INTENTION TO USE DIGITAL PAYMENT SYSTEM AFTER DEMONETISATION-A COMPARATIVE STUDY OF RURAL AND URBAN CUSTOMER

A Thesis

Submitted For the Award of the Degree of

DOCTOR OF PHILOSOPHY

In

COMMERCE

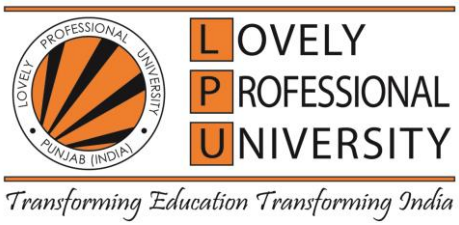
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PUNJAB

2021

DECLARATION

I, Anu Gupta, student of Ph.D. (Commerce) hereby declare that this thesis entitled 'INTENTION TO USE DIGITAL PAYMENT SYSTEM AFTER DEMONETISATION- A COMPARATIVE STUDY OF RURAL AND URBAN CUSTOMER' is an original work done by me and has not been published or submitted elsewhere for the requirement of the degree program. Any literature, data or work done by others and cited within this thesis has been given due acknowledgement and listed in the reference section.



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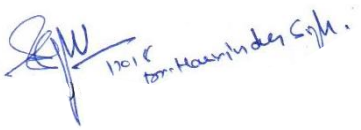
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I, Dr. Harvinder Singh, do hereby certify that Anu Gupta has prepared her thesis entitled 'INTENTION TO USE DIGITAL PAYMENT SYSTEM AFTER DEMONETISATION- A COMPARATIVE STUDY OF RURAL AND URBAN CUSTOMER' under my guidance and supervision. This thesis is being submitted by her in the partial fulfillment of the requirements for the award of the Doctor of Philosophy in Commerce from Lovely Professional University, Phagwara.



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ABSTRACT

Cash and Cheques always remain as essential modes of payment and trade for the people of India during 20th century. Earlier there were no currency and all the goods and services were purchased in the exchange of goods and services; this system of exchange has been known as Barter system. Later money has been developed as a popular means for day to day transactions for exchange of goods and services. Globalization made the cashless transactions more popular in all over the world. There were various methods of cashless transactions. The invention of cashless economy has reduced the printing of currency, cost of circulation, help in fiscal policy, financial inclusion, curbing black money and evasion of tax.

India has been gone through a very difficult period of cash crunch due to Demonetisation. Demonetisation means to deregulate the old currency in circulation and introduce new currency in exchange of old one. (Mehta, Patel and Mehta, 2016). Shirley in her paper 'Impact of Demonetisation in India' stated that, " *Demonetisation represents much more than Destabilization."* The recent demonetisation announced in India on 8th November, 2016 in which 86% currency lost its legal status. The immediate effect of it was that people move towards electronic payment system. (Gaur and Padiya,2017) Digital Payment system means when transactions made through online mode. After demonetisation people start using digital payment mechanism in a repetitive use for their work whether it is purchasing or office work. But if we talking about rural customer then the usage of this payment system is not much used by the people due to many reasons, one is security.(Aritra Brahma and Rajasi Dutta)

India turns into Digital India during the cash crisis at the time of demonetisation.so people start using online wallet. India made a law to provide protection to online system. the law is Information Technology Act,2000. But it has not been effectively implemented in India. Other problems are lack of facilities and power that broaden the digital divide in India.

The start of making India as digital came in 2016 after demonetisation. At that time the currency disappeared overnight and the citizens of India had no choice other than to shift to digital payments.

At the present time we are in a situation where digital payment jump to 1.5 billion trnsactions. The transaction based on UPI are at high level. September month count 180 crore transactions which cover 3 lakh crore rupees. The Digital Payment increased over a period of time. RBI revealed that in the year 2020 it increased at a massive rate say 55%. This increment occur between (FY) 2015-16 and 2019-20, revealed by RBI.

After doing the literature review, I am unable to find any review based on comparison of customers and retailers of rural and urban areas using digital payment system after demonetisation. Maximum studies have been done by taking only one basis either rural or urban. This study will identify the intention of rural and urban customers to use digital payment system after demonetisation by doing a comparative study of customers of both areas.

Research Objectives

a. To examine the effect of Digital Payment attributes on adoption of Digital Payment system on customers of rural and urban area after demonetisation.

b. To identify the relativeness of different Digital Payment attributes with the adoption of Digital Payment System on customers of rural and urban area after demonetisation.

c. To identify how Digital Literacy influence the intention of customers of rural and urban area to use digital payment system after demonetisation.

Hypothesis of the study

H1: There is no significant relationship between security/Trust and intention to use digital payment system by rural customers after demonetisation.

H2: There is no significant relationship between security/Trust and intention to use digital payment system by urban customer after demonetisation.

H3: There is no significant relationship between usage and intention to use digital payment system by rural customers after demonetisation.

H4: There is no significant relationship between usage and intention to use digital payment system by urban customers after demonetisation.

H5: There is no significant relationship between infrastructure and intention to use digital payment system by rural customers/ after demonetisation.

H6: There is no significant relationship between infrastructure and intention to use digital payment system by urban customers after demonetisation.

H7: There is no significant relationship between cost and intention to use digital payment system by rural customers after demonetisation.

H8: There is no significant relationship between cost and intention to use digital payment system by urban customers after demonetisation.

H9: There is no significant relationship between innovation acceptance and intention to use digital payment system by rural customers after demonetisation.

H10: There is no significant relationship between innovation acceptance and intention to use digital payment system by urban customers after demonetisation.

H11: There is no significant relationship between digital illiteracy and intention to use digital payment system by urban customers after demonetisation.

H12: There is no significant relationship between digital literacy and intention to use digital payment system by rural customers after demonetisation

Scope of Study

Scope of the study includes customers of rural and urban area. Data has been collected from the customers of rural and urban area. The areas include Ludhiana, Jalandhar, Amritsar and Chandigarh. The sample size of 600 customers from rural and urban area is included in the study. The research is focused on in intention to use digital payment systems after demonetisation among customers of rural and urban area, with the help of comparison between customers of rural and urban areas. For this purpose many studies have been reviewed to classify the variables or factors affecting the adoption of digital payment systems. After research five attributes have been found out viz. Security, Usage, Infrastructural facilities, Cost and Innovation Acceptance. Further various models and theories were reviewed. After reviewing all the theories, a conceptual model has been framed. This model is the unique model. Hence a model has been derived which help in testing the validity in context of customers in rural and urban area.

Research Methodology

In this study the population firstly put into strata to find out the sample easily. So for this the population divide into different group to find out the samples from each group and then judgmental sampling will be used. The reason for selecting this method is that this study will observe the relationship between two subgroups i.e. rural and urban customers towards the use of digital payment system after demonetisation. For this study the sampling element will be customers from rural and urban area of three districts and one union territory i.e. Ludhiana, Jalandhar, Amritsar and Chandigarh. The reason for selection of Chandigarh is the Capital of Punjab and also a Union Territory. So to collect the data the universe will be divided in sub districts. The sampling unit for this study will be persons from age group of 18-60 years and their minimum qualification should be 10^{th} pass out. The comparison will be done between urban and rural persons of three districts and one U.T according to their intention to use digital payment systems after demonetisation. The analysis of sample will be classified on different terms i.e. age, gender, educational qualification of customers.

The study will be done in Punjab and three districts have been chosen as per the income level and digital literacy level of these districts. The three districts are Ludhiana, Jalandhar and Amritsar. Ludhiana comes at first number from income point of view and followed by Jalandhar and Amritsar at second and third place. (Hindustan Times, 10^{th} August, 2019). One Union Territory i.e. Chandigarh has also been selected. The reason for selection of Chandigarh is that it is the capital of Punjab and also to do proper and clear analysis. The data has been collected through primary and secondary mode. To analyze the data initially survey will be conducted with the help of questionnaire. A pilot questionnaire will be made in order to check the effectiveness of the questionnaire. Coefficient of Correlation and regression will be used to analyze the relationship between Independent and dependent variables.

Analysis

First Objective: The influence on the adoption of digital payment systems has been analysed with the help of five attributes of this study. There was significant effect of digital payment attributes on adoption of digital payment systems. In this objective regression analysis has been used. This analysis has been checked separately for rural

and urban areas. The five attributes put significant effect on the adoption of digital payment systems in both the areas. The P value is less than 0.05 in both areas, in this case the null hypothesis has been rejected.

Second Objective: The relationship between five attributes and adoption of digital payment system has been analysed with the help of correlation. The value of correlation is positive in all the cases. Again this analysis has been done for rural and urban area. The correlation is weak, moderate and strong in different cases. When we talk about the comparison of value of correlation between rural and urban area, then the value of attributes is more in case of rural areas. The value in rural area is between weak to strong which shows that if facilities provide in rural area then customer will took initiative to use the digital payment system. In urban area the values are lying between weak to moderate, it means that as facilities are there in the urban areas, so people didn't put extra efforts to improve the system or to get extra knowledge.

Third Objective: The influence of usage on the adoption of digital payment system has been analysed with the help of regression analysis. In regression analysis also stepwise method has been used. By using stepwise method, two questions have been not taken into consideration because of low reliability of information. Two questions are left in case of rural area, which shows that usage put significant impact on the adoption of digital payment system. The same is the case of urban area, where three out of four questions has been taken. The reason for removing one question is again the low reliability of information. The P value is less than 0.05; it shows the rejection of null hypothesis. It means usage put significant impact on the adoption of digital payment system in urban area also.

Mean: When we talk about the comparison of intention of using digital payment system among rural and urban area, then this can be analysed with the help mean of data. The value of mean is more in urban area as compared to rural area. it means that the area with high mean has more intention to use digital payment system.

Findings and suggestions of the study

Security should be strongly addressed as it hinder in the adoption of digital payment systems. The cyber laws should be strong, which will make the customers more confident to adopt the online systems. There should be quick

action for them who will hack the data of the customers. Consumers in rural as well as in urban area need security, as it is their main concern while using digital modes.

Most of the respondents are of the point of view that there is lack of infrastructural facilities. The infrastructure should be 100% developed in the country, especially in rural area, so the government of India should provide these facilities at a low cost.

The digital service providers should make it ensure the hurdles in various factors such as security, usage, infrastructure facilities, and cost and innovation acceptance need to overcome in order to make the digital payment systems more user-friendly.

The security and privacy risk should be minimizing. This can be done by providing timely help to the customers. In case of any need then government should help and take corrective action in order to make people confident and reliable towards their study.

The active role should be played by the digital service providers in spreading the digital literacy and also to make customers aware about the security and other online related protocols. (e.g this can be done by organizing a camp in different areas and the people in those camp show some demo of how to use digital payment system in an easy way.)

The cost of using digital payment system should be low, because customers in rural as well as in urban area get frustrated to use online payment modes because of charges charged while using these systems. The digital service providers should maintain online free of cost payment methods, so that customers feel less burdened while using these. Like when we use NEFT, RTGS, IMPS then charges has been charged. So all of these methods should be deleted and payment system remains cost free.

The digital service providers should encourage people to use new technologies which help in learning the digital payment systems in a better and easy way, especially in the rural India. (E.g.snapdeal has partnered with the National

Payments Corporation of India. It allows customers to make payment at the time of accepting the delivery of their order through QR- based digital payment)

This study helps the policymakers to have a key insight in the adoption of digital payment system promoted under the "Digital India" program in future. The government of India wants to make India totally digitalized. Whether the person will use this system or not but he or she should have full knowledge of using digital payment system. this can be done by providing facilities especially in rural area free of cost and make people confident and secure.

While doing study it was found out that the people in rural area wanted to use digital payment system but the digital literacy and infrastructural facilities put a great obstacle in using digital payment system.

The shift in the mind of people is necessary related to the usage of digital payment system apart from the awareness and training; so the government of India and policymakers can consider the outcome of this study for developing the policies.

The five attributes has influence the adoption of digital payment system in rural and urban area. However the influence is more in rural area as compared to urban area.

The relationship between attributes and digital payment system is high in rural area as compared to the urban area. It shows that in rural area people are willing to use digital payment system if proper facilities have been provided to them.

When we talk about the demographic feature and its influence on adoption of digital payment system then gender and age put no significant impact on the adoption of digital payment system, while education, occupation and residence put significant impact on the adoption of digital payment system.

The hypothesis of this study shows that there is significant relationship between the adoption of digital payment system and the attributes of digital payment systems. The attributes of this study are security, cost, infrastructural facilities, usage and innovation acceptance.

When we talk about the comparison between rural and urban area in the adoption of digital payment system, then the intention to use is more in urban area as

compared to rural area. The reasons are digital literacy and infrastructure facilities.

There is dependency between dependent and independent variables. This analysis has been done with the help of chi-square test.

There is a need on the part of government of India to promote some effective program especially in the rural area, which help in digital awareness and also providing the infrastructural facilities to the people.

There should be more Government service center which helps in providing awareness regarding the usage of digital payment systems. The worker in service center should solve the problems of people while using digital payment system. More service center should be opened in the rural area.

CHAPTER 1

1. Introduction

In ancient times, the mode of transaction was barter system. After sometime people has started using cash as the mode of transaction. Cash and Cheques becomes as an essential modes of payment and trade for the people of India during 20th century. Earlier there were no currency and all the goods and services were purchased in the exchange of goods and services; this system of exchange has been known as Barter system. Later money has been developed as a popular means for day to day transactions for exchange of goods and services. Globalization made the cashless transactions more popular in all over the world. There were various methods of cashless transactions. The invention of cashless economy has reduced the printing of currency, cost of circulation, help in fiscal policy, financial inclusion, curbing black money and evasion of tax.

The growth of digitization in recent years at a very fast rate has created new and effective modes of payment. Retailers are considered as the beneficiaries of these payments. After demonetisation the usage of credit and debit cards and other digital payment systems has been increased by almost 200 percent. The availability of easy digital payment systems let the less sophisticated customers and retailers as well as unorganized sector to adopt these payment methods. The methods can be internet banking, mobile wallet, AEPS, UPI, Paytm etc. The acceptance of digital payment methods after demonetisation is less in districts that are immature economically, lag in technological framework and have people with conservative approach. This type of area is specifically known as rural areas. Even with the increase in the usage of digital payment systems, cash remain as the main source of transaction in India especially in rural India. In India the most used mode of payment is still Cash on Delivery.

1.1 Digital Literacy and Cashless India

The dream of digital India is still far reaching objective by seeing the current scenario, the dream of digital India appears to be like one of the main problems. Changing the old norms is going to take a lot of efforts after demonetisation. Indians used to spending and saving the cash. This habit of retaining cash is due to avoiding the taxes and convenience in transactions. Besides, keeping the digital literacy aside, the

literacy level of India still remain a serious reforms, with almost one-third of population still illiterate. These persons are unable to even sign.

In addition to this most of the Indians are still unbanked. The unbanked section has no access to credit and debit cards. Approx. 697 million debit cards have been issued but their usage is still low. The majority of people in India are still employed in the unorganized sector. This unorganized sector was adversely affected by the demonetisation. If we talk about the rural and urban people then we can see that urban cities have a relatively developed networking infrastructure facilities. The demonetisation has been the only momentary steroid for cashless transactions. Government launched digital India initiative. Therefore in India now approx. 94% Indians have access to Aadhaar cards. The Jan Dhan bank accounts launched by the India Government have today reaches approx. 24 crore Indians. Before demonetisation these accounts remain inactive but after demonetisation the same has been actively used by people.

Figure no 1.1

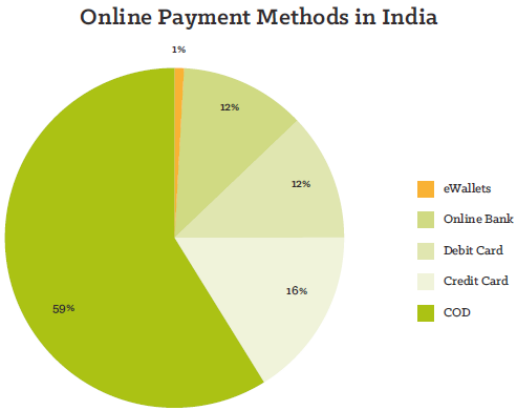


Figure 24 - distribution of online payment methods in India[60]

(**Source: IMRG**)

As from the above figure it is clear that most of the people in India still using COD mode of payment while doing online transactions. The major part of India's population is still financial illiterate and having less access of banking sector this is the reason they use cash as payment mechanism. To empower the usage of digital payment systems, the Government of India try to set up system for safety and security and also issue RuPay cards under the Prime Minister Jan dhan Yojana scheme. The digital India vision and making the country cashless society is becoming the big

dream for the Government of India. The PM of India has given the slogan for digital economy," Say yes to Digital Payment, no to cash."

India has been gone through a very difficult period of cash crunch due to Demonetisation. Demonetisation means to deregulate the old currency in circulation and introduce new currency in exchange of old one. (Mehta, Patel and Mehta, 2016). Shirley in her paper 'Impact of Demonetisation in India' stated that, " *Demonetisation represents much more than Destabilization."* The recent demonetisation announced in India on 8th November, 2016 in which 86% currency lost its legal status. The immediate effect of it was that people move towards electronic payment system. (Gaur and Padiya,2017) Digital Payment system means when transactions made through online mode. After demonetisation people start using digital payment mechanism in a repetitive use for their work whether it is purchasing or office work. But if we talking about rural customer then the usage of this payment system is not much used by the people due to many reasons, one is security.(Aritra Brahma and Rajasi Dutta)

1.2. History of Demonetisation around the World

Table no 1.1

Sr. No.	Country	Year	Summary	Impact
1	United Kingdom	1971	Adopted Decimal currency against Pounds, Shilling and Pence	Moderate
2	Ghana	1982	Demonetized 50 Cedi currency	Adverse
3	Myanmar	1987	Invalidate 80% of currency from circulation	Adverse
4	Soviet Union	1991	50 and 100 Rubble notes were removed from circulation	Positive
5	Australia	1996	Replace paper based notes with Polymer notes	Positive
6	European Union	2002	12 countries introduced euro as their legal currency	Positive
7	Zimbave	2015	Replace Zimbave dollar with American dollar	Positive
8	Pakistan	2016	Rep lace old currency with new one and give 18 months time to exchange money	Positive

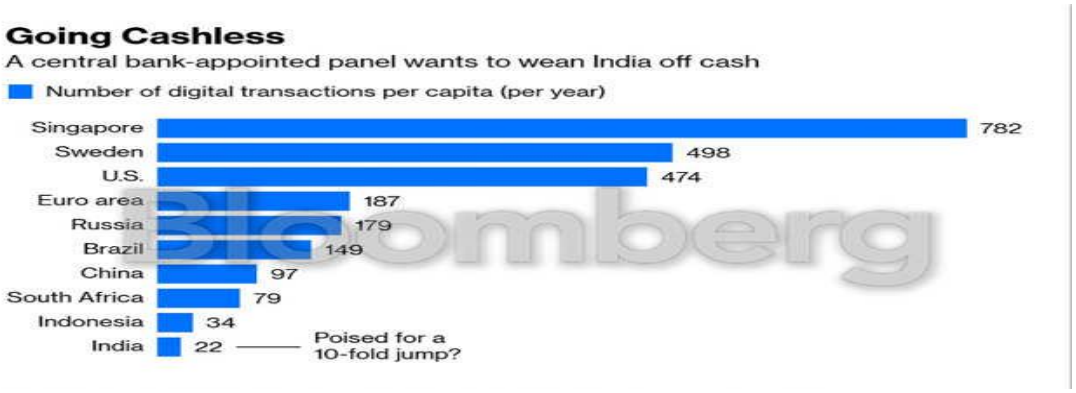
(**Source: Free Press Journal and Sovan Kumar Malik**)

1.2.1. History of Demonetisation in India

In India first demonetisation done by Government is in the year 1946 when 1000 Rs notes were demonetized. After that in 1954, 1000 Rs currency were reintroduced in India. In the year 1978 (1000, 5000 and 10,000) highest denomination notes were demonetized. 500 Rs notes were introduced in India in the year Oct, 1987. In Nov. 2000 Rs 1000 denomination notes again came into circulation. After that in the year 2016 our Prime Minister Narendra modi demonetized 500 and 1000 Rs notes in order to tackle the corruption and curb the Black money from the country. (Zee news India)

1.2.Digitalized countries in the World

Figure no 1.2.

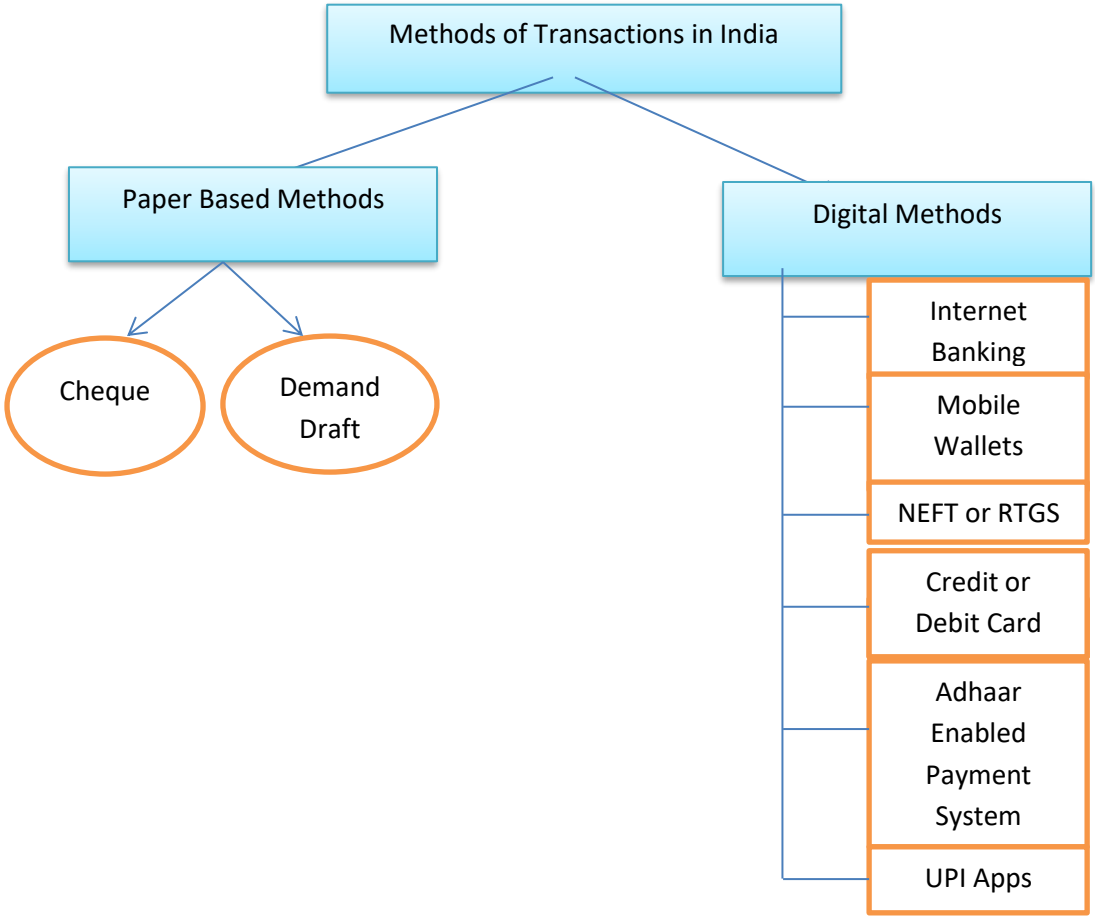


(**Source: Bloomberg, 2019**)

1.3. E-Payment System

E-Payment system is also known as Digital Payment system. It means to do transactions electronically without using cash in paper form. After demonetisation it is develop at a very fast rate.

