only 170 responses. Out of these 177 respondents, 112 are using m-wallet services and 58 are not using m-wallet services.

**Period of The Study:** The study is a cross-sectional study conducted during April-October 2019.

**Method-**To know the impact of demographical factors (age, gender, educational level, annual household income, occupation) on the uses of m-wallet services chi-square test has been used as both the variables (dependent and independent) are categorical. Percentage and Bar charts are also used to present the data.

### Objectives of The Study

This paper deals with the changing paradigm of payment methods especially, the use of M-wallet to find out the magnitude of awareness level of the m-wallet users among different demographic variables and tries to reveal the perception level of the consumers towards uses of m-wallet services.

### Hypothesis of The Study

- ❖ Ho1: There is no significant relationship between age variables and consumer preference towards the mobile wallet.
- ❖ Ho2: There is no significant relationship between gender variables and consumer preference towards the mobile wallet.

- ❖ Ho3: There is no significant relationship between the level of education variables and consumer preference towards the mobile wallet.
- ❖ Ho4: There is no significant relationship between annual household income variables and consumer preference towards the mobile wallet.
- ❖ Ho5: There is no significant relationship between

occupation variables and consumer preference towards the mobile wallet.

### Data Analysis and Interpretation

#### Demographic Details of the Respondents

The table-1 is showing the demographic details of the respondents concerning age, gender, educational level, annual household income, occupation.

**Table-1: Demographic Details of the Respondents**

Basis	Category	No of respondents	Percentage
<b>Age</b>	Below 20	22	12.9
	21-30	45	26.5
	31-40	64	37.7
	Above 40	39	22.9
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>Gender</b>	<b>Male</b>	70	41.2
	<b>Female</b>	100	58.8
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>Educational Level</b>	High School	19	11.2
	Intermediate	28	16.5
	Graduates	50	29.4
	Post Graduates	51	30.0
	Professional	22	12.9
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>Annual Household Income</b>	Below 2,50,000	20	11.8
	2,50,001-5,00,000	49	28.8
	5,00,001-7,50,000	50	29.4
	7,50,001-10,00,000	35	20.6
	Above 10,00,000	16	9.4
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>Occupation</b>	Student	26	15.3
	Salaried	43	25.3
	Self- Employed	48	28.2
	Unemployed	34	20
	Pensioners	19	11.2
	<b>Total</b>	<b>170</b>	<b>100</b>

**Table-2: Users of M-wallet**

	Frequency	Percentage
Yes	112	65.88
No	58	34.12
Total	170	100

From the above table, we can interpret that out of the 170 respondents only 112 are using m-wallet services i.e. 66%

approx. while 58 respondents are not using m-wallet services i.e. 34% approx.

#### The first preference of M-wallet App

Table-3: Usage of M-wallet App		
	Frequency	Percentage
Paytm	48	42.86
Phone pay	30	26.79
Free Charge	06	05.36
MobiKwik	04	03.57
Google-pay	13	11.61
Amazon pay	06	05.35
Airtel Money	05	04.46
<b>Total</b>	<b>112</b>	<b>100</b>

From the above table, we can interpret that maximum people are using Paytm followed by Phone Pay and in third place, there is Google Play. The reason behind the

maximum use of Paytm was demonetization as at that time there were limited options available and one of them was Paytm which has started m-wallet service in 2014.

#### Purpose/Uses of M-wallet

Table-4: Purpose/Uses of M-wallet		
	Frequency	Percentage
Movie Ticket	67	59.82
Recharge	85	75.89
Restaurants	27	24.11
Fuel Filling	87	77.68
Pay utility bills	69	61.61
Shop at marketplaces	56	50.00
Online shopping	86	76.79

From the above table, we can interpret that most people are using m-wallet services for Fuel filling, online shopping,

recharge, booking movie ticket and paying utility bills.