Figure no 1.3.: Methods of transactions in India



(Source: Self-made by the Scholar)

1.3.1. Types of Digital Payment System

1. Internet Banking

Internet banking is one of the best methods of online payment. In this customer can pay the money from his or her bank account. For making payment the customer need to have his bank id and the password. This is the easiest method of online payment.

2. Mobile Wallets

The most popular method of this is M-Wallets. In this method one has to deposit money in the mobile using IMPS. M-Wallet can be downloaded from play store in the smart phone. The examples are: Google pay, Amazon pay, Phone pe etc

3. NEFT and RTGS

Third method is NEFT and RTGS. This is the fast payment method as compared to other methods. In this a person can make payment through online mode. The minimum amount that a person can transfer is Rs. 50,000.

4. Credit Card and Debit Card

India is becoming the cashless country. People in India are using credit and debit card. They find it easy way of transfer the money. These cards use with the help of ATM. People also use these cards while doing shopping for making payments to the shopkeeper.

5. E-Wallets

This method has been used with the help of mobile phone. If a person is having smart phone and internet connection then he or she can transfer the money to some other person. The main thing in this method is to link the debit and credit card with e-wallet. PayTm and Mobikwik are the example of this system.

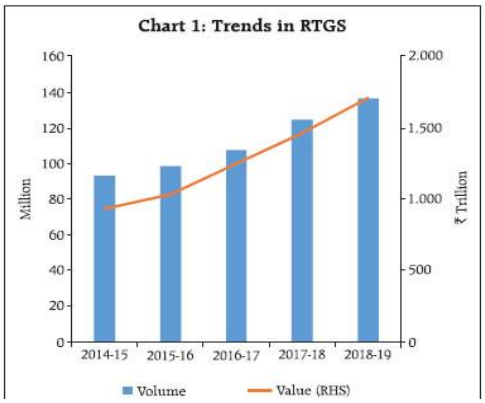
6. Aadhaar Enabled Payment System

Aadhaar Enabled Payment System (AEPS) is used through mobiles. The payment in this method has been done through online mode. This method can be used by any person whether the person is rich or poor and person having phone or not. It requires only finger print scan and then the money can automatically debited from Aadhaar linked bank account.

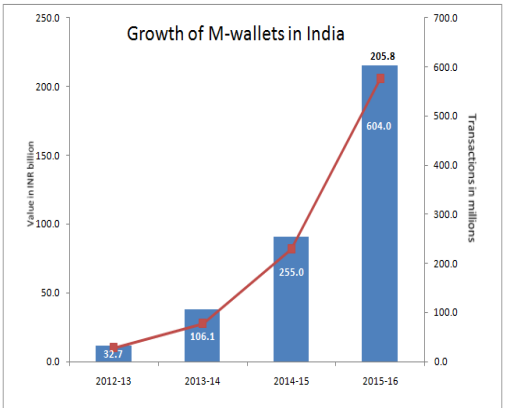
7. UPI Apps

The full form of UPI is Unified Payment Interface. This method is used for inter-bank transactions. One bank can ask for money from other bank by using UPI. It is regulated by Reserve Bank of India. An individual can also use this for checking his bank account or for doing transactions online. The funds can be transfer from Rs 100,000 and more. The best UPI app is BHIM app.

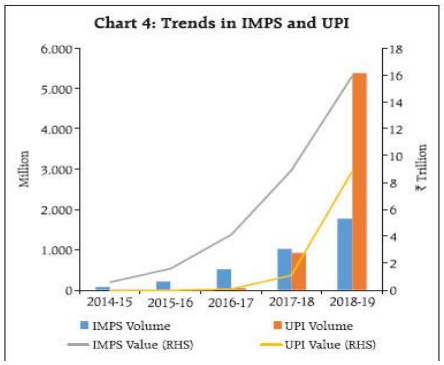
Figure 1.4. to 1.9. : Graphical representations for the growth of cashless transactions in India

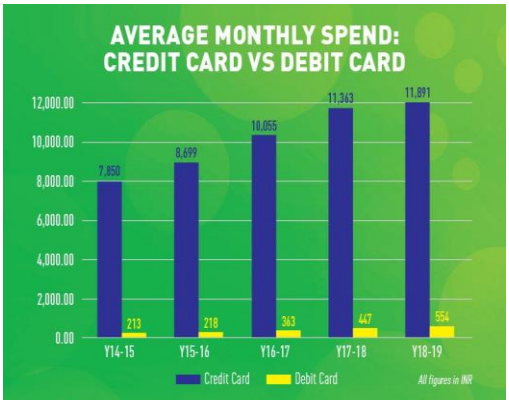


(Source: RBI, 2019)

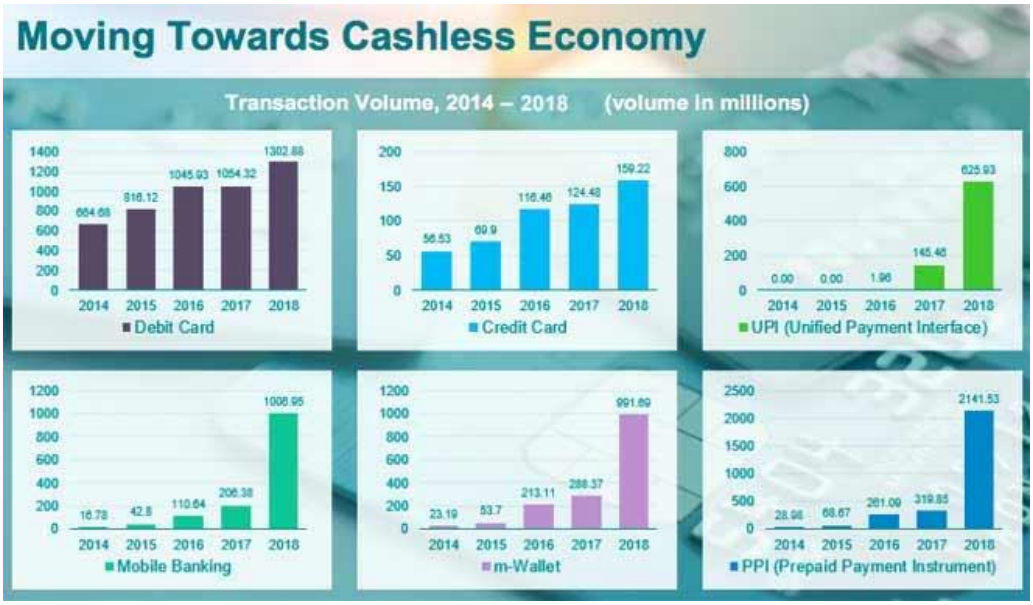


(Source: RBI, 2019)





(Source: RBI, 2019)

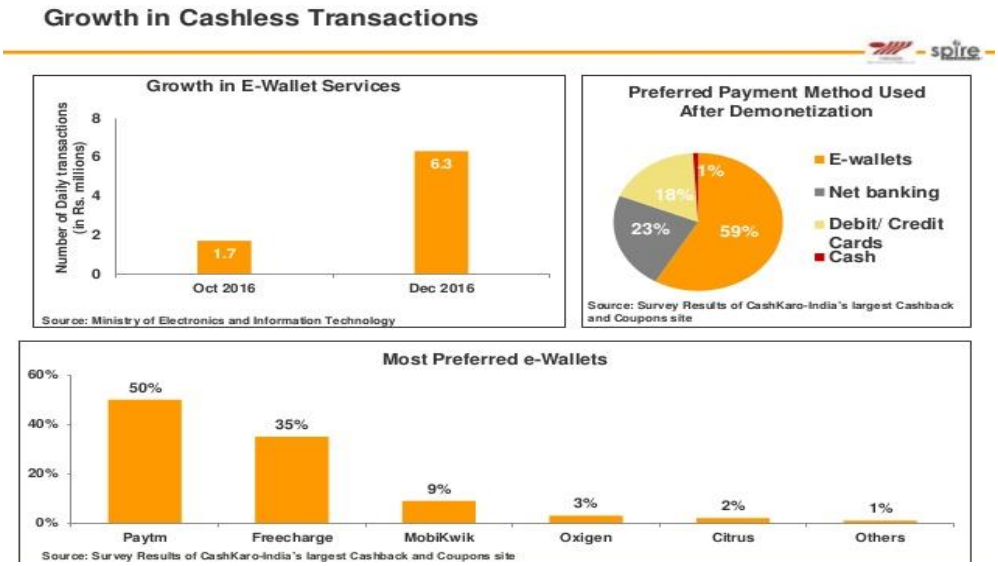


(Source: Financial Express, 2020)

1.4.Growth of Digital Payment In India

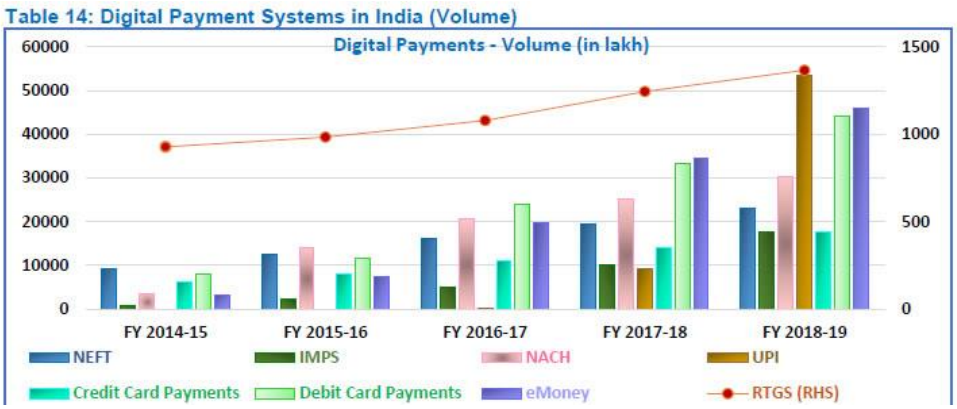
The payment done by one person to other person after demonetisation has been increased at a very fast rate with the help of digital payment systems. These systems are convenient and transparent. Digital payment system has been mostly used in urban area as compared to rural area. The growth of digital payment systems in India in the terms of volume has been shown by RBI in the following figure:

Figure no 1.10.



(Source: Spire Research and Consulting, 2017)

Figure no 1.11.



(Source: RBI, 2020)

1.4.1. Growth of Digital Payment System after Demonetisation

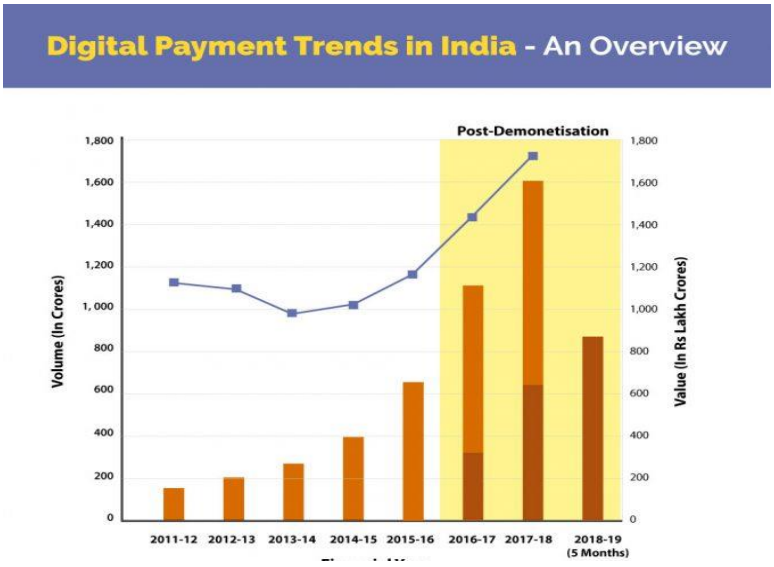
Digital Payment grows rapidly over a period of time. The Digital Payment system comes to replace cash in the economy. Due to increase in the usage of digital

payments the transactions of sale and purchase of things have been increased. Digital Payment systems provides the ease of receipts and payments between consumers and sellers. An efficient and reliable Digital Payment systems provides fast payments, better tracking, transparency, reduction in time spent, less cost and increase trust while doing the transactions. Digital Payment systems has many financial risks also. Due to the online nature the authenticity and security of transactions can't be guaranteed.

India turns into Digital India during the cash crisis at the time of demonetisation.so people start using online wallet. India made a law to provide protection to online system. the law is Information Technology Act,2000. But it has not been effectively implemented in India. Other problems are lack of facilities and power that broaden the digital divide in India.

The start of making India as digital came in 2016 after demonetisation. At that time the currency disappeared overnight and the citizens of India had no choice other than to shift to digital payments.

At the present time we are in a situation where digital payment jump to 1.5 billion trnsactions. The transaction based on UPI are at high level. September month count 180 crore transactions which cover 3 lakh crore rupees. The Digital Payment increased over a period of time. RBI revealed that in the year 2020 it increased at a massive rate say 55%. This increment occur between (FY) 2015-16 and 2019-20, revealed by RBI.

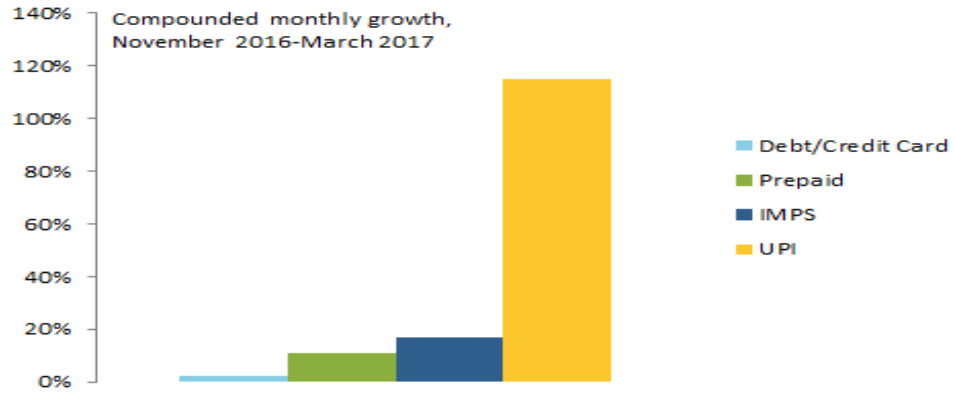


(Source: The True Picture, 2018)

In the above picture it is clear that the payment through digitalised mode has been increased at a great pace. The amount spend has been increased in lakh crores. People start using UPI and other payment systems which are convenient and the main option during demonetised time. After demonetisation the UPI transactions also increased. From the figure below it is clearly seen the rise in the transactions through UPI mode after demonetisation.

Figure no 1.12.

Digital Payment Growth Rates Following Demonetization



(Source:Federal Reserve Bank, 2017)

1.5. Advantages of digital payment methods

1. **Less Labour Costs**:

   The labour cost is considered less while making payment through digital modes. As there is no requirement of any extra expenditure spend for making payment as compared to manual payment methods. The payment made automatically through online mode in just one click. It can be done through computer or smart phone just by sitting at home only.

2. **Fast transaction speed/ Time savings**:

   The transactions can be done at a very fast rate as compared to offline methods. For doing transactions we need to have only smart phone or computer and internet connection. The feedback of transactions can be

received quickly from sender and receiver. With the help of digital payment system we don't have to stand in line of banks wait for our turn.

3. **Low risk of theft:**

   The risk of theft of cash is very much less in digitization. The amount send directly deducted from the sender account and added in the receiver account. There is no other middleman while making payment. This is the reason there is low risk of theft in digital payment methods.

4. **Control on expenses**:

   Digital payment method would allow us to have e-wallet in which all the transactions and expenses is recorded. So it's made easy to control on expenses as compared to manual payment system in which we have to keep a record on our daily transactions on our own which is a difficult task for us.

5. **Increased sales:**

   As net banking and online shopping become widespread, people carrying less cash in hand. Electronic payment becomes the preferable option of making payment. Customer can purchase goods while sitting at home only which increase the no of sales in the market.

1.5.1. Limitations of digital payment methods

1. Poor Internet connectivity: All Indians doesn't have access to mobile phones. Especially people living in rural areas have not access to internet connectivity. It differs from state to state.
2. Digital Illiteracy: In India most of the people are digitally illiterate especially rural people. Most of the rural Indians are illiterate. Due to this they are unable to understand the method of using digital payment systems.
3. Security Concern: the digital payment system is not securing one. It is more exposed to hacking. Person can make use of the personal information of customers for his personal use. Due to security risk, sometime people become unwilling to use digital payment.
4. Increased Costs: online payment increases the cost of transactions. They charge additional cost of using and providing better services to the consumers.
5. Reckless spending: people purchase more things through online mode. They don't see the real worth of the commodity. This means that, it might be challenging to control the budget.
6. Threats of password: Suppose you are having account in more than one bank or you are transacting with multiple financial institutions then there will be the risk of privacy breach.
7. Hacking risk: While doing online trasaction, the personal information is exposed over the internet. This can be one of the reason that your account being hacked. Hacking could lead to loss of financial money from your account.
8. Proof of identity: while doing inernet payment, there are no means to verify the identity of the peson with whom you are dealing.

Instead of the above advantages and limitations, there are some advantages and limitations for traders and consumers.

1.5.2.Advantages for Traders or retailers:

With the help of digitalisation large as well as small scale business can get a major advantage. A small scale business can compete with large scale business even with a small amount of investment done on virtual shop. The advantages are as under:

a. **24/7 contact with buyers**:

With the help of digitalization businessman can keep a permanent touch with consumers. It improves the communication between the two without following a strict timetable. Consumer can place order at any time and can pay money.

b. Decrease in Operational Cost:

The operational cost decreased by following the automatic procedure of placing the order.

c. New Possibilities for Marketing:

The one to one marketing objective can be achieved with the help of digitalization. Computer can retain consumers name and address, their preferences etc.

1.5.3.Disadvantages for Traders

a. Fraud:

Internet creates many fraudulent activities. In the lack of direct contact with the buyer, the buyer can cheat the trader with his identity or the real payment possibilities.

b. **The Security**:

Another problem is security of data. When there is public connection then there is more chance of loss of data with the public. This can be a serious problem.

c. **Launch and Integration Costs**:

The cost of launching a virtual shop is much lower as compared to the real one but if employees have not much technical knowledge then they can increase this cost.

Advantage for customer:

a. Facilities and convenient:

The availability of virtual shop and can make payment at anytime is a major advantage for customers. Due to digitalization there is no need to go to the commercial shop. Everyone may place order and make payment from home. The digitalization gives new meaning to globalization.

1.5.4. Disadvantages for Customer:

a. Security:

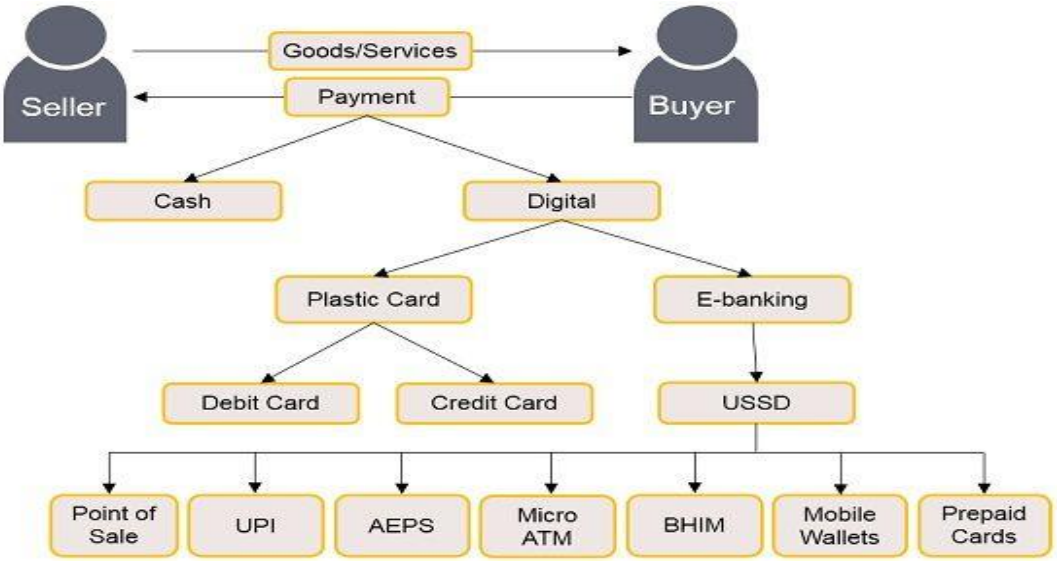
The main reason for which some persons may hesitate to use digital payment systems is security. Some persons have been afraid that their information may be used. They don't have trust on security of payment systems.

b. Access to Technology:

Due lack of technical knowledge some persons don't use digital payment methods. They don't know how to use these methods in order to make payments. That is why they prefer to visit the shop nearby.

Here is the one figure taken from e- business website which depicts the various modes of making payment to the merchant. This is the example when someone buys and sells goods and services to the other person. Let's look at the types of digital payment which earlier has been discussed in this chapter.

Figure no 1.12.



(Source: Business Jargons. 2021)

These terms mainly used in E-banking. The benefits of E-banking are as under:

a. It encourages digital payments and also the transparency for doing these type of transactions.

b. The 24/7 transactions can be done through bank with the help of above types.

c. It alert consumers about the rules and regulations of different types of payment systems and also gives alert for any change in the rules.

d. The transaction cost for the banks also get reduced due to these systems.

e. With the help of these methods customers not required to visit the bank.

To conclude we can say that any type of banking transactions which performed through e- mode comes under E-banking.

One author explained in his paper the various factors influencing the acceptance of digital payment methods in India. The following are the factors:

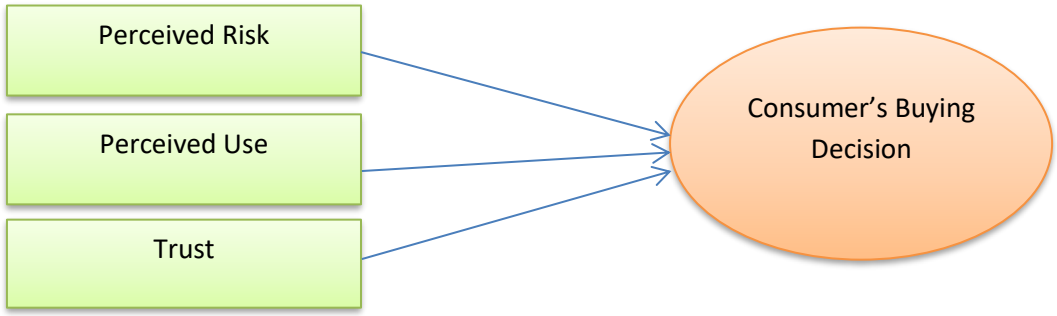
a. Perceived Risk

b. Perceived Use

c. Trust

All the above factors influence the acceptance of digital payment system in India. Author prepares a conceptual framework to explain it in a proper way. The framework is as follow:

Figure no 1.13.



(Source: Self-made by scholar)

The above framework showed that risk, usage and trust all put impact on the choice of purchasing pattern of the consumer.

1.6.The process of digital payment process



(Source: Thomas Huckabee, Inc.)

The digital payment has done through a proper way. A series of steps has been followed while doing the payment. It starts from customer and end at seller. Means the amount deducted from the account of buyer and added in the account of seller. The steps in the digital payment process has reduced the waiting period while purchasing things. With the help of latest technologies the buyer can purchase at any time and also can make payment 24/7. Now a days there are lot of companies that use online payments and also can handle credit card transactions and bank transfers at a very short time period. The buyer has a lot of option of payment service providers in the market. The way, the transactions processed and how funds transferred that will depend on the process payment and the metod you use. The online payment is totally different from the in-person transactions.

The world has been moved towrds the digital payment system. the year 2020 put the dire need in order to adapt digital technology as soon as possible. The adoption of digital payment start at a very rapid rate when the lockdown come into effect in India.

While as we know the indian government start campaign of launching online payment in India after demonetisation in 2016. The decision of digital India has pushed Indians to switch to online payments.

As India move towards the adoption of digital world, the customers as well as merchants are adopting new digital technologies. Now the e-commerce sites and other e-payment systems become must for any type of business. Due to e-payments customers are happy as they can do shopping at anytime and anywhere. Entities or items which include in online payment system are:

a. The Merchant

b. The customer

c. The payment processor

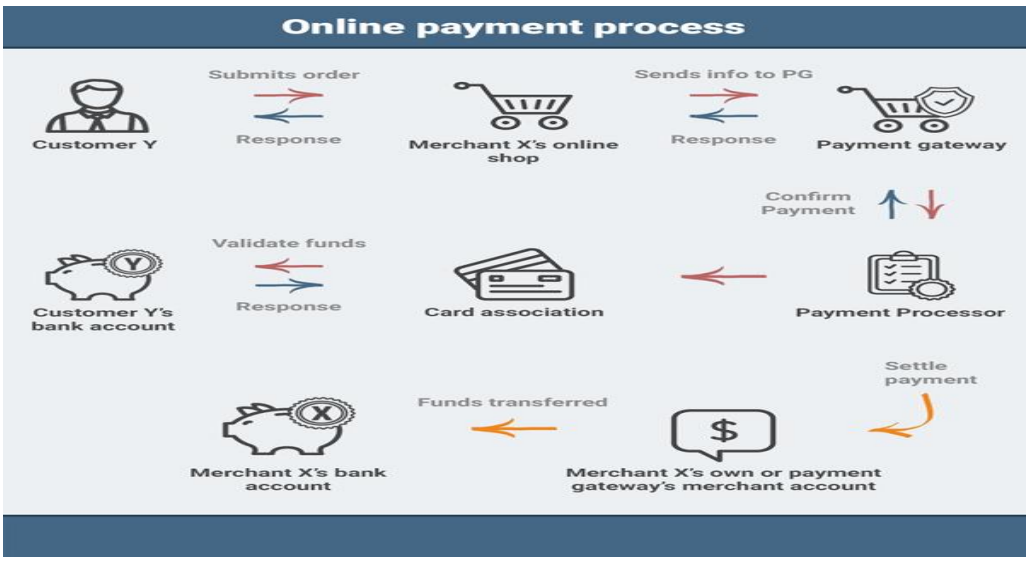
d. The payment gateway

e. The issuing bank

f. The acquirer

The e-payment system also acquire some drawbacks. Main limitation is cybercriminals or security issue while doing e-payment. In rural area the lack of availability of internet connectivity cause the reduction of usage of e-payment methods.

Figure no 1.14.



(Source: Comalytics)

When we talk about the online payment methods then firstly we should have knowledge about the three basic components which work together while making payment. In case of non-availability of one of the component the entire system will stop working. These components are as follows:

1.6.1. **Payment Processor**: Payment processor work as a middleman between the bank and the seller. It provides the information from customer's card to the bank and also to the customer's bank. It provides the information like card limit, card validity, security etc. in case the customer account have sufficient funds in his bank account only then the transaction will complete and payment made by the bank. It is a transactor for financial calculations. It verified the credit or debit card. It is a company that handles various transactions so that customer can purchase products online. Many players are there in the payment processor but there are main six parties involved in it:

a. The consumer

b. The businessman

c. Payment processor

d. Customer's bank

e. Business bank

f. Payment gateway

1.6.2. **Payment Gateway**: it is an online version of traditional market. it helps to connect the website and the payment processor with each other. In other words it acts as a middleman between website and the payment processor. It handles the technical portion of online transactions and make sure that merchant will able to receive the money from the customer's bank or from the other source. It is channel which help to make and receive the payments. This service can be provided by the banks or through a service provider which authorized by the bank. The payment gateway work through a number of steps;

a. The first step is to fill the card details by the customer when he or she place the order through online mode and also wants to make payment.

b. Then the detail of the card will be encrypted in a secure manner with the help of Secure Socket Layer (SSL).

c. Then the business forwards the detail of transaction to the payment gateway for further processing.

d. Then the transaction forward to the payment processor.

e. The payment processor sends the information to the card association e.g. Master card.

f. Then the card issuing bank verifies the card detail and then sends a reply to the processor along with a reply code which indicates that whether the transaction has been approved or denied.

g. Then the reply forward to the payment gateway. Till this step it takes only 2-3 seconds.

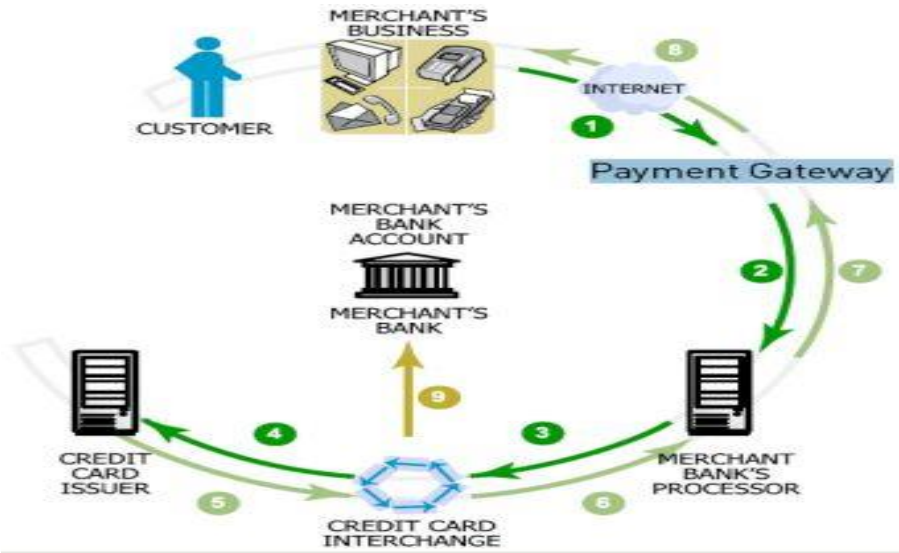
h. Then the business fulfills the order for the customer.

i. The acquiring bank settles the request of the credit card issuer.

j. The issuer bank makes the payment to the acquiring bank.

1.6.3. **Merchant Account**: the account in which money has to be transferred is merchant account. The funds have been automatically transferred from customers account to the merchant's account within one or two working days. Here is the picture of online payment process which starts from placing the order and ends at transfer of money from customer's bank to the merchant's bank.

Figure: 1.15.



(Source: Online Payment Flow)

So this is the picture of online payment process. In this as we can see that payment gateway, payment processor and the merchant's bank can be clearly seen.

1.7. Order of the thesis

The order of various chapters in this thesis is as under:

Chapter 1- Introduction

This chapter includes the meaning of digital payment system. The growth of digital payment system after demonetisation, its various types, advantages, disadvantages. It also explains the process of digital payment system.

Chapter 2 – Literature Review

In this chapter various research papers theoretical and conceptual literature has been discussed. These papers related to the concerned research. In the theoretical review, various paper related to the factors effecting adoption of digital payment system and their model have been studied in detail. In conceptual review, various concepts related to the adoption of digital payment methods have been studied and then classified under different attributes viz. Security/Trust, Usage, Cost, Infrastructure Facilities and Innovation Acceptance. After the complete review a conceptual model has been made which is based on some theories and also part of it self-made by the scholar. This model states the intention to use digital payment system after demonetisation between customers of rural and urban area and the influence of attributes on the adoption.

Chapter 3 – Research Methodology

This chapter discusses the objectives of the study, research design, sources of data, sampling design, sample size, sampling technique questionnaire design, techniques for the analysis of data and execution of sampling process.

Chapter 4 – Analysis and Interpretation

This chapter includes the complete analysis of the data collected. It includes reliability and validity of data, Principal Component Method, demographic analysis, testing of hypothesis, analysis of three objectives of the study with the help of regression and correlation. It also includes the comparison of intention of using digital payment system among rural and urban customers with the help of Mean. The dependability of dependent and independent variables explained with the help of chi-square test.

Chapter 5 – Conclusion

This chapter concludes the analysis done in chapter no.4.

Chapter 6 – Research Contribution

This chapter includes the findings, limitations and scope for future research.

CHAPTER-2

LITERATURE REVIEW

A literature review is the summary of researches related to the concerned topic. In this researches identifies and evaluates based on a particular field of study. It is a collection of all published materials required to conduct the study. For this study, I required researches based on security, usage, cost, infrastructure facilities and innovation acceptance which put impact on the adoption of digital payment systems.

2.1. Review from security point of view

1.	K.C. Balaji[1] and K.Balaji[2]	A study of demonetisation and its impact on cashless transactions	2017	After demonetisation people effected by two types of changes. One is operational and second is behavioral. It hits real estate and retailing sector the most. After Demonetisation the online transactions in India increased by 250%. To make payment through cashless mode is now become need for the society. But apart from that the main utterance while using cashless mode is security.	The objective is to determine the impact of demonetization on cash less transactions. The study is conceptual.
2.	Brijesh Sivathan	Adoption of digital	2017	There are many benefits of using	Objective to identify the actual

	u	payment systems in the era of Demonetisation in India		digital payment system like effortless and suited. Person can send the money anywhere and get rebate from taxes. One can keep the record. Apart from these advantages there are some limitations also like not suitable for digital illiterate and risk of data theft. The other two obstacles are behavioral intention and innovation resistance.	usage of digital payment systems during demonetization by the customers. UTAUT2 has been used with the help of PLS.
3.	Srihari Kulkarni, Abdul Shahanaz Taz	Digital payments: challenges and solutions	2019	Paper discussed that there are challenges ahead of digitalized economy. It includes both rural and urban people. Some main challenges are cyber security, cash dependent economy. The solution for these problems can be to provide security and make people aware about the advantages of online payments	The objective is to identify the various challenges and solutions come while using digital methods. The method used in this study is questionnaire.

				modes.	
4.	Vishal Soodan and Mohit Jamwal	Transforming physical to digital marketplace-E-retail: An Indian perspective	2014	The retail industry in India is unorganized industry where the retail stores can be found in villages. With the commencement of World Wide Web maximum people start using online shopping. With the help of mobiles it is become easier for the customers to purchase goods from the net as it is more easy and convenient. The advent of nuclear family, technology trends, 24*7availability etc is the main reasons for the growth of e-retailing in India. But there are some challenges also of e-retailing like trust, security. Cost, consumer's loyalty, net connection and language problem.	The aim is to identify the factors which effect the growth of e-commerce in India and also to found out the challenges related to e-commerce. The deduction and inferential analysis used in this study.
5.	Tanya Sanatani	Effects of Demonetisation on digital	2017	After Demonetisation almost all the online	Its main aim is to see that how digital methods

		payment system in India		payment companies suffered huge lose because people stopped making payment through Cash on Delivery. But with the passage of time online companies start growing by providing other facilities of making payment and consumers also become aware of these facilities. There are many benefits of online payment like easily traceable, convenient, quick, save paper. But in spite of benefits the main drawback of online payment is security issue.	evolved after demonetisation.
6.	Aritra Brahma and Rajasi Dutta	Cashless transactions and its impact- A wise move towards digital India	2018	Though there are many advantages and types of cashless transaction but even then there are many hurdles to make India a cashless country. These problems mainly found in rural area	The aim is to identify the impact of cashless transactions on different sectors and also identify the security threats.

				where cash remains the main source of transaction. Security of online transaction is the main issue.	
7.	Sarojit Kapasi	Impact of demonetisation in India1	2019	The effect of Demonetisation is neutral in India. It does not affect those persons who are not having any black money. The short term negative impacts have been seen but long term impact of Demonetisation would be good for the society. The online transaction much affected by cyber crime. Even Govt. has not given any assurance to protect the money from cyber crime.	The objective is to identify the impact of digital payments on different sectors and also on cyber crime issues.
8.	Chang Liua,*, Jack T. Marchewkab, June Luc , Chun-Sheng Yud	Beyond concern: a privacy-trust-behavioral model of electronic commerce	2004	Based on person's perception privacy regarding privacy and security should influence their attitude towards the digital purchase decision. If customer satisfy with	This study has been based on model of privacy trust and behavioral intention. Online survey has been done along with laboratory

				privacy and security then he or she will trust the site and do frequent purchases as well as recommend the site to others.	experiment.
9.	Christy Cheung, Matthew K.O. Lee	Trust in Internet Shopping: A Proposed Model and Measurement Instrument	2000	Though the use of internet has been increased but even then there is one factor which influence it and that factor is trust. Trust can be affected by two factors namely: "trustworthiness of Internet vendors" and "external environment. Perceived risk also influence consumer behavior to use internet shopping. A model of trust in internet shopping illustrated in this paper, which mentioned the factors trust, risk and security in net shopping.	This study has been based on model of trust, privacy and risk. The analysis has been done with the help of survey.
10.	Seema Dua	Digital India: Opportunities and Challenges	2017	Cyber security and consumer's privacy are the two obstacles in acceptance of	This study based on secondary data and objective is to find out the

				online payment systems. India needs 1 million professionals to be appointed in cyber-crime security department.	challenges faced for implementation of digital programme.
11.	Marzieh Zendehdel1, Laily Hj Paim	Perceived risk of security and privacy in online shopping: A study of Malaysia context	2012	According to authors online shopping is the new concept in e-commerce. While doing purchasing customer share his information on the net. If there is a risk of sharing personal information with others then the purchasing will reduce. So security and privacy put a great impact on the online shopping. According to authors there is a negative relationship between security and online shopping.	The data collected for this study are students. SEM was used to test the hypothesis. Questionnaire done for this study.
12.	Jiunn-Woei Lian a,*, Tzu-Ming Lin	Effects of consumer characteristics on their acceptance of	2008	Authors discussed that security concerns significantly affect online shopping attitude of customers.	This study has been based on five factors like innovation, security, privacy etc. survey has

		online shopping: Comparisons among different product types		Authors divide privacy concern into four categories. Privacy concerns vary as per the personal thinking, educational level, culture, and so on.	been done in this study.
13.	Harshita Bhatnagar	Demonetization to Digitalization: A Step Toward Progress	2017	Switching from cash to cashless economy put many hurdles in front of country. The main is security and privacy issue. Security of personal information. To avoid this problem there should be cyber security.	The aim of this study is to find the journey from demonetization to digitalization.
14.	Hsiao-Cheng Yu a,∗, Kuo-Hua Hsi a, Pei-Jen Kuo b	Electronic payment systems: an analysis and comparison of types	2002	In this paper authors discussed that there should be users security. Security of information, payment, data. The security should satisfy the requirement of Authority, Privacy, Integrity and Non-repudiation.	This study found out the level of security while using digital payments. This research based on secondary data.
15.	Komal Ahuja	Challenges for Indian E-Payment System	2019	The author discussed that customers have fear that their personal data may	This research explained various challenges in use o e-payments. This

				get theft by the users while using the e-payment system. This type of theft is one of the growing crimes in which a person uses the data of customers for their personal gain.	study is totally based on secondary data.
16.	N Ramya, D Sivasakthi and M Nandhini	Cashless transaction: Modes, advantages and disadvantages	2016	In this paper author discussed that the biggest fear in the mind of consumer is the loss of data while making payment through digital modes.	This paper is based on secondary data.
17.	Ramakrishna Paramahamsa, George Eliot, Middlemarch	Demonetisation: To Deify or Demonize?	2016	There should be privacy and security of using digital payment mechanisms. Trust should be maintained by providing the cyber security to the consumers	This paper tries to found out the various aspects of demonetization.
18.	Mr.K. Gowri Shankar & Dr. P.Raju	A Study on Opportunities and Challenges of Adopting Digital Wallet in India	2019	In this paper author examined that the barrier in the adoption of digital payment system is mainly security and the risk of loss of data.	
19.	ANTHO	Consumer	2001	The research shows	This paper

	NY D. MIYAZAKI AND ANA FERNANDEZ	Perceptions of Privacy and Security Risks for Online Shopping		that privacy and security both affect the adoption of e-commerce. The higher the internet experience and online shopping experience the less will be the risk in the mind of consumers.	evaluates the perceived risk among the consumers while using online payment systems. Questionnaire has been used in this study.
20.	Neelu Tiwari, Naveen Kumar Singh	Factor Affecting Consumer Satisfaction in Cashless Payment Systems in India with Respect to Paytm and BHIM	2019	In this paper author suggested that in payment apps the security put positive impact on the adoption. In this paper it consists highest coefficient.	The main objective of this study is to identify the factors affecting adoption of online payment and customers satisfaction in India. Model has been discussed with the help of questionnaire.
21.	K.Vinitha , Vasantha	Determinants of customer intention to use digital payment system	2020	This paper has taken three factors which affect the adoption of digital payment system i.e. perceived credibility, perceived enjoyment and perceived benefits.	Conceptual model and primary data has been used.
22.	Kim ; et al	An empirical study of customer's	2010	In this paper authors examined the issues related with security	Primary data has been used along with conceptual

		perceptions of security and trust in e-payment systems		and trust with the usage of digital payments.	framework.

So, security is the main issue or we can say that main hurdle on the way of using digital Payment system. People have been afraid that their personal information will be used by others. So due to privacy they reduce the use of digital payment system.

2.2. Review from usage point of view

1.	K.C. Balaji[1] and K.Balaji[2]	A study of demonetisation and its impact on cashless transactions	2017	After demonetisation people effected by two types of changes. One is operational and second is behavioral. It hits real estate and retailing sector the most. After Demonetisation the online transactions in India increased by 250%. To make payment through cashless mode is now become need for the society. But apart from that the main utterance while using cashless mode is security.	The objective is to determine the impact of demonetizatio n on cash less transactions. The study is conceptual.
2.	Brijesh Sivathanu	Adoption of digital payment systems in the era of Demonetisation in India	2017	There are many benefits of using digital payment system like effortless and suited. Person can send the money anywhere and get rebate from taxes and one can keep the record. Apart from these advantages there are some limitations also like not suitable for	Objective to identify the actual usage of digital payment systems during demonetizatio n by the customers. UTAUT2 has been used with the help of PLS.

				digital illiterate and risk of data theft. The other two obstacles are behavioral intention and innovation resistance.	
3.	Laila Memdani	An overview of digitalization of rural India and its impact on the rural economy	2012	There are many advantages of digitalization for the rural people like improving the standard of living. Still many more is there to learn about digital technology.	This research paper is theoretical paper based on secondary data and just explaining the fact of digital literacy.
4.	Virendra B. shahare	Assessing the impact of Demonetisation on rural economy	2017	Demonetisation paralyzed the rural economy at a large scale especially poor people and farmers. Digital illiteracy is the main problem. Unorganized labourers unable to find jobs. During Demonetisation period the era in rural area was of price spiking.	This study evaluates the impact of cashless economy on rural economy and secondary data used in this study.
5.	Sheetal Thomas and G. Krishnamurthi	Cashless rural economy- A dream or reality?	2017	According to CLSA report approx 68% transactions in India are cash based. There are many challenges	The aim of this paper is to examine the government's motive to

				in front of India to make rural area digitalized. Digital illiteracy, trust deficit, lack of infrastructure all is the main problems which have to be solved in order to make rural economy a cashless economy.	make rural India as a cashless economy and secondary data used in this study.
6.	Dr. Ravi.CS	Digital payments system and rural India: A review of transaction to cashless economy	2017	Govt. of India introduced Adhaar pay as the mode of payment for the rural people who are illiterate and poor. This system is secure and just require fingerprint to make payment. But even then the problems are there like cost, internet connection, lack of awareness and lack of infrastructure.	This study examines the problems of digital payment in rural India. The data is secondary in nature.
7.	Srihari Kulkarni, Abdul Shahanaz Taz	Digital payments: challenges and solutions	2019	Paper discussed that there are challenges ahead of digitalized economy. It includes both rural and urban people. Some main challenges are cyber security, cash	The objective is to identify the various challenges and solutions come while using digital methods. The

				dependent economy. The solution for these problems can be to provide security and create awareness among people of India about the advantages of digital payment modes.	method used in this study is questionnaire
8.	Arpita Pandey, Mr. Arjun Singh Rathore	Impact and Importance of digital payment in India	2018	As India has achieved high literacy rate but lack of technological knowledge is the main problem of digitalization in India. There is negative impact on rural area because of digital illiteracy, trust and less internet connectivity.	The data is secondary in nature and research done to understand the consequences of digital system.
9.	Ayash Yousuf Shah	Impact of Demonetisation on rural India	2017	The consumers and farmers of rural class are not advanced like urban middle class because they don't have bank accounts and the access to ATM. Lack of knowledge and lack of infrastructure made it difficult for the rural class to deal with the effects of Demonetisation	The data used is secondary data and study done to know the impact of demonetisation on rural India.