**Table-5: Crosstab: Mobile Wallet user \* age**

			age				Total
			Below 20	21-30	31-40	above 40	
Mobile Wallet user	NO	Count	6	15	22	15	58
		% within Mobile Wallet user	10.3%	25.9%	37.9%	25.9%	100.0%
		% within age	27.3%	33.3%	34.4%	38.5%	34.1%
		% of Total	3.5%	8.8%	12.9%	8.8%	34.1%
	Yes	Count	16	30	42	24	112
		% within Mobile Wallet user	14.3%	26.8%	37.5%	21.4%	100.0%
		% within age	72.7%	66.7%	65.6%	61.5%	65.9%
		% of Total	9.4%	17.6%	24.7%	14.1%	65.9%
Total		Count	22	45	64	39	170
		% within Mobile Wallet user	12.9%	26.5%	37.6%	22.9%	100.0%
		% within age	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	12.9%	26.5%	37.6%	22.9%	100.0%



From the above cross tab table, we can interpret that out of the total 170 respondents 58 are not using m-wallet services maximum of 38.5% are from the age group above 40 years. 34.4% are from the age group 31-40 years, 33.3% are from the age group above 21-30 years and 27.3% are from the age group below 20 years. On the other hand, when we see to the m-wallet services users maximum of 72.7% are from

the age group below 20 years. 66.7% are from the age group 21-30 years, 65.6% are from the age group above 31-40 years and the lowest 61.5% are from the age group above 40 years. Which implies that the non-users of m-wallet are increasing with the increase in age but the gap is negligible?

**Table-6: Chi-Square Tests: Mobile Wallet user \* age**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.800 <sup>a</sup>	3	.849
Likelihood Ratio	.812	3	.847
Linear-by-Linear Association	.720	1	.396
N of Valid Cases	170		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.51.

As from the above chi-square test we can interpret that the age is not significantly contributing to the adoption of the m-wallet user. This implies that all age categories people

are using the m-wallet, hence the null hypothesis  $H_0$  is accepted as the significance value is 0.849 which is above to the .05.

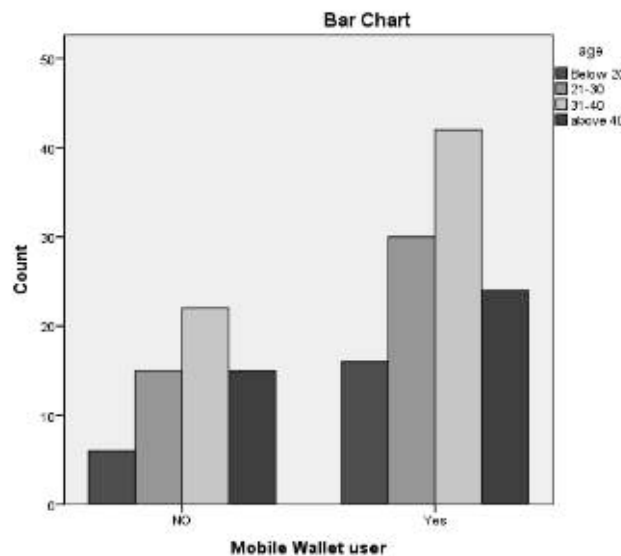


Figure1: Mobile Wallet user \* age

From the above chart, we can interpret no relationship between the age and adoption of m-wallet. We can see that

all age categories of peoples are using and not using m-wallet.

**Table-7: Crosstab: Mobile Wallet user \* Gender**

			Sex		Total
			Male	Female	
Mobile Wallet user	NO	Count	22	36	58
		% within Mobile Wallet user	37.9%	62.1%	100.0%
		% within Sex	31.4%	36.0%	34.1%
		% of Total	12.9%	21.2%	34.1%
	Yes	Count	48	64	112
		% within Mobile Wallet user	42.9%	57.1%	100.0%
		% within Sex	68.6%	64.0%	65.9%
		% of Total	28.2%	37.6%	65.9%
Total		Count	70	100	170
		% within Mobile Wallet user	41.2%	58.8%	100.0%
		% within Sex	100.0%	100.0%	100.0%
		% of Total	41.2%	58.8%	100.0%

From the above cross tab table, we can interpret that out of the total 170 respondents 100 are females and out of the 36% are not using m-wallet services and 64% are using. On the other hand, out of the 70 male respondents, 31.4% are