10.	Dr. S. Parthiban and Mr. S. Krishna Kumar	Impacts of Demonetisation in Organized and unorganized sector		The effect in organized sector was not so big because maximum amount of cash that remained with the businessman will be remain in land or gold form. The main effect is that investment is not taking place, inflation rises and capital formation slow down. The unorganized sector affects a lot because people don't have enough money in hand and lack of knowledge in relation to how to use digital payment system. They found difficult to exchange old currency with new one from the bank. Demonetisation helps the people to start using net banking etc.	This study dine to know the impact of demonetisatio n on two types of sectors and to learn about the digital literacy.
11.	Chang Liua,*, Jack T. Marchewka b , June Luc , Chun-Sheng Yud	Beyond concern: a privacy-trust-behavioral model of electronic commerce	2004	Based on person's perception privacy regarding privacy and security should influence their attitude towards the digital purchase	This study has been based on model of privacy trust and behavioral intention. Online survey

				decision. If customer satisfy with privacy and security then he or she will trust the site and do frequent purchases as well as recommend the site to others. All this will result into intention to use the online site for buying goods or services.	has been done along with laboratory experiment.
12.	Seema Dua	Digital India: Opportunities and Challenges	2017	According to author the main problem to make digitalized India is digital illiteracy. Around 950 million people in India still not having access to the internet.	This study based on secondary data and objective is to find out the challenges faced for implementation of digital programme.
13.	Siriginidi Subba Rao	Bridging digital divide: Efforts in India	2005	In this paper author discussed about the digital divide in India. Digital divide means persons who are having the knowledge of technology and who don't. So those persons who don't have digital knowledge find difficulty in using	This study discussed about the digital divide

				digital payment apps.	
14.	Harshita Bhatnagar	Demonetization to Digitalization: A Step Toward Progress	2017	A huge population is still living in rural area where people are not educated. So digital illiteracy is the main hurdle in digitalization.	The aim of this study is to find the journey from demonetizatio n to digitalization.
15	Nanjundi Karthick Krishnan, Aditya Johri, Ramgopal Chandraseka ran, Joyojeet Pal	Cashing Out: Digital Payments and Resilience Post-demonetization	2019	In this paper authors examined the behavior of consumer with the help of three levels. At level 0 with no awareness and at level 3 having full knowledge of digital payment systems. Demonetisation has great impact on urban rural poor. People who are having no accessibility of digital payment system are less vulnerable.	This study done through survey in order to find out the awareness among people for digital systems usage.
16	Komal Ahuja	Challenges for Indian E-Payment System	2019	In this paper the author discussed that illiteracy is one of the main reason due to which people hesitate to use digital payment system. Due to this lack of awareness that how to use digital	This research explained various challenges in use of e-payments. This study is totally based on secondary data.

				payment system rural people use cash only for their transactions.	
17	K.Suma vally*, Dr. K.Hema Divya*	A study on Digital payments in India with perspective of consumers adoption	2018	In this paper after conducting a survey the author finds out that customer education put a great impact on the usage of digital payment system.	This study examines the impact of customer education on the usage of digital payments. The study done with the help of questionnaire.
18	Rakhi Thakur, Mala Srivastava	Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India	2013	In this paper author discussed that there are two factors perceived usefulness and perceived ease to use. There is perceptual difference between adopters and non-adopters of digital payment system which can be based on awareness and knowledge.	To test the functional relationship between AR and PR and usage intention for mobile payments in India. The SEM used in this study.
19	Mritunjay Kapur	Digital Payments-Analyzing the Cyber Landscape	2017	The author discussed various attributes which comes as the barriers in the growth of digital payment system. One is lack of awareness among	This article based on cyber security and data collected through survey method.

				the consumers.	
20	Kanchan Tripathi	An Empirical Study on Cash & Digital Payments after Demonetization	2020	In this paper author described that the main issue in the growth of digital payment is literacy and our education system. There is need to set up an information center by the government so that digital payment campaign can be made successful in the economy.	This paper checks the adoption of technology by the customers and research done with the help of secondary data.
21	FD Davis	Perceived usefulness, perceived ease of use and user acceptance of information technology	1989	In this paper author described three factors of using information technology. Author has taken ease of use and perceived usefulness as two variables in acceptance of online applications.	The data is primary nature and aim is to check the acceptance level of customers.
22	K.Vinitha, Vasantha	Determinants of customer intention to use digital payment system	2020	This paper has taken three factors which affect the adoption of digital payment system i.e. perceived credibility, perceived enjoyment and perceived benefits.	Conceptual model and primary data has been used.
23	Kim ; et al	An empirical	2009	In this paper authors	Primary data

		study of customer's perceptions of security and trust in e-payment systems		examined the issues related with security and trust with the usage of digital payments.	has been used along with conceptual framework.

Usage means digital literacy. If a person has knowledge of digital payment system only then he or she can use this.

2.3. Review from infrastructure point of view

1.	Sheetal Thomas and G. Krishnamurthi	Cashless rural economy- A dream or reality?	2017	According to CLSA report approx. 68% transactions in India are cash based. There are many challenges in front of India to make rural area digitalized. Digital illiteracy, trust deficit, lack of infrastructure is the main problems which have to be solved in order to make rural economy a cashless economy.	The aim of this paper is to examine the government's motive to make rural India as a cashless economy and secondary data used in this study.
2.	Dr. Ravi.CS	Digital payments system and rural India: A review of transaction to cashless economy	2017	Govt. of India introduced Aadhaar pay as the mode of payment for the rural people who are illiterate and poor. This system is secure and just require fingerprint to make	This study examines the problems of digital payment in rural India. The data is secondary in nature.

				payment. But even then the problems are there like cost, internet connection, lack of awareness and lack of infrastructure.	
3.	S Vijay Kumar and T Shiva Kumar	Demonetisation and complete financial inclusion	2016	In comparison of world as a whole the knowledge of financial services is quite low in India especially to rural people due to illiteracy and less bank accounts. Though the author gives some advantages and disadvantages of Demonetisation.	This paper elaborates the concept of demonetisation on financial inclusion and use secondary data.
4.	Vishal Soodan and Mohit Jamwal	Transforming physical to digital marketplace-E-retail: An Indian perspective	2014	The retail industry in India is unorganized industry where the retail stores can be found in villages. With the commencement of World Wide Web maximum people start using online shopping. With the help of mobiles it is become easier for the customers to	The aim is to identify the factors which effect the growth of e-commerce in India and also to found out the challenges related to e-commerce. The deduction and inferential analysis used

				purchase goods from the net as it is more easy and convenient. The advent of nuclear family, technology trends, 24*7availability etc is the main reasons for the development of e-retailing in India. But there are some challenges also of e-retailing like trust, security. Cost, consumer's loyalty, net connection and language problem.	in this study.
5.	Arpita Pandey, Mr. Arjun Singh Rathore	Impact and Importance of digital payment in India	2018	As India has achieved high literacy rate but lack of technological knowledge is the main problem of digitalization in India. There is negative impact on rural area because of digital illiteracy, trust and less internet connectivity.	The data is secondary in nature and research done to understand the consequences of digital system.
6.	Arvind Madhukarand Kulkarni and Partap Vyankatrao Naikwade	Impact of Demonetisation on farmers and other people from rural	2018	The effect of Demonetisation have been more worried in rural area where the transactions done through only and	Primary data used in this study and show the impact of demonetisatio

		background and their perception on Demonetisation		only with cash. People in rural area do very less visit to banks. Small farmers did not have any bank account so they were most affected with Demonetisation. Demonetisation affected critically rural area where the net connectivity is very less.	n on farmers and other people in rural economy.
7.	Ayash Yousuf Shah	Impact of Demonetisation on rural India	2017	The consumers and farmers of rural class are not advanced like urban middle class because they don't have bank accounts and the access to ATM. Lack of knowledge and lack of infrastructure made it difficult for the rural class to deal with the effects of Demonetisation	The data used is secondary data and study done to know the impact of demonetisation on rural India.
8.	Seema Dua	Digital India: Opportunities and Challenges	2017	The main problem is low level of infrastructure. India's digital infrastructure is inadequate in order to meet the digital literacy in the country.	This study based on secondary data and objective is to find out the challenges faced for implementatio

					n of digital programme.
9.	Dr Ambalika Sinha Divya Rai	Aftermath of Demonetisation on rural population	2016	Demonetisation announced in India without prior information. It puts very adverse effect on the country especially rural area where cash is the main source of transaction. Due to cash crunch economy become paralyzed	Secondary data used in this study.
10	Komal Ahuja	Challenges for Indian E-Payment System	2019	The lack of infrastructure facility is one the reasons which put adverse effect on digital payment system especially in rural areas. In rural areas there are very few ATMs, swipe machines, electricity. People have mobile phones but without internet.	This research explained various challenges in use of e-payments. This study is totally based on secondary data.
11	N Ramya, D Sivasakthi and M Nandhini	Cashless transaction: Modes, advantages and disadvantages	2016	In this paper the author examined that India has very low internet penetration. This is because of lack of infrastructure facility.	This paper is based on secondary data

12	Deepak Kumar Yadav , Dr Rohit Ramesh	Indian Rural Customer's Risk Perception of Electronic Payment System	2019	The authors examined that in rural India the main and important obstacle in the adoption of digital payment system is lack of infrastructure facilities. At least one bank should be there in each small to small village. The other medium of infrastructure should be properly given to the rural consumers.	This study done to know the risk perception of customer's for e-payment system and secondary data used.

Lack of infrastructure facilities is again the main problem. Mainly, this problem has been seen especially in rural area where people don't have internet connection, lack of technologies.

2.4. Review on the basis of psychological/ Trust barrier

1.	Brijesh Sivathanu	Adoption of digital payment systems in the era of Demonetisation in India	2017	There are many benefits of using digital payment system like effortless and suited. Person can send the money anywhere and get rebate from taxes. One can keep the record. Apart from these advantages there are some limitations also like not suitable for	Objective to identify the actual usage of digital payment systems during demonetization by the customers. UTAUT2 has been used with the help of PLS.

				digital illiterate and risk of data theft. The other two obstacles are behavioral intention and innovation resistance.	
2.	Sheetal Thomas and G. Krishnamurthi	Cashless rural economy- A dream or reality?	2017	According to CLSA report approx 68% transactions in India are cash based. There are many challenges in front of India to make rural area digitalized. Digital illiteracy, trust deficit, lack of infrastructure is the main problems which have to be solved in order to make rural economy a cashless economy.	The aim of this paper is to examine the government's motive to make rural India as a cashless economy and secondary data used in this study.
3.	Sindhu Singh, Vivek Srivastava & R.K.Srivastava	Customer acceptance of mobile banking: A conceptual framework	2010	In the present world mobile become the necessity of life. Every work can be done with the use of mobile e.g. bill payment, sending e-mail etc. cost, convenience, security, privacy are the main factors	This study has been done with the help of theoretical model

				which make mobile banking popular.	
4.	Vishal Soodan and Mohit Jamwal	Transforming physical to digital marketplace- E-retail: An Indian perspective	2014	The retail industry in India is unorganized industry where the retail stores can be found in villages. With the commencement of World Wide Web maximum people start using online shopping. With the help of mobiles it is become easier for the customers to purchase goods from the net as it is more easy and convenient. The advent of nuclear family, technology trends, 24*7availability etc is the main reasons for the development of e-retailing in India. But there are some challenges also of e-retailing like trust, security. Cost, consumer's loyalty, net connection and language problem.	The aim is to identify the factors which effect the growth of e-commerce in India and also to found out the challenges related to e-commerce. The deduction and inferential analysis used in this study.
5.	Arpita	Impact and	2018	As India has	The data is

	Pandey, Mr. Arjun Singh Rathore	Importance of digital payment in India		achieved high literacy rate but lack of technological knowledge is the main problem of digitalization in India. There is negative impact on rural area because of digital illiteracy, trust and less internet connectivity.	secondary in nature and research done to understand the consequences of digital system.
6.	Srihari Kulkarni, Abdul Shahanaz Taz	Digital payments: challenges and solutions	2019	Paper discussed that there are challenges ahead of digitalized economy. It includes both rural and urban people. Some main challenges are cyber security, cash dependent economy. The solution for these problems can be to provide security and provide knowledge about the advantages of digital payment modes.	The objective is to identify the various challenges and solutions come while using digital methods. The method used in this study is questionnaire
7.	Christy Cheung, Matthew K.O. Lee	Trust in Internet Shopping: A Proposed Model and Measurement Instrument.	2000	Though the use of internet is increasing day by day but even then there is one factor which influence it and that factor is trust. Trust	A theoretical model has been prepared and data collected through survey method

				can be affected by two factors namely: "trustworthiness of Internet vendors" and "external environment. Perceived risk also influence consumer behavior to use internet shopping. A model of trust in internet shopping illustrated in this paper, which mentioned the factors trust, risk and security in net shopping.	
8	N Ramya, D Sivasakthi and M Nandhini	Cashless transaction: Modes, advantages and disadvantages	2016	The major block in the success of digital payment system is psychological factor. This problem mainly faced by those people who are tech-unfriendly. The old age people and rural people feel satisfied to use cash for their day to day transactions.	This paper is based on secondary data

Psychological barrier means lack of trust and the behavior of a person. If people don't have trust in digital payment system then he can't use that. It is the mental thought of a person which allows him to use that system. So trust is the main factor for using digital payment system.

2.5. Review from the point of innovation Acceptance

1.	Brijesh Sivathanu	Adoption of digital payment systems in the era of Demonetisation in India	2017	There are many advantages of using digital payment system like easy and convenient. Send the money anywhere, rebate from taxes and one can keep the record. Apart from these advantages there are some limitations also like not suitable for digital illiterate and risk of data theft. The other two obstacles are behavioral intention and innovation resistance.	Objective to identify the actual usage of digital payment systems during demonetization by the customers. UTAUT2 has been used with the help of PLS.
2.	Aritra Brahma and Rajasi Dutta	Cashless transactions and its impact- A wise move towards digital India	2018	Though there are many advantages and types of cashless transaction but even then there are many hurdles to make India a cashless country. These problems mainly found in rural area where cash remains the main source of transaction and people resist using new technology. Security of online transaction is the main issue.	The aim is to identify the impact of cashless transactions on different sectors and also identify the security threats.
3.	Dr M. Viswanathan and M. Chandru	Demonetisation -An active Volcano		Demonetisation put short term and long term impact on the economy. The main short term	This paper uses the secondary data.

				impacts are decrease in demand for non-essentials, impact on real estate, and increase in tax collection. Long term impacts are change in spending habit, rate cuts by govt. so Demonetisation considered being active volcano because its impact will be slow.	
	Sheetal Thomas and G. Krishnamurthi	Cashless rural economy- A dream or reality?	2017	According to CLSA report approx 68% transactions in India are cash based. There are many challenges in front of India to make rural area digitalized. Digital illiteracy, trust deficit, lack of infrastructure all is the main problems which have to be solved in order to make rural economy a cashless economy.	The aim of this paper is to examine the government's motive to make rural India as a cashless economy and secondary data used in this study.
	K.Sumavally*, Dr. K.Hema Divya*	A study on Digital payments in India with perspective of consumers adoption	2018	After conducting the survey with the help of questionnaire the author find out that if consumers are educated then they can adopt the innovations. There will be favorable attitude of consumers towards	The focus of this study is to analyse the adoption digital payment by customers. Primary data has ben

				digital payment system if they are educated to understand things properly.	used.

Sometimes people are not ready to accept the new technology. In India people are still using cash for their transactions.

2.6. From 'Cost' point of view

1	Dr. A.C. Pandey* Mohit Jamwal** Vishal Soodan	Transforming physical to digital marketplace-E-retail: An Indian Perspective	2014	Shipping cost is one of the problems of adoption of digital payment system. Retailers as well consumers both have to bear shipping cost.	The aim is to identify the factors which effect the growth of e-commerce in India and also to found out the challenges related to e-commerce. The deduction and inferential analysis used in this study.
2	Tanya Sanatani[1]	Effects of Demonetization on Digital Payment Systems in India	2017	In this paper author examined that the service charges and convenience fees annoys the consumers while using the digital payment system.	The objective is to check the effect of demonetisation on digital methods in India. Secondary data has been used.
3	Hsiao-Cheng Yu a,∗, Kuo-Hua Hsi a, Pei-	Electronic payment systems: an	2002	The electronic payment system also involves cost	It explores the various methods of

	Jen Kuo b	analysis and comparison of types		of the transaction. The cost should be divided in indirect and direct cost.	digital payments with the help of secondary data.
4	Ramakrishna Paramahamsa, George Eliot, Middlemarch	Demonetisation: To Deify or Demonize?	2016	In this paper the author suggested that the cost of using digital payment system should be borne by public sector or the government instead of consumers.	This paper tries to found out the various aspects of demonetization.
5	C.P. Chandrasekhar and Jayati Ghosh	The Financialization of Finance? Demonetization and the Dubious Push to Cashlessness in India	2017	The shift of consumers from traditional cash to e-cash should not be forced. It should be the willingness of the consumers to adopt e-payment system. The cost of E-transactions should be feasible enough.	This paper concern for cost, privacy and frud while using digital payment systems.
6	Ligon, Malick, Sheth and Trachtman	What explains low adoption of digital payment technologies?	2019	In this paper suthors found out the reason behind the less usage of digital technologies. The main reason is cost charged while	Descriptive in nature and primary data used.

				making payment. They feels that it will increase the tax liability as payment or receipt done through bank account.	

2.7. Others point of view

1	Heng Zhu a, Anubhab Gupta a,*, Binoy Majumder b, Sandro Steinbach	Short-term effects of India's demonetization on the rural poor	2018	Demonetisation hit the rural economy. Rural economy suffered losses due to this. The short term impact of demonetisation is very harmful for the poor.	Primary data used with the help of survey.
2	MarziehZendehdel**1**, LailyHjPaim**2**	Effect of Consumer Characteristics on Attitude Towards Online Shopping	2015	The study conducted in Malaysia market. Online shopping is a very popular phenomenon. But some customers seem unwilling to do online shopping because of insecurity and lack of trust. Attitude, trust and subjective norms were studied to determine their influence on online shopping.	This paper explain a framework related to the online shopping and survey done with the help of questionnaire to be filled by the students.
3	Mr. Swapnil Undale1, Mr. Krishnakumar	One Month After Demonetisation: What People Say?	2016	Author in this paper again same point discussed that demonetisation hit poor people who mainly dependent on cash only.	The research was quantitative and done through

	Gaggad			A survey has been conducted by the author and the author concluded that the move was not wrong but the way it was implemented is wrong.	survey.
4	Navya G Reddy1, Nikitha B S2	Effects of Digitalisation Post Demonetisation	2019	Demonetisation affects our country as a whole but it also starts cashless system in our country. Most of the transactions done on digital mode. Author discussed four objectives which have been satisfied like cashless economy, impact of move on Indian economy, channels of electronic mode, progress of digitalization.	This paper analyse the growth of digitalizatio n after demonetisat ion and secondary data used in this study.
5	Divya Munjal	Digitalization-Solution to Demonetisation	2017	Author discussed that demonetisation made country cashless but not as a whole. Still some areas where informal sector worked use cash for transactions.	To study the effect of demonetisat ion on different categories and secondary data used.
6	Dipanwita Banerjee	Demonetisation and its impact on rural economy	2017	India is a rural economy. Agriculture is the main source of income for the	

				government of India. but after demonetisation and cash crunch sellers did not able to sell their products in the market. Transport facility also stopped after demonetisation which affects the rural society a lot.	
7	Dr.Sweta Singhal	Demonetisation and E-banking in India	2017	After demonetisation e-banking came as a main hero in front of the economy. Because of mobile phones usage increased. But still rural population wants some programs from the government to facilitate the usage of e-banking. Rural people are not aware about the facilities of e-payments.	The purpose is to check the e-banking awareness among rural and urban customers. Primary data used in this study.
8	** Dr. J. K. Jain *Narendra Verma	Demonetisation: Curbing the practice of holding unaccounted money and moving towards e-monetisation	2017	The study concludes that demonetisation cause a significant decrease in income in hands of local shopkeepers. It also no able to control tax evasion.	Primary data used in order to check the shift towards e-monetizatio n.
9	Deepa Krishnan, Stephan	Effects of Demo netization: Evide nce from 28 Slu	2017	The study was conducted at a leading school in Mumbai. After	The effect has been discussed

	Siegel	m Neighborhoods in Mumbai		conducted the survey it was found out that there is drop in income and also savings.	with the help of questions asked from respondents.
10	*Dr. Arcot Purna Prasad	Impact of Demonetization on Fast Moving Consumer Goods (FMCG) Retail Sector	2019	The retail sector also suffers a lot due to demonetisation. The unorganized sector's sale and profit margin went down. Retailers found it difficult to purchase materials from the wholesalers.	This is an exploratory research and secondary data used.
11	Dr. Harmeet Kaur	Impact of Demonetization on E-Commerce in Indian Economy	2017	Demonetisation put an adverse effect on the retail industry. The sale of retail industry decreased as compared to online industry. The e-commerce business received surge after demonetisation.	The aim is to analyse the preference of customers towards e-commerce and data collected with the help of interview method.
12	Swadesh Deepak	Impact Of Demonetization On The Indian Retail Industry	2018	The demonetisation has a major impact on the retail sector. The main affected area is unorganized sector. The sales of the stores	The primary data used in this study.

				decreased due to cash crunch.	
13	K. Veerakumar	A study on people impact on Demonetisation	2017	Demonetisation taken to solve various measures such as tax evasion, control the funding in illegal activities, to curb the black money. The e-wallets, e-banking debit and credit cards usage have been increased after demonetisation.	
14	Tojo Jose	What are the impacts of demonetisation on Indian Economy?	2016	Demonetisation put a great impact on the Indian economy such as Liquidity crunch, low consumption by the consumer results in less revenue, loss of growth of economy.	This article discussed various impacts of demonetisation.
15	Mr. Shubham Goswami, Dr. Meera Mathur	Retail goes online- An Indian perspective	2011	Compared to developed countries India is still at nascent stage of e-shopping. The e-retailing maximum prevailing in big cities as compared to small ones. The growth of e-retailing depends upon infrastructural facilities.	Secondary data used in this study.
16	Dr. G Ganesan and B Gajendrana	Impact of demonetization on Indian economy	2017	The study found out that in the short run demonetisation put an adverse effect but it has	To analyse the impact of demonetisat

	yagam			positive impact in the long run.	ion on various sectors of economy with the help of secondary data.
17	Shweta Mehta, Kruti Patel, Krupa Mehta	Demonetisation : Shifting gears from Physical cash to Digital cash	2016	The move of demonetisation could change the face of Indian economy. It will make a positive difference in the society. People will shift towards cashless payments. The success of demonetisation depends upon the integrated tax structure.	Full detail explanation given by author with the help of secondary data.
18	Rahul Deodhar	Black money and Demonetisation	2016	Government of India made a huge step to control the black money through demonetisation but it is not at all possible. It is just a one step. Government should take so many other types of steps to control the black money	This is an article related to black money.
19	Mrunal Chetanbhai Joshi, Dr. Jayesh Desai,	Demonetisation and Cashless Drive: A Bane for Small Retailers	2017	Business of small retailers affected negatively by demonetisation. Most of the customers start using	The main objective is to study the cashless economy

	Belim Mubassira			e-payment systems. Even then there is mix response from the society towards the impact of demonetisation.	with the help of questionnaire.
20	Prabhakar Joshi*	Study on Demonetization and its Counter-Effect on the Common Man Life	2017	Demonetisation is a great step taken by the government of India to curb the black money and making India a cashless society. Post demonetisation people start using digital payment systems.	Data has been taken randomly with the help of questionnaire.
21	Wenjing Yang	Analysis of Online Payment Systems of E-Commerce	2017	The research gives answer to understand opinion of different online payment customers through survey.	Questionnaire has been used in this study.
22	Linet Christlida Gnana Lilly R	A Study of Customer Satisfaction and Preference towards Electronic Payments and Clearing System in Chennai City	2016	The author prepares the thesis based on customer satisfaction towards the usage of electronic payment systems in Chennai city.	Secondary data has been used.
23	S Fatonah, A Yulandari and F W Wibowo	A Review of E-Payment System in E-Commerce	2018	In this paper the author discussed about the electronic commerce and e-payment systems. The e-payment system is	Meta-analysis technique has been used and

				a better option than cash. E-payment can be understood as a mechanism using electronic media.	primary data collected in this study.
24	Kritika Krishnakumar	Digital payment market grows since demonetisation	2020	Government launched Digital India Campaign to promote digital payments. After demonetisation and during lockdown consumers using the online wallet. Digital Payment systems have revolutionized the way that people can pay and accept money.	Article using secondary data
25	Shubham Singh	Digital Payment grows 55% reveals RBI	2020	Author described that the Digital Payment increased by 55% over the past five years. The data disclosed by RBI.	Article using secondary data.
26	Sreejith R K and Soubhagya PJ	Effect of demonetisation on Payment system: A review	2019	The authors described that demonetisation put impact on various payment methods in India. For short term it may be negative but in the long run it may be very positive for the growth of digital payments and also it curbs the black money and reduces corruption in the economy.	The aim is to examine the position of cashless payments in India. Primary data collected from respondents.

27	Shipra Singh	How has digital payment changed since demonetisation	2019	Author discussed that after 3 years of demonetisation the e-transactions through debit cards, m-wallets and UPI have become triple.	It is an article.
28	Joshi Upadhyay Sheetal1*, Purohit D.N. 2 and Vyas Anup2	Increase in number of Online Services and Payments through Mobile Applications Post Demonetization	2019	In this paper authors described that there is a rapid growth in the usage of online services. Online services and payments have gained a tremendous popularity in these days.	The aim of this study is to analyse the adoption of online services after demonetisation. Primary data was used.
29	Baghla, A.	A study on the future of digital payments in India	2018	Author described the usage of digital payment systems. Digital payment help bank with sufficient cash and to provide loans to the people. But even people scared of using internet banking and other online payment modes due to security, lack of awareness of using these modes. Author done the survey in this research paper.	The objective of this study is to find out the problems faced by people in India and data collected through primary mode.
30	Nirupam Bajpai,	Post-Demonetization	2018	In this paper author described that after	This author of this paper

	John Biberman, and Jeffrey Sachs	E-Payment Trends		demonetisation India shift toward cashless transactions. The transactions through UPI also increased. Businessman receive money directly into their bank account with the use of BHIM app.	used secondary data.
31	V. Sornaganesh, Sudha Ganesh, M. Thangejesu Sathish, Chellamma A V Assistant	Impact of Covid-19 Outbreak in Digital Payments	2020	In this paper author explained that post covid-19 era is the time of digital payment. There is surge in digital payments because of lockdown in the economy. Various types of digital payment methods also discussed in this paper which are used in this pandemic situation.	To study the impact of covid-19 with the help of questionnaire.
32	Naveen Kumar Singh, GP Sahu, Nripendra P Rana, Pushp P Patil and Babita Gupta	"Critical Success Factors of the Digital Payment Infrastructure for Developing Economies	2019	"In this paper authors described ten factors for the adoption of digital payment system. Author also uses structural modeling methodology. This study is based on descriptive approach for primary and secondary data usage."	In this study various theories have been examined and primary data was used.

33	Pooja Tiwari, Vikas Garg, Abhishek Singhal	A study of Consumer adoption of Digital Wallet special Reference to NCR	2019	In this paper author discussed about the types of digital wallet. The wallet use for various purposes like online shopping or payment of funds or booking tickets and many more. The advantage of digital wallet is that an individual is not required to carry cash with him. The funds can be transferred anywhere in the world. The disadvantage of digital wallet is that it can be hacked and the password can be misplaced. After demonetisation the usage of e-wallet has been increased at a very fast rate.	The study done with the help of a model and primary data was collected for the analysis.
34	Neeelu Tiwari, Naveen Kumar Singh	Factor Affecting Consumer Satisfaction in Cashless Payment Systems in India with Respect to PayTm and BHIM	2019	There are various factors which affects the usage of digital payment apps such as personal and social factors.	In this study a conceptual framework has been used and data collected with the help of questionnair

					e.

8. Research Gap

- After doing the literature review, I am unable to find any review based on comparison of customers of rural and urban areas using digital payment system after demonetisation.
- Maximum studies have been done by taking only one basis either rural or urban area.
- Some authors take the concept of factor affecting adoption of digital payment systems on both basis but do not make the comparison between the same.
- So in this study I have taken the concept of rural and urban area and do comparison on both areas in terms of intention to use digital payment system.

CHAPTER-3

RESEARCH METHODOLOGY

3.1 Introduction

In simple words research refers to search for knowledge. The advanced learner's dictionary lays down the meaning of research as, *"a careful investigation through the research for new facts in any branch of knowledge*." Some think research as the movement from unknown to known. Research design and methodology can be defined as the structure of enquiry framed in order to obtain the answers. The

The purpose of this chapter is to discuss the research methodology which has been followed by researcher for doing this research work. Research methodology is a primary need of any research work and also plays a main role in it. Basically it is a blue print of a research. In this chapter the scholar has described the research methodology which used for this study. This chapter gives detailed information about the objectives, hypothesis, research design, research methods that are used, selection of samples, data collection methods used for this thesis.

The researcher keeps the fact in mind that due to demonetisation customers shift to cashless payment systems. Now days it has become very important for everyone to come out from traditional way of making payment and get a vast picture of the changing environment.

The study aims at identifying the digital payment methods used by rural and urban people. If some are not using then what is the reason for that.

3.2. Objectives for the study

d. To examine the effect of Digital Payment attributes on adoption of Digital Payment system on customers of rural and urban area after demonetisation.

e. To identify the relativeness of different Digital Payment attributes with the adoption of Digital Payment System on customers of rural and urban area after demonetisation.

f. To identify how Digital Literacy influence the intention of customers of rural and urban area to use digital payment system after demonetisation.

3.3. Hypothesis of the study

H1: There is no significant relationship between security/Trust and intention to use digital payment system by rural customers after demonetisation.

H2: There is no significant relationship between security/Trust and intention to use digital payment system by urban customer after demonetisation.

H3: There is no significant relationship between usage and intention to use digital payment system by rural customers after demonetisation.

H4: There is no significant relationship between usage and intention to use digital payment system by urban customers after demonetisation.

H5: There is no significant relationship between infrastructure and intention to use digital payment system by rural customers/ after demonetisation.

H6: There is no significant relationship between infrastructure and intention to use digital payment system by urban customers after demonetisation.

H7: There is no significant relationship between cost and intention to use digital payment system by rural customers after demonetisation.

H8: There is no significant relationship between cost and intention to use digital payment system by urban customers after demonetisation.

H9: There is no significant relationship between innovation acceptance and intention to use digital payment system by rural customers after demonetisation.

H10: There is no significant relationship between innovation acceptance and intention to use digital payment system by urban customers after demonetisation.

H11: There is no significant relationship between digital illiteracy and intention to use digital payment system by urban customers after demonetisation.

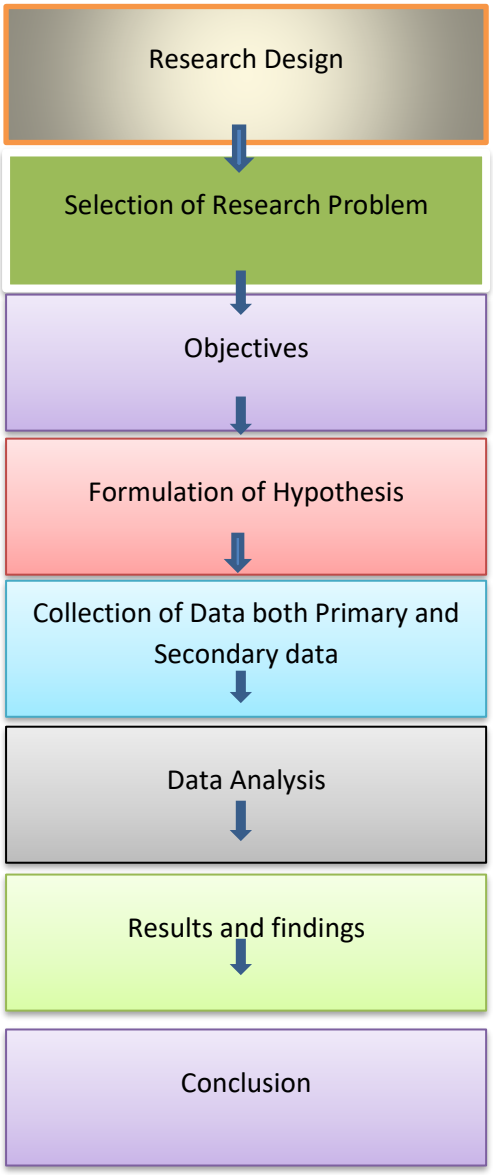
H12: There is no significant relationship between digital literacy and intention to use digital payment system by rural customers after demonetisation

3.4. Research Design

Research design is a blue print of the study. The researcher chooses a research design in order to combine various parts of research in a proper and logical manner, so that the research work can be done efficiently. Descriptive research method will be used in

this study. A descriptive method can be defined as a research method that explains about the population that is being studied. It does not focus on why a certain fact occurs. In this study, the descriptive research will investigate the effect of demonetisation on the usage of digital payment system among rural and urban customers. In order to achieve this survey will be conducted with the help of structured questionnaire. The questions are close ended. Close ended questions are quick and easy to answer.

Figure 3.1.: Overview of research design



(Source: Self-made by Scholar)

3.5. Sources of data

3.5.1. Source List

The population has been selected on the basis of income level of three districts. One union territory also selected in order to make the result more effective. The three districts are Jalandhar, Amritsar, Ludhiana and one U.T is Chandigarh. The population selected from the census of Punjab.

3.5.2. Tool for collecting information

Tool for collecting the information is questionnaire. This study is carried out for finding the intention of rural and urban customers for using digital payment systems after demonetisation.

Primary Data

The method used for primary data in this study is questionnaire. The information collected from customers firstly on the basis of demographically. The present study has used a five point Likert type scales to get information from the customers. The questions have been based on the 5 attributes which has been mentioned in the conceptual model of this study. Customers were asked to rate from 1 to 5. If they rate 1 it indicates that they were strongly disagree and if they rate 5 it indicates that they were strongly agree.

The five point likert scale can be shown in a following way,

Figure 3.2.Five Point Likert Scale

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The questionnaire has been divided into following parts:

a. **Personal information or General questions**: This section covers the information related to the demographic profile of customers like name, gender, age and qualification.

b. **On the basis of security and trust**: This section covers the information related to the security and trust of using digital payment system. How much person trust on e- payments and use these systems frequently.

c. **On the basis of cost**: this section provides the information related to the cost which a customer has to pay while using digital payment system. Whether the person agree to pay the cost or not.

d. **On the basis of usage**: this section provides information related to digital literacy of customer. The customer is having full knowledge of using digital payment system or not.

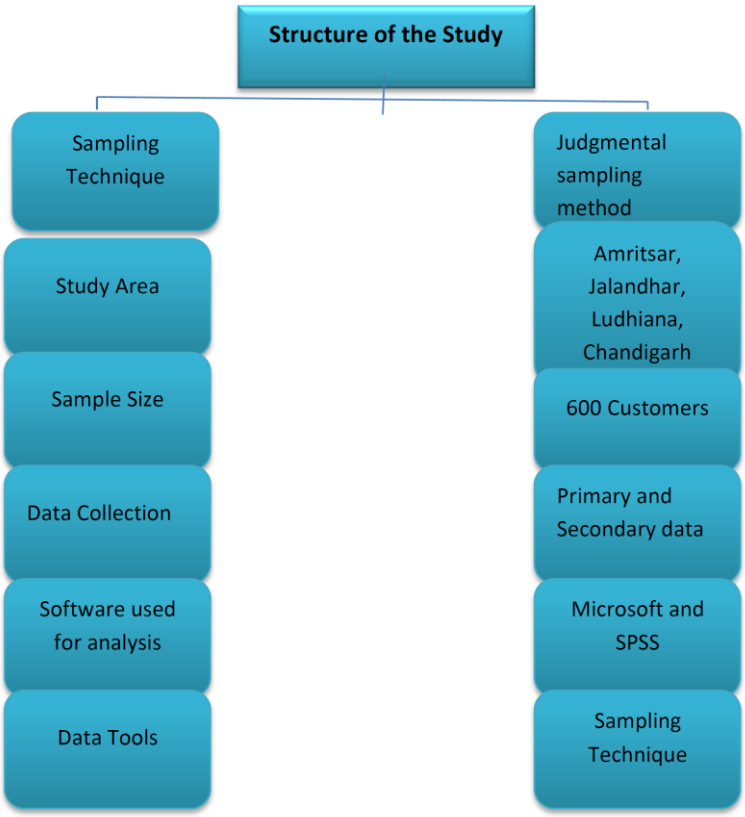
e. **On the basis of infrastructural facilities**: this section provides information related to the facilities available for using digital payment system like internet connectivity, computer, smart phones etc.

f. **On the basis of innovation resistance**: this section covers the information to adoption of new innovation in digital payment system.

Secondary data

The data has been collected and taken from various types of already publishes sources such as census of Punjab, RBI reports, research papers, shodhganga, books, newspapers and websites. This research can be termed as explanatory research.

Figure 3.3 Structure of the Study



(Source: Self-made by Scholar)

3.6. Sampling Design

3.6.1. Sampling method

In this study the population firstly put into strata to find out the sample easily. So for this the population divide into different group to find out the samples from each group and then judgmental sampling will be used. The reason for selecting this method is that this study will observe the relationship between two subgroups i.e. rural and urban customers towards the use of digital payment system after demonetisation.

3.6.2. Sampling element

For this study the sampling element will be customers from rural and urban area of three districts and one union territory i.e. Ludhiana, Jalandhar, Amritsar and Chandigarh. The reason for selection of Chandigarh is the Capital of Punjab and also a Union Territory. So to collect the data the universe will be divided in sub

districts. The sampling unit for this study will be persons from age group of 18-60 years and their minimum qualification should be 10th pass out. The comparison will be done between urban and rural persons of three districts and one U.T according to their adoption of digital payment systems after demonetisation. Analysis of sample will be classified on different terms i.e. age, gender, educational qualification of customers.

3.6.3. Sampling location

The study will be done in Punjab and three districts have been chosen as per the income level and digital literacy level of these districts. The three districts are Ludhiana, Jalandhar and Amritsar. Ludhiana comes at first number from income point of view and followed by Jalandhar and Amritsar at second and third place. (Hindustan Times, 10th August, 2019). One Union Territory i.e. Chandigarh has also been selected. The reason for selection of Chandigarh is that it is the capital of Punjab and also to do proper and clear analysis.

3.6.4. Sample size

The sample size has been determined with the help of lower bound sample size formula given by Westland (2010). Westland framed a formula for the minimum sample size calculation for Structural Equation Model analysis. Siddiqui (2013) suggested that there should be maximum 15 observations for each predictor variable. Since there are 5 predictors in this study so sample size should be greater than 75. Craig Michael Krebsbach in his research of Bootstrapping with small sample in structural equation modeling suggested that the sample size should be larger than 200 observations. According to Krejcie and Morgan table (2012) the minimum sample size should be 384 for population size of 1000000.

The distribution of the population is as:

Total population of Ludhiana is 3498739, Jalandhar 2193590, Amritsar 2490656 and Chandigarh is 1054686.

Sample Size Calculation:

$$n = \frac{z2.N.\sigma p2}{(N-1).e2 + z2.\sigma p2}$$

So after considering all the above parameters and put the values in the formula the sample size of customers has been come to 600.

3.6.5. Pilot Study and Reliability

The pilot study is an exploratory study which helps in refining the problem, refine the hypothesis. It is desirable to conduct the pilot test before collection of data from the selected sample. The main objectives of the pilot test are:-

1) To analyse the feasibility of tool
2) To test the tool for statement and language
3) To identify the problems this may occur during data collection.

A pilot study was conducted after collecting the data from 50 respondents with the help of questionnaire. Reliability test was also conducted on the pilot test. The Cronbach's Alpha test of reliability has been applied. The value of alpha value obtained is .745, which indicates that the questionnaire is valid and reliable.

3.7. Questionnaire Design:

Data collection was done with the help of questionnaire. The questionnaire comprised the demographical questions as well as questions based on Security, Usage, Cost, Infrastructural Facilities and Innovation Acceptance. The questions based on five point likert scale which comprise strongly disagree, disagree, neutral, agree and strongly disagree.

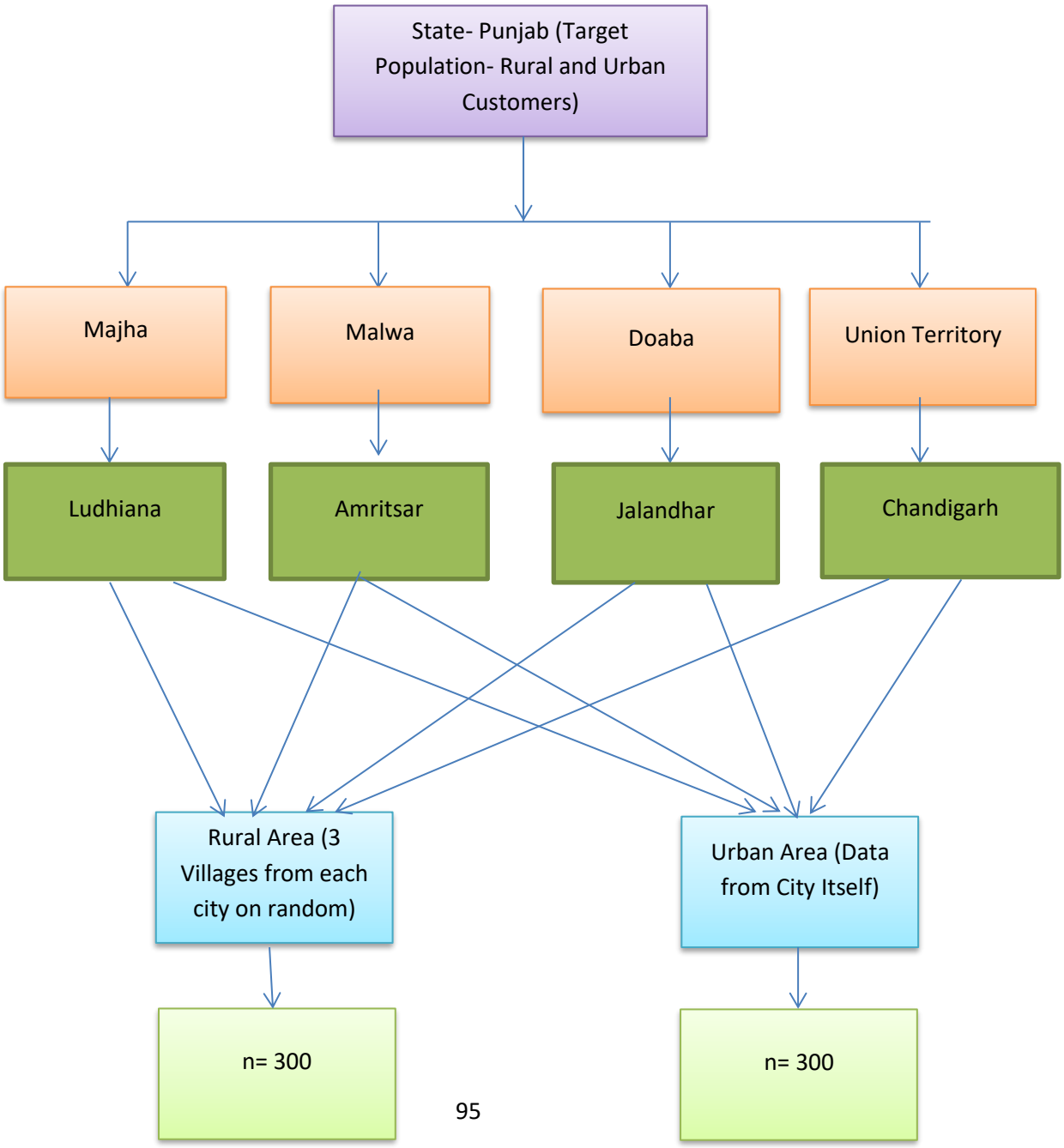
In the questionnaire, 1st eight questions (1 to 8) explain the demographic information of the respondents like name, age, gender, education, occupation etc. Further, 4 questions (9 to 12) explain the security issue in terms of adoption of digital payment systems. Questions from 13 to 16 explain the usage of digital payment systems. Questions from 17 to 19 explain the infrastructural issue in terms of adoption of digital payment systems. Questions from 20 to 23 explain the cost issue in terms of adoption of digital payment systems. Questions from 24 to 26 explain the innovation acceptance issue in terms of adoption of digital payment systems.

The questionnaire was circulated to the consumers residing in Jalandhar, Amritsar, Ludhiana and Chandigarh.

3.8 Execution of Sampling Process

The execution is based on various steps involved in the sample design. It includes target population, sampling unit, sampling technique and sample size. The data ppp collected during the period of October 2020 to July 2021. The data was collected by using self-administrated questionnaire.

Figure no 3.4



3.9. Data collection Process

The questions are closes ended. Questionnaire is structured one. Some questionnaires send through post, some were send through online mode using Google form. The researcher also collects data by visiting personally especially in rural area. By visiting personally and through follow up, the researcher was able to collect needed data required for the study. The total response rate is 96%, it is because of regular follow up of the respondents and also collecting data by visiting personally. Through Google form data received from 105 respondents which contains majority of respondents from urban area.

Table: Breakup of Survey

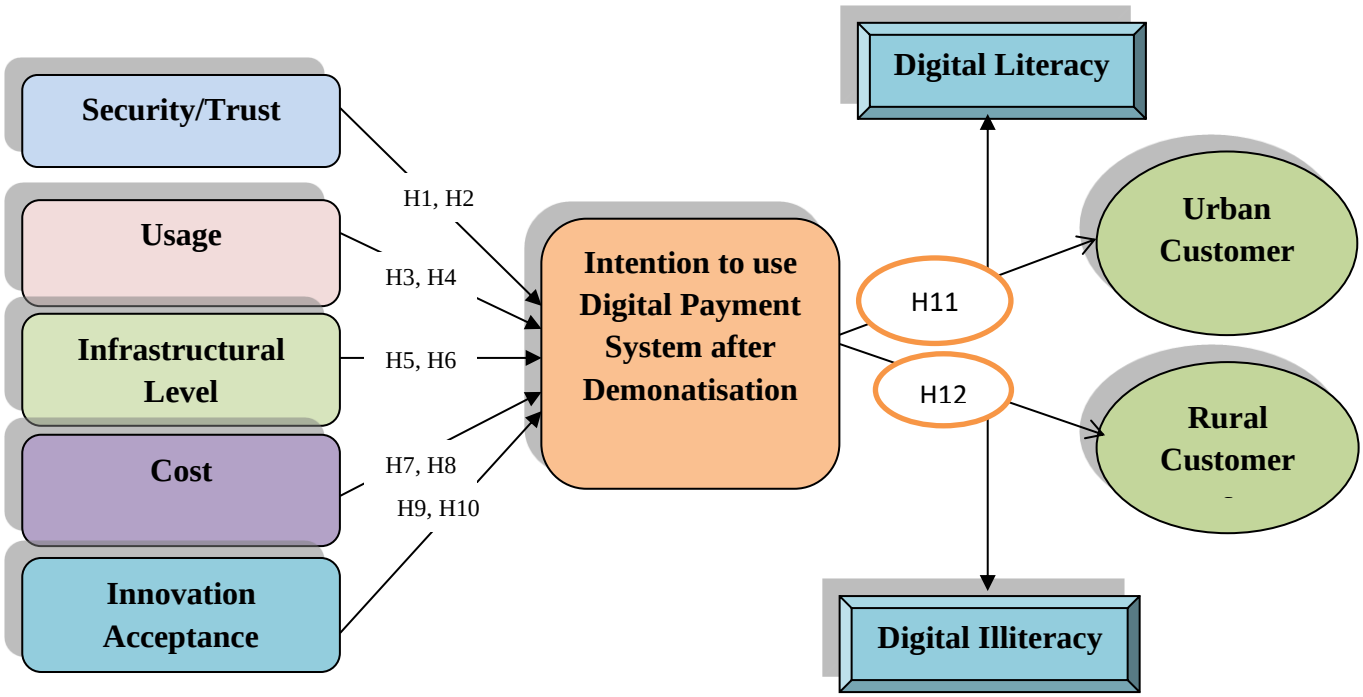
Region		**No of respondents contacted**	**No of Responses Received**	**No of Valid Responses**
Ludhiana	**Rural**	**124**	**120**	**75**
	Urban	**125**	**119**	**75**
Jalandhar	**Rural**	**110**	**97**	**75**
	Urban	**120**	**102**	**75**
Amritsar	**Rural**	**98**	**92**	**75**
	Urban	**95**	**86**	**75**
Chandigarh	**Rural**	**115**	**80**	**75**
	Urban	**100**	**84**	**75**
Total		**807**	**780**	**600**

3.10. Analysis of Data

To analyze the data initially survey done with the help of questionnaire. A pilot questionnaire made in order to check the effectiveness of the questionnaire. Coefficient of Correlation and regression has been used to analyze the relationship and impact between Independent and dependent variables. Independent T test, ANOVA and Factor analysis also used in this study. The data analysis was done by using SPSS software.