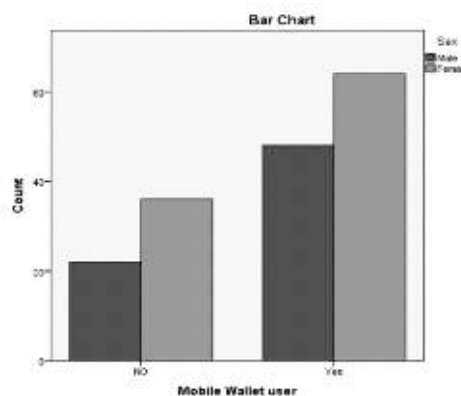
not using m-wallet services and 68.6% males are using m-wallet services. This implies that the females' adoption rate of m-wallet is less as compared to the male but the gap is negligible.

**Table-8: Chi-Square Tests: Mobile Wallet user \* Gender**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.383 <sup>a</sup>	1	.536
Continuity Correction <sup>b</sup>	.206	1	.650
Likelihood Ratio	.385	1	.535
Fisher's Exact Test			
Linear-by-Linear Association	.381	1	.537
N of Valid Cases	170		

As from the above chi-square test, we can interpret that gender is not significantly contributing to the adoption of the m-wallet user. This implies that males, as well as

females, are using the m-wallet, hence the null hypothesis  $H_0$  is accepted as the significance value is 0.536 which is above to the .05.

**Figure 2: Mobile Wallet user \* Gender**

From the above chart, we can interpret no relationship between the age and adoption of m-wallet. We can see that both the gender category is using and not using m-wallet.

**Table-9: Crosstab: Mobile Wallet user \* Education**

			Education					Total
			High School	Intermediate	Under Graduate	Post Graduate	Professional	
Mobile Wallet user	NO	Count	8	10	13	19	8	58
		% within Mobile Wallet user	13.8%	17.2%	22.4%	32.8%	13.8%	100.0%
		% within Education	42.1%	35.7%	26.0%	37.3%	36.4%	34.1%
		% of Total	4.7%	5.9%	7.6%	11.2%	4.7%	34.1%
	Yes	Count	11	18	37	32	14	112
		% within Mobile Wallet user	9.8%	16.1%	33.0%	28.6%	12.5%	100.0%
		% within Education	57.9%	64.3%	74.0%	62.7%	63.6%	65.9%
		% of Total	6.5%	10.6%	21.8%	18.8%	8.2%	65.9%
Total	Count		19	28	50	51	22	170
	% within Mobile Wallet user		11.2%	16.5%	29.4%	30.0%	12.9%	100.0%
	% within Education		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		11.2%	16.5%	29.4%	30.0%	12.9%	100.0%

From the above cross tab table, we can interpret that out of the total 170 respondents 58 are not using m-wallet services out of which 19 posts graduate, 13 are under-graduate, 10 are intermediate, eight are high school and professionals. On the other hand, out of the 112 users, 37 are

under-graduate, 32 are postgraduate, 18 are intermediate, 14 are professionals and 11 are high school. Hence, no clear trend is noticed regarding the level of education and adoption of m-wallet services.

**Table-10: Chi-Square Tests: Mobile Wallet user \* Education**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.310 <sup>a</sup>	4	.679
Likelihood Ratio	2.357	4	.670
Linear-by-Linear Association	.015	1	.903
N of Valid Cases	170		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.48.

As from the above chi-square test we can interpret that the education level is not significantly contributing to the adoption of the m-wallet user. This implies that all

education level people are using the m-wallet, hence the null hypothesis H03 is accepted as the significance value is 0.679 which is above to the .05.

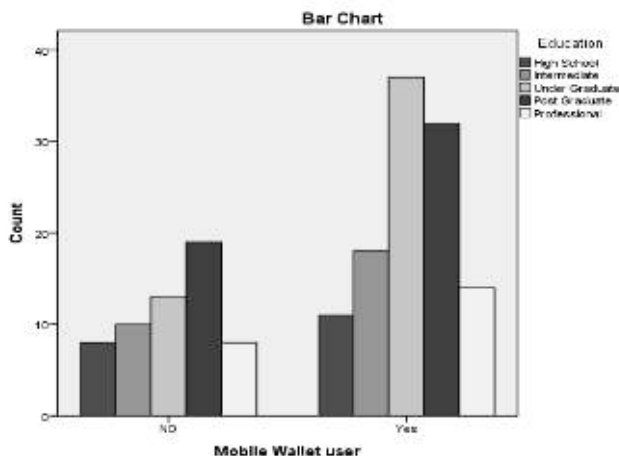


Figure3: Mobile Wallet user \* Education

From the above chart, we can interpret no relationship between the level of education and adoption of m-wallet.