3.11 Conceptual model

Conceptual Framework



CHAPTER 4

INTERPRETATION AND ANALYSIS

4. Introduction

The theme of current chapter is to interpret and analyze the effectiveness and relativeness of digital payment attributes on the adoption of digital payment system. First of all, an overview of digital payment systems has been discussed in this chapter. This is followed by details of various attributes affecting the adoption of digital payment system. Furthermore, scales and tools to be discussed in this chapter.

Before introduction of the internet the consumers used traditional way of payments. Cash was considered is main instrument of making payments. But with the introduction of digital payment modes, the method of paying cash has been shifted from traditional to modern way. Even though people started using digital payment modes but it was not much popular in India. It became popular in India when in the year 2016, our Prime Minister made an announcement of Demonetisation. The main effect of demonetisation was on rural economy. (Heng, Gupta, Sandro 2018). Demonetisation hit the poor people as they were illiterate and mostly doesn't have bank accounts. Even they don't know how to use digital payment system in order to make payments. The move was not wrong but the way demonetisation was implemented was wrong (Undale, Gaggad, 2016). The retail sector suffers a lot due to demonetisation. The sale and profit margin went down. Retailers found difficult to purchase materials from the wholesalers. (Prasad 2019). The move of demonetisation changes the face of Indian economy. People shifted towards cashless payments. There is increase of 55% in terms of usage of digital payments in the last five years. This statement has been taken from the RBI report (Sreejith, Sounhagya 2019).

After demonetisation India shifted towards cashless transactions. Urban and rural people start using digital payment system. But if we compare the usage among rural and urban customers then we found out that it was less in rural area because of many reasons. The transactions through UPI increased. Through digital payment system the merchant receive money from the customer directly into their bank account with the

use of BHIM app. (Bajpai, Biberman and Sach 2018). There are various types of online payment systems available in India.

The payment done by one person to other person after demonetisation has been increased at a very fast rate with the help of digital payment systems. These systems are convenient and transparent

While doing the survey it has been come to notice that people use of digital payment is concerned, people in rural and urban area use different types of systems. People use ATM, UPI, debit and credit cards. The maximum usage is ATM and UPI by the people. In rural area people use UPI and ATM. In urban area people use all types of digital payment systems. On an average customers use online payment 5 times in a month

4.1. Development of Scale

To study the intention of customers to use digital payment system after demonetisation, the scale development procedure was adopted. It is also known as item generation. To check the validity of data validation has been done. Therefore an attempt has been made in this chapter in order to found out the different attributes that affect the intention of customers for using digital payment system. For this a detail review of literature has been done to recognize the different attributes.

4.2.Development of Attributes:

It involves the identification of different attributes which affect the intention of customers for using digital payment system. To identify different attributes a detailed literature review was carried out. Different authors have given different attributes. Here, I pick those which were almost similar in each paper.

4.3. Attributes Generation:

An extensive and detailed literature review was done in order to found out different attributes. Prior to attributes generation with the help of literature review, meeting with experts, customers and retailers was done in order to identify the attributes. But the main part of attributes generation was identify through literature review. During literature review it has been found out that author done study on one aspect only that is rural or urban. There is no study identifies which has been done to compare the

intention of rural and urban customers. In the next section the most important attributes of using digital payment system have been discussed:

4.3.1. Security/ Trust: According to Kulkarni and Taz," there are challenges ahead of digitalized economy which include both rural and urban people. The challenges are cyber security, Trustworthy apps." As per Ramya," the biggest fear in the mind of consumer is the loss of data while making payment through digital modes."

4.3.2. Usage: According to Shahare," Digital Illiteracy is one of the main problem. Most of the rural as well as urban people doesn't know how to use digital payment system." According to Tripathi," the growth of digital payment system mainly depends upon digital literacy. There is need to set up an information center by the government for giving knowledge of how to use digital payment system."

4.3.3. Infrastructural Facility: According to Thomas and krishnamurthi," the lack of infrastructural facility is the main problem which has to be solved in order to make rural as well as urban economy a cashless economy." In rural area there are very few ATM, Swipe machines, Internet connection and electricity. (Ahuja 2019)

4.3.4. Cost: the extra cost for using online payments put barrier in the path of adoption of digital payment system. The service charges and convenience fees sometimes annoys the consumers. They feel frustrated for using digital payment system.(Sanatani, 2017).

4.3.5. Innovation Acceptance: Sometimes people resist using the new technology. If we educate the person then he or she can adopt the innovations. (Vally, Hema. 2018)

So the above are the five attributes which can affect the adoption of digital payment system. The intention of customers can be related or affected with these five attributes. Digital literacy is the main factor in the adoption of digital payment system.

4.4.Reliability and Validity of data:

4.4.1. Validity of Data:

According to Jain, Dubey," *Validity refers to accurately measuring what it claims to measure."* Validity shows the degree up to which the data supports the statistical tests. There are many types of validity; one of them is content validity.

Content validity means the level to which the items on a test are fairly representative of the entire domain the test seeks to measure.

Content validity plays a very important role in the development of new instrument. As in my study also used the new conceptual model which has been constructed by me on the basis of literature review. So it was quite compulsory to get my questionnaire get validated from various experts. Content validity helps to do that. To evaluate the content, questionnaire get validate from various experts from different fields such as education and industry. Total seven experts validate my questionnaire and asked to change some questions and also to delete some questions. So in the previous questionnaire the numbers of questions are more. After validation some questions wording has been changed and some have been deleted from the questionnaire. The need to check the validity was important because the conceptual model has not been used earlier as in this study some attributes matched with the previous theories but not all of them.

4.4.2. Construct Validity

According to Jain, Dubey, Jain"Construct validity evaluates the degree to which the instrument reflects the concept to be measured" through construct validity we can measure the questionnaire that how well it is constructed. The convergent validity checked in this. How all construct related to each other. The rule of thumb of convergent validity is, the value of Average Variance Extracted (AVE) must be higher than 0.5. If it is so then we can say that the constructs in the questionnaire are related to each other and correlated. In this study there are 6 construct in which 5 are independent variables and 1 dependent variable. The calculation of construct variable has done manually.

In SPSS we can't do the calculation automatically. The convergent validity calculated with the help of Exploratory Factor Analysis.

Two things that we have to check in order to found out that whether data is in the range of convergent validity are:

1. Correlation among the measures of a construct (AVE). (AVE>0.5)

2. The inter factor loading relationship should be more than cross factor loading.

Here is the table which shows that the AVE among all the constructs is higher than 0.5. The inter factor loading is also higher in all constructs.

Table 4.1: Calculation of Average Variance Extracted

Variables		λ	λ^2	AVE
Security	SQ1	0.874	0.763876	0.681488
	SQ2	0.852	0.763876	
	SQ3	0.803	0.763876	
	SQ4	0.769	0.763876	
Usage	UQ1	0.825	0.680625	0.0.660747
	UQ2	0.805	0.680625	
	UQ3	0.867	0.680625	
	UQ4	0.893	0.680625	
Infrastructural Facility	IFL1	0.622	0.386884	0.56365
	IFL2	0.729	0.386884	
	IFL3	0.879	0.386884	
Cost	CO1	0.743	0.552049	0.56938
	CO2	0.751	0.552049	
	CO3	0.816	0.552049	
	CO4	0.704	0.552049	
Innovation Acceptance	INA1	0.902	0.813604	0.658514
	INA2	0.668	0.813604	
	INA3	0.846	0.813604	

Adoption of Digital Payment System	D1	0.836	0.698896	0.596946
	D2	0.698	0.698896	
	D3	0.806	0.698896	
	D4	0.743	0.698896	

Average Variance Extracted= Total of λ^2/n

4.4.3. Reliability:

The reliability means consistency of the questions in the scale. Reliability test done to find out that to which extent the scale produces the same results in the repeated analysis. The reliability has been computed by analyzing the Cronbach's alpha test. The rule of thumb of reliability test is that $\alpha>0.9$ (excellent), $\alpha>0.8$ (good), $\alpha>0.7$ (acceptable), $\alpha>0.6$ (questionable), $\alpha>0.5$ (poor) and $\alpha<0.5$ is unacceptable. (Goerge and Mallery, 2016). So the acceptable range of Cronbach's Alpha ranges from 0.9 to 0.6. The reliability of all construct in the questionnaire has been tested and can be used for further analysis.

Hence, the validity and reliability have been done in order to ensure the correctness of scale.

Table: 4.2 Reliability of constructs

Sr. no.	Constructs	No of items	Crombach's Alpha
1	Security/Trust	4	0.869
2	Usage	4	0.813
3	Infrastructural Facility	3	0.705
4	Cost	4	0.746
5	Innovation Acceptance	3	0.752
6	Adoption of Digital Payment System	4	0.844

4.5. Principal Component Method

The principal component method of factor analysis used to reduce the items into a fixed number of factors. In my case, there are 18 items which were reduced to five factors of adoption of digital payment system.

According to Hair et al. (1998)," It is necessary before conducting exploratory factor Analysis (EFA) to make sure that sufficient variance exists within the variables." The Bartlett test of Sphericity and KMO test were applied in order to measure the adequacy of sample. The value of KMO should be greater than 0.5. If it is so, then it is acceptable. (Sentosa 2016). The result of this test shows that the data is fit to run factor analysis.

Table 4.3: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin		0.794
Bartlett's Test of Sphericity	Approx. Chi-Square	4645.052
	df	153
	"Sig.	0.0001

Source: Calculated through SPSS

In my case it is above 0.5 so we can run the factor analysis test. Next table shows the communalities of different items of the scale.

The items which were having factor loading below 0.45 will be dropped from the scale. { Hair et al. (1998)}. In this case the value of items is more than 0.45, so the data is acceptable and we can move for further analysis.

Table 4.4: Communalities

Items	Initial	Extraction
SQ1	1.000	.762
SQ2	1.000	.745
SQ3	1.000	.707
SQ4	1.000	.656
UQ1	1.000	.678
UQ2	1.000	.678
UQ3	1.000	.759

UQ4	1.000	.733
IFL1	1.000	.711
IFL2	1.000	.773
IFL3	1.000	.569
CO1	1.000	.582
CO2	1.000	.581
CO3	1.000	.720
CO4	1.000	.602
INA1	1.000	.786
INA2	1.000	.562
INA3	1.000	.726
Extraction Method: Principal Component		

Source: SPSS

Table4.5: 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	4.974	27.633	27.633	4.974	27.633	27.633	3.207	17.818	17.818
2	2.145	11.917	39.550	2.145	11.917	39.550	2.551	14.173	31.992
3	1.964	10.913	50.463	1.964	10.913	50.463	2.460	13.666	45.658
4	1.860	10.336	60.799	1.860	10.336	60.799	2.152	11.955	57.612
5	1.386	7.698	68.497	1.386	7.698	68.497	1.959	10.884	68.497
6	.824	4.576	73.073						
7	.724	4.020	77.093						
8	.555	3.085	80.178						
9	.532	2.954	83.132						
10	.501	2.783	85.915						
11	.433	2.408	88.323						
12	.387	2.151	90.474						
13	.359	1.994	92.468						
14	.344	1.911	94.378						
15	.297	1.649	96.027						
16	.261	1.449	97.476						
17	.243	1.350	98.827						
18	.211	1.173	100.000						
Extraction Method: Principal Component Analysis.									

Source: SPSS

"In the table no 2.5 total variance of 68.5% has been achieved for five factors. The first Eigen value is 4.974 that mean, it explains 49% of variance in the data. The second is 2.145 that mean, it explains 21% of variance in the data. The third value is 1.964 that mean, it explains 19% of variance in the data. The fourth value is 1.860 which explains 18.6% of variance in the original data. The fifth and last value is 1.386 which explains 13.8% of variance in the original data.

According to Malhotra (2002) suggested that the value of total variance should be more than 50%. In the present study, the five factors explained 68.5% of the total variance, which is very much acceptable.

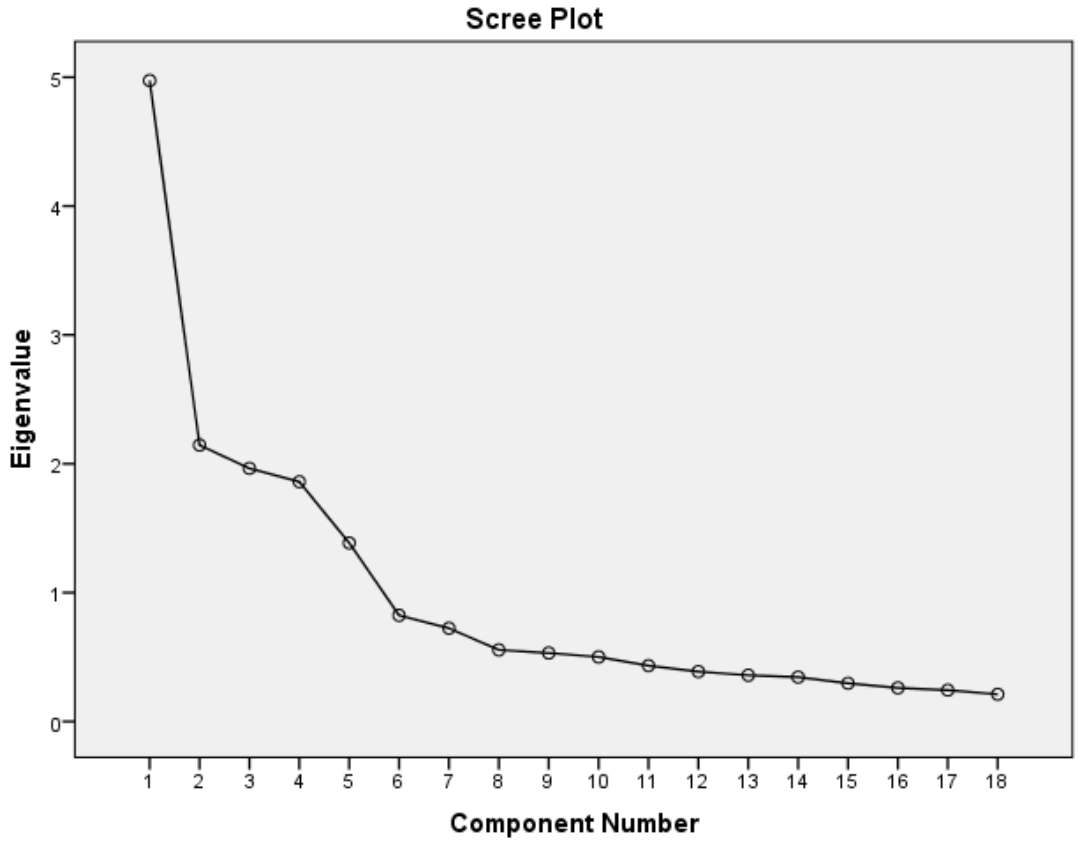
Table 4.6: Rotated Component Matrix

	Component				
	1	2	3	4	5
SQ1	.854				
SQ2	.837				
SQ3	.830				
SQ4	.779				
UQ3		.866			
UQ4		.834			
UQ1		.686			
UQ2		.657			
CO3			.812		
CO2			.749		
CO4			.693		
CO1			.691		
INA1				.874	
INA3				.818	
INA2				.698	
IFL2					.785
IFL1					.774
IFL3					.725

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Scree Plot: Scree plot is the presentation of factors in the diagrammatical form. It is a plot of Eigen values. In this Eigen values are shown on y-axis and factors on x-axis. The scree plot with five factors has been shown below in figure 2.1

Figure:4.1. .



Source: SPSS

The summarized result of factor analysis has been shown in table 2.7.

Table 4.7: Summary of Factor Analysis

Sr. No.	Factor Name (% of Variance)	Eigen Value	Cronbach's alpha	Loading
1	Security (17.818	4.974	0.869	SQ1 0.854 SQ2 0.837 SQ3 0.830 SQ4 0.779
2	Usage (14.173	2.145	0.813	UQ1 0.686 UQ2 0.657 UQ3 0.866 UQ4 0.834
3	Infrastructural Facilities (13.666)	1.964	0.705	IFL1 0.774 IFL2 0.785 IFL3 0.725
4	Cost (11.955)	1.860	0.746	CO1 0.691 CO2 0.749 CO3 0.812 CO4 0.693
5	Innovation Acceptance (10.884)	1.386	0.752	INA1 0.874 INA2 0.698 INA3 0.818

Table 4.7 Shows that the first dimension, Security, is comprised of four items relating to security in using digital payment system. It explained 17.818% of variation of the data, with an Eigen value of 4.974. It contains four items with loading of Security. The loading value is much better in the case of security, thus security is considered as the most important dimension in adoption of digital payment system. Therefore, the privacy of personal data and transparency should be there in case of online transactions.

The second dimension, Usage, is comprised of four items relating to Usage of digital payment system or digital literacy. It explained 14.173% of variation of data, with an Eigen value of 2.145. The loading value is quite good in this case; it shows that maximum users have knowledge of usage of digital payment systems.

The third dimension, Infrastructural Facilities, is comprised of three items. It explained 13.666% of variation of data, with an Eigen value of 1.964. The loading is again better in this case. For the adoption of digital payment system, it is compulsory to provide better infrastructural facilities like net connectivity, instrument for the adoption of digital payment systems.

The fourth dimension is Cost, is comprised of four items. It explained 11.955% of variation of data, with an Eigen value of 1.860. The loading is acceptable. So the cost of using digital payment systems should be reasonable and user should know about the charges, charged for using digital payment modes.

The fifth dimension is Innovation Acceptance, is comprised of three items. It explained 10.884% of variation of data, with an Eigen value of 1.386. The loading is good in this case. So customers are willing to use new technologies in the digital modes.

4.6.Analysis Technique and Statistical Tools

The quantitative analysis technique has been used in this study in order to understand the intention of customers for adoption of digital payment systems. A structured, descriptive research design has been used with the aim to collecting the data and to generalize the result. The data has taken from the target population from rural and urban areas. The area for collection of data is Punjab and Chandigarh. The district of Punjab is Ludhiana, Jalandhar and Amritsar. These districts have been chosen on the basis of income level and digital literacy level. The sample size is 600 customers.

Table4.8. Detail of Sample

Sr.No.	Region	Districts and U.T.	Selection of villages (rural)	Respondents from city (urban)	Respondents
1	Doaba	Jalandhar	3 villages	75	150
2	Malwa	Ludhiana	3 villages	75	150
3	Majha	Amritsar	3 villages	75	150
4	Union Territory	Chandigarh	3 villages	75	150

So in order to calculate responses from the customers, we select three districts and one Union Territory. 3 villages have been taken from each city on random basis. The survey conducted on judgmental basis from each village. 15 respondents have been taken from each village.

4.7. Customer's Demographics and adoption of Digital Payment System

The preference, attitude and intention of any individual may be influenced by his or her gender. (Gefenand Straub, 1997). The demographic profile of a customer is essential in order to get data. In this study the data has been collected from four cities with the help of questionnaire.

4.7.1. Gender and Adoption of Digital Payment System

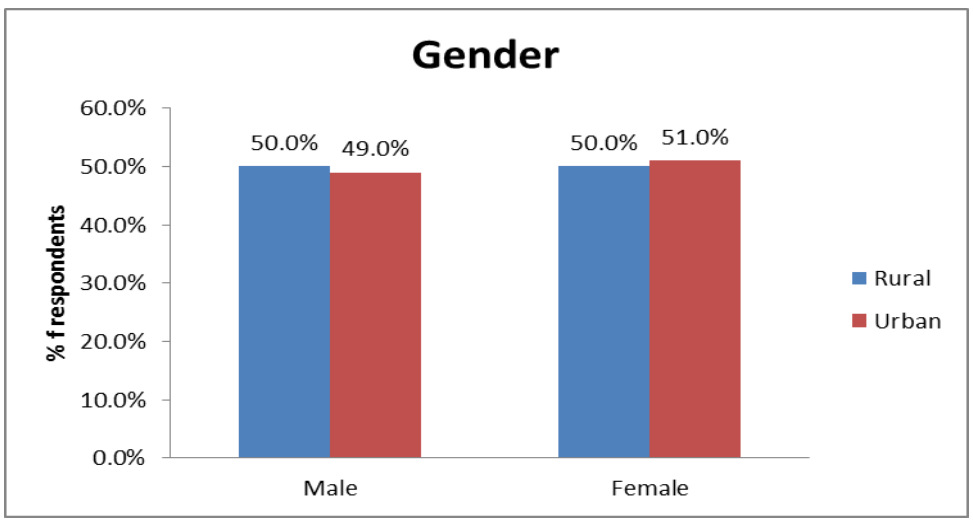
The demographic data of respondents is gender wise i.e. male and female. The data related to gender has been taken from rural and urban area. In rural area it is quite equal that is 50-50. But in urban area it is somehow less than 50%. Like in urban area males are 49% and females are 51%.

Table: 4.9. GENDER

		Residence					
		Rural		Urban		Total	
Gender	Male	150	50%	147	49%	297	49.5%
	Female	150	50%	153	51%	303	50.5%

The above data can be presented in a graphical way.

Figure 4.2



In order to analyse the significant difference between the means of male and female in the adoption of digital payment system, independent t-test was used. The hypothesis to check this is as under:

H0: the two population means of male and female are equal ($\mu_1=\mu_2$)

H1: the two population means of male and female are not equal ($\mu_1\neq\mu_2$)

Table4.10. Independent sample t-test for adoption of digital payment system (Gender)

	Equality Variance		**t-test for equality of means**		
	F	**Sig.**	**T**	**DF**	**Sig (2-tailed)**
Equal variance assumed	.648	.421	1.661	598	.097
Equal variance not assumed			1.659	598.118	.098

Note: Response was obtained on a five point likert scale.

The t-test of equality revealed that DF (598) = T(1.661)=p=.097. As p value is more than .05 so in this case null hypothesis has been accepted and can say that there was no significant difference between the means of male and female in the adoption of digital payment system. It revealed that gender of a person doesn't put impact on the adoption of digital payment system.

4.7.2. Age and adoption of digital payment system

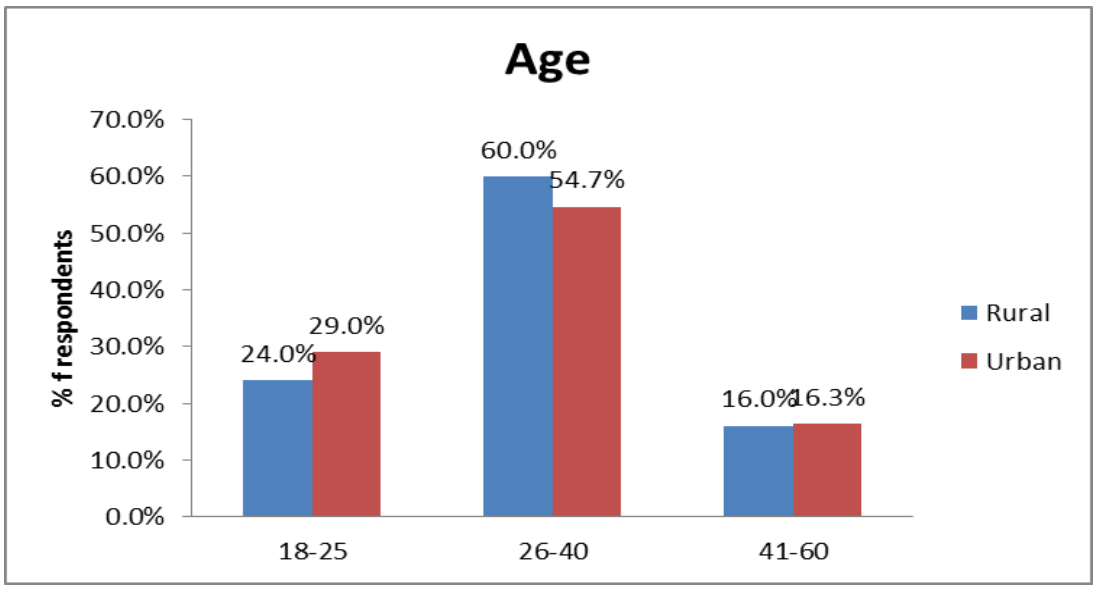
The demographic data include age wise data. The age group has been divided into three groups. It has been taken from the previous studies. The differentiation of age group is 18-25, 26-40 and 41-60. The data showed that 159 persons belong to 18-25 age group. 344 persons belong to 26-40 and 97 respondents belong to 41-60 age group. The following table depicts the data related to age.

Table4.11. Age

		Residence					
		Rural		Urban		Total	
Age	18-25	72	24%	87	29%	159	26.5%
	26-40	180	60%	164	54.7%	344	57.3%
	41-60	48	16%	49	16.3%	97	16.2%

The graphical presentation of above data is as under:

Figure 4.3



In order to check the significant difference between different groups in terms of adoption of digital payment system, one way ANOVA analysis was used. The hypotheses in this case are:

H0: there was no significant difference between age and adoption of digital payment system.

H1: there was significant difference between age and adoption of digital payment system

To check the hypothesis the result of one way ANOVA is as under:

Table4.12. One Way ANOVA

"ANOVA"					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.827	2	.914	1.380	.252
Within Groups	395.144	597	.662		
Total	396.971	599			

Table 2.5 depicted the result of one-way ANOVA for age and adoption of digital payment system. The outcome of ANOVA depict that there was no significant difference between age group and adoption of digital payment system. As p value> 0.05 the null hypothesis has been accepted. At last we can say that age do not put impact on the adoption of digital payment system that means person of any age group use the digital payment system.

4.7.3. Education and adoption of digital payment system

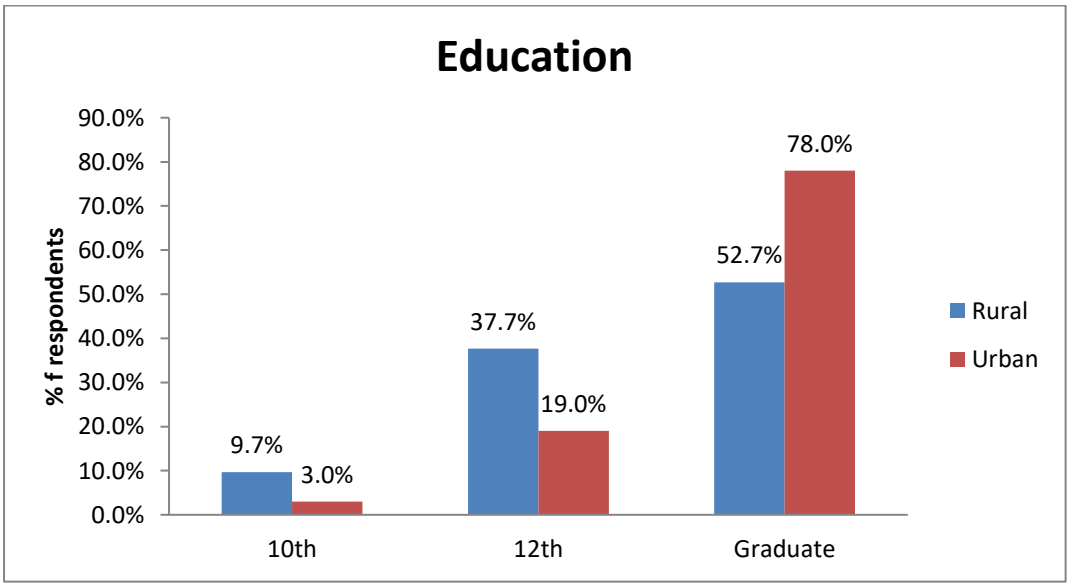
The demographic data also include data related to education of respondents. The education taken into account in this study is 10^{th}, 12^{th} and graduate. The data showed that in rural area 29 belong to 10^{th}, 113 belong to 12^{th} and 158 related to graduate pass. In urban area 9 belong to 10^{th}, 57 belong to 12^{th} and 234 belong to graduate individuals.

Table 4.13 Education

		Residence					
		Rural		Urban		Total	
Education	10^{th}	29	9.7%	9	3%	38	6.3%
	12^{th}	113	37.7%	57	19%	170	28.3%
	Graduate	158	52.7%	234	78%	392	65.3%

The above data can be shown in the graphical way, which is as follows:

Figure: 4.4.



In order to check the significant difference between different educational groups in terms of adoption of digital payment system, one way ANOVA analysis was used. The hypotheses in this case are:

H0: there was no significant difference between education and adoption of digital payment system.

H1: there was significant difference between education and adoption of digital payment system

To check hypothesis the result of one way ANOVA is as under:

Table 4.14

"**ANOVA**"

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	69.260	2	34.630	63.086	.000
Within Groups	327.711	597	.549		
Total	396.971	599			

The above table depicts the result of one-way ANOVA in case of education of respondents. It can be seen that p value<0.05. So in this case H0 will be rejected, hence conclude that there was significant difference between education and adoption of digital payment system. It means that education of a person put impact on the adoption of digital payment system. The difference between the specific groups was also found out with the help of post-hoc tests.

Form the result of post hoc test it was revealed that there was again significant difference between the group as a whole. The p value between 10^{th} and graduate is 0.000, p value between 12^{th} and graduate is 0.000 and p value between graduate and 10^{th} & 12^{th} is again 0.000. So we can say that there was significant difference between groups in case of education.

4.7.4. Occupation and adoption of digital payment system

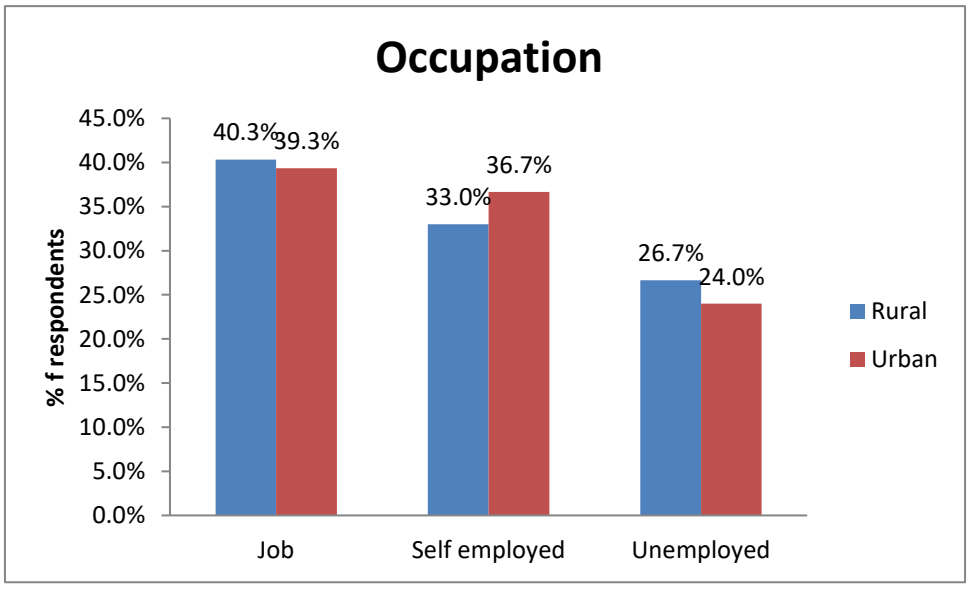
The demographic data of respondents include the data related to occupation of an individual. The occupation divided into three groups Job, Self employed and Unemployed. In rural area 121 belong to Job, 99 belong to Self-employed and 80 to Unemployed. In urban area 118 belong to job, 110 belong to Self Employed and 72 to Unemployed respondents.

Table 4.15 Occupation

		Residence					
		Rural		Urban		Total	
Occupation	Job	121	40.3%	118	39.3%	239	39.8%
	Self-Employed	99	33%	110	36.7%	209	34.8%
	Unemployed	80	26.7%	72	24%	152	25.3%

The above data can be shown in the graphical way, which is as follows:

Figure 4.5.



In order to check the significant difference between different occupational groups in terms of adoption of digital payment system, one way ANOVA analysis was used. The hypotheses in this case are:

H0: there was no significant difference between occupation and adoption of digital payment system.

H1: there was significant difference between occupation and adoption of digital payment system

To check the hypothesis the result of one way ANOVA is as under:

Table 4.16. ANOVA Analysis

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.407	2	3.703	5.675	.004
Within Groups	389.565	597	.653		
Total	396.971	599			

The above table depicts the result of one-way ANOVA in case of occupation of respondents. It can be seen that p value was 0.004< 0.05. So in this case H0 will be rejected, hence conclude that there was significant difference between occupation and adoption of digital payment system. It means that occupation of a person put impact on the adoption of digital payment system. The difference between the specific groups was also found out with the help of post-hoc tests.

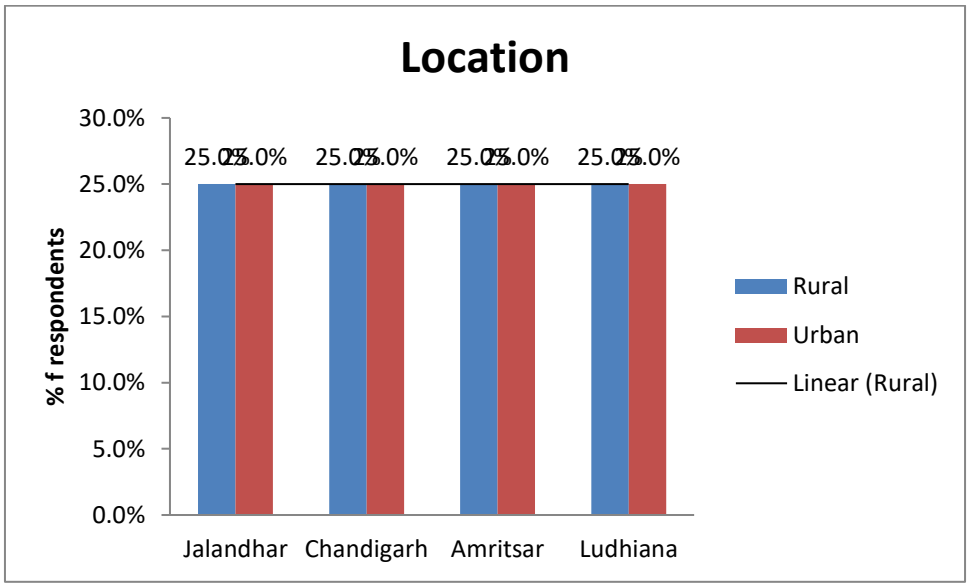
Form the result of post hoc test it was revealed that there was again significant difference between the group as a whole. The p value between job and unemployed is 0.006, p value between self employed and unemployed is 0.10 and p value between unemployed and self-employed is 0.10. so we can say that there was significant difference between groups of job and unemployed was found. Whereas in other two groups no significant difference was found as p value is more than 0.05.

4.7.5. Residence and adoption of digital payment system

The data has been collected from rural and urban customers. As this study has been related to comparison of rural and urban customers and adoption of digital payment system, so data has been collected in equal proportion from both areas. 300 respondents from rural area and 300 from urban area have been taken. This data has

been collected from four different cities such as Ludhiana, Jalandhar, Amritsar and Chandigarh. Each city contains 150 customers for the study. The graphical presentation of this data is as follows:

Figure 4.6



In order to check the significant difference between the means of rural and urban area in adoption of digital payment system, independent t-test was used. The hypothesis to check this is as under:

H0: the two population means of rural and urban are equal ($\mu_1=\mu_2$)

H1: the two population means of rural and urban are not equal ($\mu_1\neq\mu_2$)

Table4.17. Independent sample t-test for adoption of digital payment system (Residence)

	Equality Variance		**t-test for equality of means**		
	F	**Sig.**	**T**	**DF**	**Sig (2-tailed)**
Equal variance assumed	170.882	0.000	-10.400	598	0.000
Equal variance not assumed			-10.400	416.912	0.000

The t-test of equality revealed that t value (598) = -10.400=p=.000. As p value is less than .05 so in this case we reject the null hypothesis rejected, hence conclude that

there was significant difference between the means of rural and urban area in adoption of digital payment system. It revealed that area or residence of a person put significant impact on the adoption of digital payment system.

Table4.18. Overall analysis of hypothesis related to adoption of digital payment system

Demographic feature	P value	Null Hypothesis Accepted/rejected
Gender	0.097	Accepted
Age	0.252	Accepted
Education	0.000	Rejected
Occupation	0.004	Rejected
Residence	0.000	Rejected

So overall null hypothesis has been accepted in case of gender and age that means gender and age does not put impact on the adoption of digital payment system. Whereas the education of a person, occupation and residential status of a person have been put significant impact on the adoption of digital payment system.

Now we interpret the no of person's preference for using digital payment system in relation to attributes keep in mind. This descriptive information will be shown attributes wise and in table form:

		4.19. Preference of Security											
		Most important		Important		Average		Not Important		Least Important		Total	
Gender	Male	68	22.9%	92	31.0%	69	23.2%	43	14.5%	25	8.4%	297	100.0%
	Female	59	19.5%	70	23.1%	90	29.7%	56	18.5%	28	9.2%	303	100.0%
Age	18-25	33	20.8%	40	25.2%	47	29.6%	23	14.5%	16	10.1%	159	100.0%
	26-40	68	19.8%	96	27.9%	92	26.7%	58	16.9%	30	8.7%	344	100.0%
	41-60	26	26.8%	26	26.8%	20	20.6%	18	18.6%	7	7.2%	97	100.0%
Education	10th	5	13.2%	8	21.1%	10	26.3%	10	26.3%	5	13.2%	38	100.0%
	12th	33	19.4%	37	21.8%	38	22.4%	40	23.5%	22	12.9%	170	100.0%
	Graduate	89	22.7%	117	29.8%	111	28.3%	49	12.5%	26	6.6%	392	100.0%
Occupation	Job	52	21.8%	70	29.3%	65	27.2%	33	13.8%	19	7.9%	239	100.0%
	Self employed	42	20.1%	62	29.7%	54	25.8%	31	14.8%	20	9.6%	209	100.0%
	Unemployed	33	21.7%	30	19.7%	40	26.3%	35	23.0%	14	9.2%	152	100.0%

First attribute is security. In the table above we can see that maximum person from different age groups, having different job profile and education level give importance to security while using digital payment systems.

		4.20. Preference of Usage											
		Most important		Important		Average		Not Important		Least Important		Total	
Gender	Male	69	23.2%	75	25.3%	66	22.2%	38	12.8%	49	16.5%	297	100.0%
	Female	68	22.4%	67	22.1%	61	20.1%	57	18.8%	50	16.5%	303	100.0%
Age	18-25	31	19.5%	40	25.2%	29	18.2%	32	20.1%	27	17.0%	159	100.0%
	26-40	84	24.4%	86	25.0%	69	20.1%	55	16.0%	50	14.5%	344	100.0%
	41-60	22	22.7%	16	16.5%	29	29.9%	8	8.2%	22	22.7%	97	100.0%
Education	10th	4	10.5%	6	15.8%	13	34.2%	6	15.8%	9	23.7%	38	100.0%
	12th	28	16.5%	39	22.9%	33	19.4%	34	20.0%	36	21.2%	170	100.0%
	Graduate	105	26.8%	97	24.7%	81	20.7%	55	14.0%	54	13.8%	392	100.0%
Occupation	Job	64	26.8%	63	26.4%	46	19.2%	36	15.1%	30	12.6%	239	100.0%
	Self employed	52	24.9%	45	21.5%	51	24.4%	25	12.0%	36	17.2%	209	100.0%
	Unemployed	21	13.8%	34	22.4%	30	19.7%	34	22.4%	33	21.7%	152	100.0%

Second attribute is usage or digital literacy. In the table above we can see that maximum person from different age groups, having different job profile and education level give importance to digital literacy while using digital payment systems.

		4.21. Preference of Infrastructure Facilities											
		Most important		Important		Average		Not Important		Least Important		Total	
Gender	Male	43	14.5%	97	32.7%	71	23.9%	51	17.2%	35	11.8%	297	100.0%
	Female	36	11.9%	86	28.4%	89	29.4%	66	21.8%	26	8.6%	303	100.0%
Age	18-25	20	12.6%	44	27.7%	46	28.9%	38	23.9%	11	6.9%	159	100.0%
	26-40	45	13.1%	107	31.1%	99	28.8%	58	16.9%	35	10.2%	344	100.0%
	41-60	14	14.4%	32	33.0%	15	15.5%	21	21.6%	15	15.5%	97	100.0%
Education	10th	3	7.9%	6	15.8%	7	18.4%	15	39.5%	7	18.4%	38	100.0%
	12th	21	12.4%	41	24.1%	45	26.5%	36	21.2%	27	15.9%	170	100.0%
	Graduate	55	14.0%	136	34.7%	108	27.6%	66	16.8%	27	6.9%	392	100.0%
Occupation	Job	34	14.2%	81	33.9%	55	23.0%	50	20.9%	19	7.9%	239	100.0%
	Self employed	27	12.9%	68	32.5%	58	27.8%	30	14.4%	26	12.4%	209	100.0%
	Unemployed	18	11.8%	34	22.4%	47	30.9%	37	24.3%	16	10.5%	152	100.0%

Third attribute is infrastructure facilities. In the table above we can see that there is mix approach from the person from different age groups, having different job profile and education level towards infrastructure facilities while using digital payment systems.

		4.22. Preference of Cost											
		Most important		Important		Average		Not Important		Least Important		Total	
Gender	Male	51	17.2%	45	15.2%	73	24.6%	86	29.0%	42	14.1%	297	100.0%
	Female	33	10.9%	39	12.9%	88	29.0%	91	30.0%	52	17.2%	303	100.0%
Age	18-25	20	12.6%	27	17.0%	36	22.6%	54	34.0%	22	13.8%	159	100.0%
	26-40	48	14.0%	49	14.2%	95	27.6%	90	26.2%	62	18.0%	344	100.0%
	41-60	16	16.5%	8	8.2%	30	30.9%	33	34.0%	10	10.3%	97	100.0%
Education	10th	2	5.3%	2	5.3%	12	31.6%	16	42.1%	6	15.8%	38	100.0%
	12th	13	7.6%	17	10.0%	52	30.6%	60	35.3%	28	16.5%	170	100.0%
	Graduate	69	17.6%	65	16.6%	97	24.7%	101	25.8%	60	15.3%	392	100.0%
Occupation	Job	39	16.3%	30	12.6%	66	27.6%	62	25.9%	42	17.6%	239	100.0%
	Self employed	33	15.8%	30	14.4%	52	24.9%	68	32.5%	26	12.4%	209	100.0%
	Unemployed	12	7.9%	24	15.8%	43	28.3%	47	30.9%	26	17.1%	152	100.0%

The fourth attribute is cost. As we can observe from the above table that people gives less importance to cost while using digital payment systems.

		4.23. Preference of Innovation Acceptance											
		Most important		Important		Average		Not Important		Least Important		Total	
Gender	Male	46	15.5%	57	19.2%	41	13.8%	70	23.6%	83	27.9%	297	100.0%
	Female	40	13.2%	43	14.2%	41	13.5%	86	28.4%	93	30.7%	303	100.0%
Age	18-25	28	17.6%	18	11.3%	23	14.5%	40	25.2%	50	31.4%	159	100.0%
	26-40	43	12.5%	69	20.1%	48	14.0%	89	25.9%	95	27.6%	344	100.0%
	41-60	15	15.5%	13	13.4%	11	11.3%	27	27.8%	31	32.0%	97	100.0%
Education	10th	1	2.6%	3	7.9%	5	13.2%	7	18.4%	22	57.9%	38	100.0%
	12th	22	12.9%	16	9.4%	21	12.4%	42	24.7%	69	40.6%	170	100.0%
	Graduate	63	16.1%	81	20.7%	56	14.3%	107	27.3%	85	21.7%	392	100.0%
Occupation	Job	41	17.2%	47	19.7%	30	12.6%	63	26.4%	58	24.3%	239	100.0%
	Self employed	27	12.9%	37	17.7%	33	15.8%	52	24.9%	60	28.7%	209	100.0%
	Unemployed	18	11.8%	16	10.5%	19	12.5%	41	27.0%	58	38.2%	152	100.0%

The fifth attribute is innovation acceptance. As it has been observed from the above table that people has not considered important to learn about the new technologies of using digital payment systems.

4.9.Hypothesis testing

Hypothesis:

Hypothesis means the assumptions taken for research. In this study the assumption or the hypothesis are based on the conceptual model. As the study id based on the comparison of rural and urban areas in terms of adoption of digital payment systems. So hypothesis also framed separately for each segment. Further to achieve the objectives three more hypothesis has been framed so that the complete and clear comparison can be made. So the analysis of hypothesis is as follows:

4.7.6. The first hypothesis of this study is:

H01: null hypothesis: There is no significant relationship between security/Trust and intention to use digital payment system by rural customers after demonetisation.

HA1: Alternate hypothesis: There is significant relationship between security/Trust and intention to use digital payment system by rural customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between security and adoption of digital payment system by rural customers. The result is as under:

Table 4.24. Correlations

		Security/ Trust	Digital Payment System
Security/ Trust	Pearson Correlation	1	.494**
	Sig. (2-tailed)		.000
	N	300	300
Digital Payment System	Pearson Correlation	.494**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is moderate positive relationship between security and adoption of digital payment system in rural area. This means that as people get

security they will use digital payment systems. The correlation is 0.494 which is positive relationship. The p value is 0.000<0.05, so as p value is less than 0.05, null hypothesis will be rejected and alternate hypothesis accepted. So it can be said that there significant relationship between security and intention to use digital payment system in rural area after demonetisation.

P<0.05 (P value Low, H0 Go)

4.7.7. The second hypothesis is:

H02: null hypothesis: There is no significant relationship between security/Trust and intention to use digital payment system by urban customers after demonetisation.

HA2: Alternate hypothesis: There is significant relationship between security/Trust and intention to use digital payment system by urban customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between security and adoption of digital payment system by urban customers.