We can see that all education level peoples are using as well as not using m-wallet services.

**Table-11: Crosstab: Mobile Wallet user \* Income**

			Income					Total
			Below 2,50,000	2,50,001- 5,00,000	5,00,001- 7,50,000	7,50,001- 10,00,000	Above 10,00,000	
Mobile Wallet user	NO	Count	8	15	20	11	4	58
		% within Mobile Wallet user	13.8%	25.9%	34.5%	19.0%	6.9%	100.0%
		% within Income	40.0%	30.6%	40.0%	31.4%	25.0%	34.1%
		% of Total	4.7%	8.8%	11.8%	6.5%	2.4%	34.1%
	Yes	Count	12	34	30	24	12	112
		% within Mobile Wallet user	10.7%	30.4%	26.8%	21.4%	10.7%	100.0%
		% within Income	60.0%	69.4%	60.0%	68.6%	75.0%	65.9%
		% of Total	7.1%	20.0%	17.6%	14.1%	7.1%	65.9%
Total	Count		20	49	50	35	16	170
	% within Mobile Wallet user		11.8%	28.8%	29.4%	20.6%	9.4%	100.0%
	% within Income		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		11.8%	28.8%	29.4%	20.6%	9.4%	100.0%



From the above cross tab table, we can interpret that out of the total 170 respondents 58 are not using m-wallet services out of which 20 are from 5,00,001 to 7,50,000 category, 15 are from 2,50,001 to 5,00,000 category, 11 are from 7,50,001 to 10,00,000 category, eight are from below 2,50,000 category and four are from above 10,00,000 category. On the other hand, out of the 112 users of m-

wallet 30 are from 5,00,001 to 7,50,000 category, 34 are from 2,50,001 to 5,00,000 category, 24 are from 7,50,001 to 10,00,000 category, 12 are from below 2,50,000 category and 12 are from above 10,00,000 category. Hence, no clear trend is notice regarding the level of income and adoption of m-wallet services.

**Table-12: Chi-Square Tests: Mobile Wallet user \* Income**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.050 <sup>a</sup>	4	.727
Likelihood Ratio	2.062	4	.724
Linear-by-Linear Association	.397	1	.529
N of Valid Cases	170		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.46.

As from the above chi-square test, we can interpret that the income level is not significantly contributing to the adoption of m-wallet users. This implies that all income

categories people are using the m-wallet, hence the null hypothesis  $H_0$  is accepted as the significance value is 0.664 which is above to the .05.

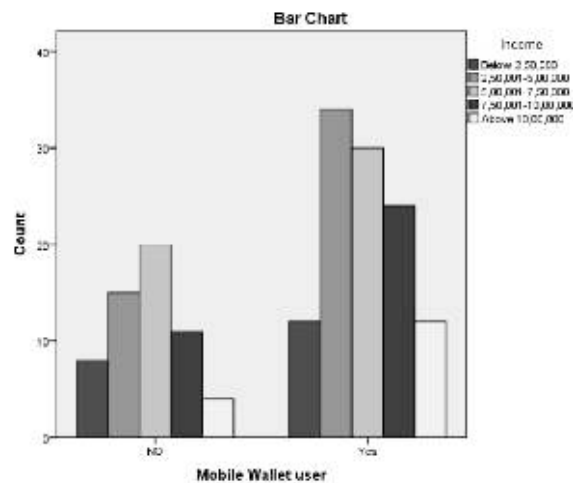


Figure4: Mobile Wallet user \* Income

From the above chart, we can interpret no relationship between the income and adoption of m-wallet. We can see

that all income categories peoples are using as well as not using m-wallet services.

**Table-13: Crosstab: Mobile Wallet user \* Occupation**

			Occupation					Total
			Student	Salaried	Self Employed	Unemployed	Pensioner	
Mobile Wallet user	NO	Count	10	18	15	10	5	58
		% within Mobile Wallet user	17.2%	31.0%	25.9%	17.2%	8.6%	100.0%
		% within Occupation	38.5%	41.9%	31.3%	29.4%	26.3%	34.1%
		% of Total	5.9%	10.6%	8.8%	5.9%	2.9%	34.1%
	Yes	Count	16	25	33	24	14	112
		% within Mobile Wallet user	14.3%	22.3%	29.5%	21.4%	12.5%	100.0%
		% within Occupation	61.5%	58.1%	68.8%	70.6%	73.7%	65.9%
		% of Total	9.4%	14.7%	19.4%	14.1%	8.2%	65.9%
Total	Count		26	43	48	34	19	170
	% within Mobile Wallet user		15.3%	25.3%	28.2%	20.0%	11.2%	100.0%
	% within Occupation		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total		15.3%	25.3%	28.2%	20.0%	11.2%	100.0%

From the above cross tab table, we can interpret that out of the total 170 respondents 58 are not using m-wallet services out of which 18 are salaried, 15 are self-employed, 10 are students, 10 are unemployed and 5 are pensioners. On the

other hand, out of the 112 users, 25 are salaried, 33 are self-employed, 16 are students, 24 are unemployed and 14 are pensioners. Hence, no clear trend is noticed regarding the occupation and adoption of m-wallet services.

**Table-14: Chi-Square Tests: Mobile Wallet user \* Occupation**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.390 <sup>a</sup>	4	.664
Likelihood Ratio	2.385	4	.665
Linear-by-Linear Association	1.796	1	.180
N of Valid Cases	170		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.48.

As from the above chi-square test, we can interpret that the occupation is not significantly contributing to the adoption of m-wallet users. This implies that people of all

occupation categories are using the m-wallet, hence the null hypothesis H05 is accepted as the significance value is 0.664 which is above to the .05.

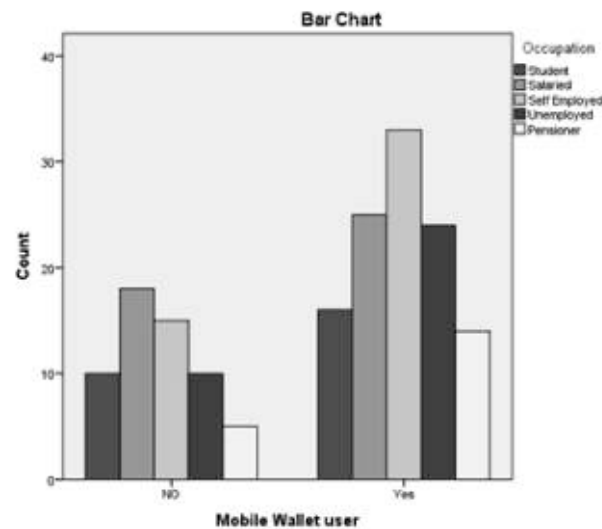


Figure5: Mobile Wallet user \* occupation

From the above chart, we can interpret no relationship between the Occupation and adoption of m-wallet. We can see that all occupations category peoples are using and not using m-wallet.

### Conclusion

Mobile wallet considered as the easiest possible way to make financial transaction anywhere around the world, and the reality is that mobile wallet also contributes to the betterment of society in many ways. The study found approx. 66% sample is using m-walleted services irrespective of their age, gender, educational level, income level and occupation which implies that demographic factors don't have any impact on the adoption rate of m-banking services. These findings are similar to the findings of the study of Singh & Rana 2017, Singh & Rana 2017 except for the level of education where the study found the level of education as the significant factor and Reddy & Rao 2019. Paytm, Phone pay and Google pay are the most used m-wallet in India. Fuel filling, online shopping, and recharge are the most used causes for the m-wallet services in India the reason behind using was determined as cash rewards and incentives in the forms of vouchers which are offered by the m-wallet service providers. Finally, it can be concluded that there will be tremendous growth in the adoption of mobile wallets in the forthcoming years.

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