The result is as under:

Table 4.25. Correlations

		Digital Payment System	Security/ Trust
Digital Payment System	Pearson Correlation	1	.414**
	Sig. (2-tailed)		.000
	N	300	300
Security/ Trust	Pearson Correlation	.414**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is moderate positive relationship between security and adoption of digital payment system in urban area. This means that as people get security they will use digital payment systems. The correlation is 0.414 which is

positive relationship. . The p value is 0.000<0.05, so as p value is less than 0.05, null hypothesis will be rejected and alternate hypothesis accepted. Thus we can say that there is significant relationship between security and intention to use digital payment system in urban area after demonetisation.

P<0.05 (P value Low, H0 Go)

Comparison between rural and urban customers in terms of intention to use digital payment system on the basis of security/trust.

To compare we can say that both rural and urban area have positive relationship with the adoption of digital payment system. In both the cases null hypothesis has been rejected and alternate has been accepted.

4.7.8. The third hypothesis is:

H03: null hypothesis: There is no significant relationship between usage and intention to use digital payment system by rural customers after demonetisation.

HA3: Alternate hypothesis: There is significant relationship between usage and intention to use digital payment system by rural customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between usage and adoption of digital payment system by rural customers.

The result is as under:

Table 4.26. Correlations

		Digital Payment System	Usage
Digital Payment System	Pearson Correlation	1	.614**
	Sig. (2-tailed)		.000
	N	300	300
Usage	Pearson Correlation	.614**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is strong positive relationship between usage and intention to use digital payment system. It means that when there is digital literacy among customers then the level of adoption of digital payment system also increased. The correlation value is 0.614; this is the strong positive relationship. The P value is 0.000, which is less than 0.05. So we accept the alternate hypothesis and there is significant relationship between usage and intention to use digital payment system by rural customers after demonetisation.

4.7.9. The fourth hypothesis is:

H04: null hypothesis: There is no significant relationship between usage and intention to use digital payment system by urban customers after demonetisation.

HA4: Alternate hypothesis: There is significant relationship between usage and intention to use digital payment system by urban customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between usage and adoption of digital payment system by urban customers.

The result is as under:

Table 4.27. Correlations

		Digital Payment System	Usage
Digital Payment System	Pearson Correlation	1	.219**
	Sig. (2-tailed)		.000
	N	300	300
Usage	Pearson Correlation	.219**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is weak positive relationship between usage and intention to use digital payment system. A weak positive correlation means that while both the variables tend to go up in relation to each other but even than the relationship is not very strong between the two. The correlation value is 0.219; this is the weak positive relationship. So we can say that in urban area the digital literacy does not have much concern as compared to rural area. The P value is 0.000, which is less than 0.05. So alternate hypothesis accepted and it can be said that there is significant relationship between usage and intention to use digital payment system by urban customers after demonetisation.

5. Comparison between rural and urban customers in terms of intention to use digital payment system on the basis of usage.

   To compare we can say that both in rural area the relationship is strong while in urban area the relationship is weak. In both the cases null hypothesis has been rejected and alternate has been accepted.

4.9.5. The fifth hypothesis is:

H05: null hypothesis: There is no significant relationship between infrastructure and intention to use digital payment system by rural customers after demonetisation.

HA5: Alternate hypothesis: There is significant relationship between infrastructure and intention to use digital payment system by rural customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between infrastructure facilities and adoption of digital payment system by rural customers.

The result is as under:

Table 4.28. Correlations

		Infrastructural Level	Digital Payment System
Infrastructural Level	Pearson Correlation	1	.728**
	Sig. (2-tailed)		.000
	N	300	300
Digital Payment System	Pearson Correlation	.728**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is strong positive relationship between infrastructure and intention to use digital payment system. It means that the level of intention to use digital payment system will go up when the infrastructure level go up. The direction of both terms increase in the same direction. In rural area if we provide the better infrastructure facility then the adoption level also improve. The value of correlation is 0.728. The value of P is 0.000 < 0.05. So the null hypothesis will be rejected. As per the alternate hypothesis it can be said that there is significant relationship between infrastructure facilities and intention to use digital payment system by rural customers after demonetisation.

4.9.6. The sixth hypothesis is:

H06: null hypothesis: There is no significant relationship between infrastructure and intention to use digital payment system by urban customers after demonetisation.

HA6: Alternate hypothesis: There is significant relationship between infrastructure and intention to use digital payment system by urban customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between infrastructure facilities and adoption of digital payment system by urban customers.

The result is as under:

Table 4.29. Correlations

		Infrastructural Level	Digital Payment System
Infrastructural Level	Pearson Correlation	1	.261**
	Sig. (2-tailed)		.000
	N	300	300
Digital Payment System	Pearson Correlation	.261**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is weak positive relationship between infrastructure level and intention to use digital payment system. A weak positive correlation means that while both the variables tend to go up in relation to each other but even than the relationship is not very strong between the two. Here the correlation value is 0.261, which is the weak positive correlation. So we can say that in urban area infrastructure level does not correlate with adoption of digital payment systems. With fewer infrastructures also people able to use digital payment systems. The P value in this case is 0.000 < 0.05. So the null hypothesis will be rejected and alternate hypothesis accepted. This means that there is significant relationship between infrastructure and intention to use digital payment system in urban area after demonetisation.

4.9.7. The seventh hypothesis is:

H07: null hypothesis: There is no significant relationship between cost and intention to use digital payment system by rural customers after demonetisation.

HA7: Alternate hypothesis: There is significant relationship between cost and intention to use digital payment system by rural customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between cost and adoption of digital payment system by rural customers.

The result is as under:

Table 4.30. Correlations

		Digital Payment System	Cost
Digital Payment System	Pearson Correlation	1	.283**
	Sig. (2-tailed)		.000
	N	300	300
Cost	Pearson Correlation	.283**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

So the result showed that there is weak positive relationship between cost and intention to use digital payment system. A weak positive correlation means that while both the variables tend to go up in relation to each other but even than the relationship is not very strong between the two. Here the value of correlation is 0.283, which is the weak positive correlation. So we can say that in rural area cost does not correlate with adoption of digital payment systems. The P value in this case is 0.000< .05. So the null hypothesis will be rejected and alternate hypothesis accepted. This means that there is significant relationship between cost and intention to use digital payment system in rural area after demonetisation.

4.9.8. The eighth hypothesis is:

H08: null hypothesis: There is no significant relationship between cost and intention to use digital payment system by urban customers after demonetisation.

HA8: Alternate hypothesis: There is significant relationship between cost and intention to use digital payment system by urban customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between cost and adoption of digital payment system by urban customers.

The result is as under:

Table 4.31. Correlations

		Digital Payment System	Cost
Digital Payment System	Pearson Correlation	1	.233**
	Sig. (2-tailed)		.000
	N	300	300
Cost	Pearson Correlation	.233**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

The result showed that there is weak positive relationship between cost and intention to use digital payment system. A weak positive correlation means that while both the variables tend to go up in relation to each other but even than the relationship is not very strong between the two. Here the correlation value is 0.233. This is the weak positive correlation. So we can say that in urban area also cost does not correlate with the adoption of digital payment systems. The P value is < 0.05. So the null hypothesis will be rejected and alternate hypothesis accepted. This means that there is significant

relationship between cost and intention to use digital payment system in urban area after demonetisation.

4.9.9. The ninth hypothesis is:

H09: null hypothesis: There is no significant relationship between innovation acceptance and intention to use digital payment system by rural customers after demonetisation.

HA9: Alternate hypothesis: There is significant relationship between innovation acceptance and intention to use digital payment system by rural customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between innovation acceptance and adoption of digital payment system by rural customers.

The result is as under:

Table 4.32. Correlations

		Digital Payment System	Innovative Acceptance
Digital Payment System	Pearson Correlation	1	.373**
	Sig. (2-tailed)		.000
	N	300	300
Innovative Acceptance	Pearson Correlation	.373**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

The result showed that there is moderate positive correlation between innovation acceptance and intention to use digital payment system in rural area. It depicts that even though there is no strong relationship but even than if there are new technologies

in the rural area then people may tend to accept it and use it. The value of correlation in this case is 0.373, which is moderate positive correlation. The P value is < 0.05.

So null hypothesis will be rejected and alternate hypothesis accepted. There is significant relationship between innovation acceptance and intention to use digital payment system in rural area after demonetisation.

4.10. The tenth hypothesis is:

H010: null hypothesis: There is no significant relationship between innovation acceptance and intention to use digital payment system by urban customers after demonetisation.

HA10: Alternate hypothesis: There is significant relationship between innovation acceptance and intention to use digital payment system by urban customers after demonetisation

In order to analyze this hypothesis, correlation analysis has been used, to check the relationship between innovation acceptance and adoption of digital payment system by urban customers.

The result is as under:

Table 4.33. Correlations

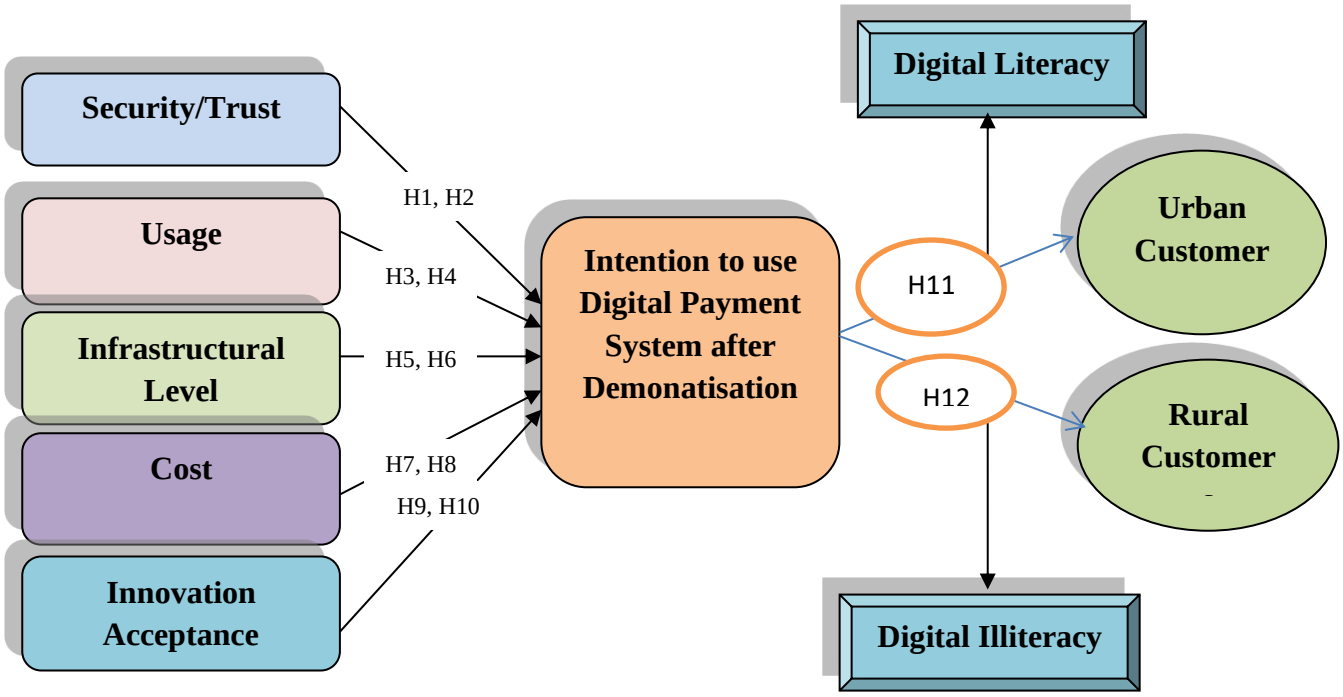
		Digital Payment System	Innovative Acceptance
Digital Payment System	Pearson Correlation	1	.440**
	Sig. (2-tailed)		.000
	N	300	300
Innovative Acceptance	Pearson Correlation	.440**	1
	Sig. (2-tailed)	.000	
	N	300	300

**. Correlation is significant at the 0.01 level (2-tailed).

The result showed that there is moderate positive correlation between innovation acceptance and intention to use digital payment system in urban area. It depicts that even though there is no strong relationship but even than if there are new technologies in the urban area then people may tend to accept it and use it. The value of correlation in this case is 0.440, which is moderate positive correlation. The P value is < 0.05.

So null hypothesis will be rejected and alternate hypothesis accepted. There is significant relationship between innovation acceptance and intention to use digital payment system in urban area after demonetisation.

Conceptual Framework



Overall summary of Hypothesis analysis

Hypothesis	Name	Residence	Correlation value	P value	H1 Accepted/ Rejected
H1	Security	Rural	0.494	0.000	Accepted
H2	Security	Urban	0.414	0.000	Accepted
H3	Usage	Rural	0.614	0.000	Accepted
H4	Usage	Urban	0.219	0.000	Accepted
H5	Infrastructure Facilities	Rural	0.728	0.000	Accepted
H6	Infrastructure Facilities	Urban	0.261	0.000	Accepted
H7	Cost	Rural	0.283	0.000	Accepted
H8	Cost	Urban	0.233	0.000	Accepted
H9	Innovation Acceptance	Rural	0.373	0.000	Accepted
H10	Innovation Acceptance	Urban	0.440	0.000	Accepted

4.10. Analysis of objectives

Analysis of objectives is the important task in the study. All the study revolves around the identification of objectives, their analysis, findings and suggestion as per the findings. The interpretation of objectives is very much important while doing the analysis. Three objectives have been set in this study. One by one each objective will be analyzed and interpreted in this chapter. With the help of questionnaire the data was collected.

After collecting the data, the entire data has been uploaded in SPSS. SPSS is the software, use to analyze the data. Different tools have been applied on the data in order to get the results.

To analyze first objective, here regression analysis has been applied, in order to know the effect of one variable on the other one.

4.11. Regression Analysis (for First Objective)

Regression analysis is the quantitative method. It has been used to analyses variables or to analyze impact on one variable on the other. The relationship between a dependent variable and independent variables has been checked. In other words it is used to estimate the value of one variable based on another variable. The variable whose value is to forecasted is known as dependent variable or output variable or response variable. The variable which predicts the value of output variable is known as predictor variable or independent variable or explanatory variable. It is a statistical tool. The common form of regression analysis is the linear regression. There are two purpose of using this analysis. These are

a. It is used for the prediction.
b. It is prefer to check the causal relationship between the dependent and independent variables.

4.12.Regression Model

Regression model state the relationship of dependent variable to the function of independent variable and unknown parameter. The dependent variable describe as (Y), the independent variable as (X) and the unknown parameter as (β).

$Y= f (X,\beta)$

The regression equation made in order to predict the values of 'Y'. the value of Y can be predicted if the value of X is given. The regression equation can be

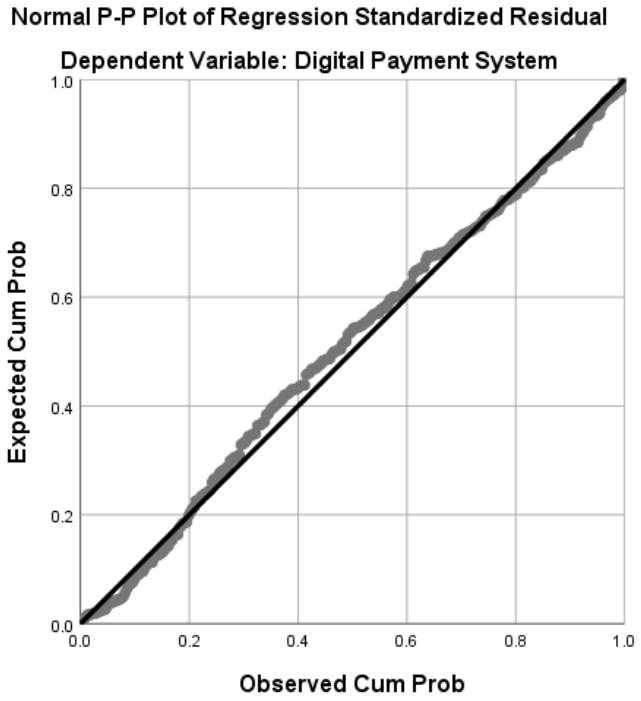
$Y= a+bX$

To find the values of dependent variable on the basis of independent variable, we have to apply regression analysis. The regression analysis is based on the set of assumptions. There are six basic assumptions to run the regression analysis. We need to make sure that our data passes the assumptions which are required for the regression analysis. These assumptions can be checked with the help of SPSS. So in this case the regression will be done with the help of assumptions. The assumption should be explained one by one and we will see that whether our data comply with these assumptions or not.

First we will check the data of rural and its assumptions for the regression analysis.

- Assumption 1: The very first assumption states that the two variables should be measured in continuous level. It means the data should be in interval or ratio. In this study the data is in ratio or interval in nature. So first assumption of regression analysis has been met. Now we can move towards second assumption.
- Assumption 2: Second assumption describe about the linear relationship between two variables. The linearity of variables can be checked with the help of scatterplot in SPSS. This assumption has been met. As we can see a diagonal line with a bunch of small circles. The data is normal in this case. The normal P-P plot which shows the linearity of data is as follows:

Figure 4.7 Normal P-P plot



- Assumption 3: No significant Outliers:

  No significant outliers should be there in the data. As we can see from the P-P plot that al values lying on the diagonal line. No point is lying below or above the plot. An outlier can be defined as "*an observed data point that has a dependent variable value that is very different to the value predicted by the regression*

equation." If there is outlier then there can be the negative effect on the regression analysis. In this study no point is far away the linear line. We can say that there is no outlier in this study and we can move further in this analysis.

- Assumption 4: Independence of observations:

  The independence of observation can be check with the help of Durbin-Watson method. This method is used to check the auto correlation in the residuals. The rule of thumb is in the range of 1.5-2.5, which consider as normal. If the value lies between this range then we can say that there is no auto correlation in the residual. The value of this test is as under:

Sig.F change	Durbin-Watson
0.000	2.090

As the value lie between the ranges, so this assumption is also met.

- Assumption 5: Homoscedasticity:

  It means that the variances should move along with the line. There should not be any pattern. The plot looks like the shots out of a gun at different places. The points are equally distributed in X and Y axis. In the figure given below we can see that there is no specific pattern of dots. This assumption has also been met.

Figure 4.8.Homoscedasticity

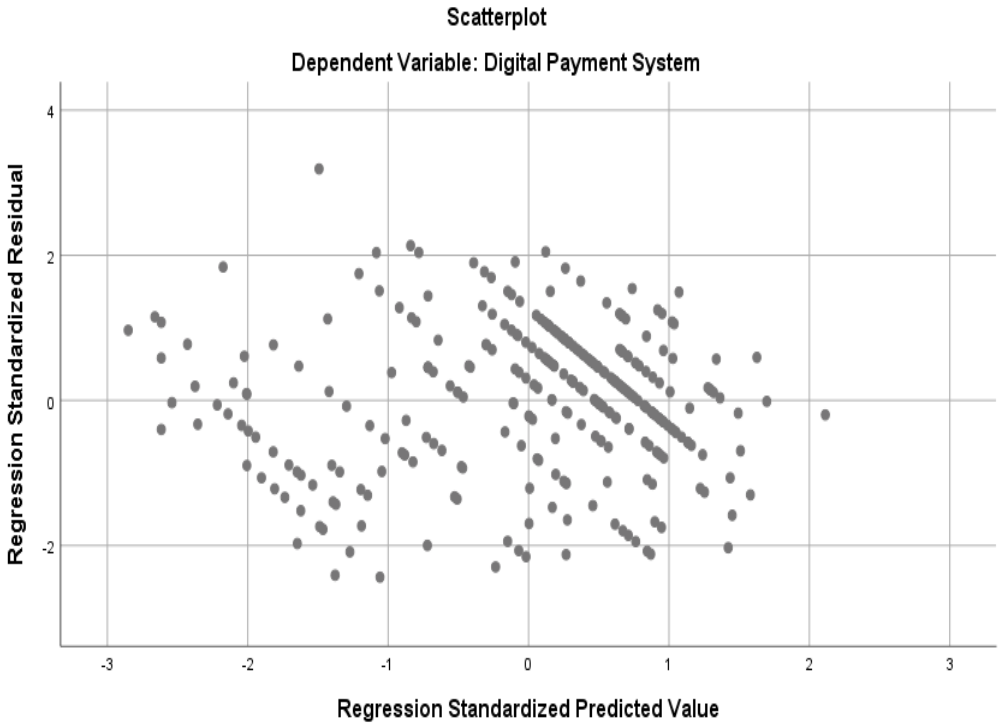

Scatterplot
Dependent Variable: Digital Payment System
Regression Standardized Residual
Regression Standardized Predicted Value
4
2
0
-2
-3
-2
-1
0
1
2
3

Table 4.34. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.995	.187		-5.323	.000		
	Trust	.174	.035	.168	4.924	.000	.795	1.259
	Usage	.285	.032	.313	8.846	.000	.739	1.354
	Infrastructural Level	.492	.033	.507	14.952	.000	.803	1.245
	Cost	.079	.035	.071	2.229	.027	.921	1.086
	Innovative Acceptance	.225	.042	.171	5.419	.000	.924	1.082

a. Dependent Variable: Digital Payment System

- Assumption 6: Multi collinearity:

  There should be absence of multi-collinearity in the data. to check this VIF values taken into consideration. The VIF values should be below 10, which indicate that the assumption has been met. The above table shows that all the values are below 10. So again this assumption has been met.

  As all the assumptions have been met, in this case we can go further with the analysis and interpretation part of regression analysis.

  Before start the interpretation of result firstly the objective and the hypothesis related to the objective are as follows:

4.13. <u>The first objective of the study is</u>

- **To examine the effect of Digital Payment attributes on adoption of Digital Payment system on customers of rural and urban area after demonetisation.**
- **To analyze this objective first rural area will be analyzed, then urban area**
- **The null and alternate hypothesis for the rural area is as under:-**

- **Null Hypothesis Ho1: There is no effect of Digital Payment Attributes on adoption of digital payment system on customers of rural area after demonetisation.**
- **Alternate Hypothesis Ha1: There is effect of Digital Payment Attributes on adoption of digital payment system on customers of rural area after demonetisation.**

The above hypothesis can be analyzed with the help of regression analysis.

Table 4.35. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.728	.529	.528	.66357	.529	335.306	1	298	.0001**
2	0.816	.665	.663	.56064	.136	120.464	1	297	.0001**
3	0.837	.700	.697	.53122	.035	34.817	1	296	.0001**
4	0.851	.724	.720	.51123	.023	24.596	1	295	.0001**
5	0.853	.728	.723	.50783	.005	4.968	1	294	.027*

The first table which explained in this analysis is model summary. The table shows the value of R and R^2. The R value represents correlation and R^2 represent how much variation of dependent variable explained by the independent variable. In this study the dependent variable is adoption of digital payment system while the independent variables are the five attributes of digital payment system.

a. The R value represents the correlation between dependent and independent variables. If the R value is more than 0.4 than we can move further and it is considered as good value for further analysis. In this study the value of R in all five attributes is more than 0.4, which is good. The value for infrastructural level is 0.728, for usage is 0.816, for innovation acceptance is0.837, for security is0.851 and for cost is 0.853.

b. R square explain the variation in dependent variable which explained by the independent variable. Value more than 0.5 showed that the model is fit to determine the relationship. In this case all values are more than 0.5, which

considered as good and fit model. R square in this study depicts that adoption of digital payment system variation has been explained by digital payment attributes. In this case the highest one is 72.8%.

c. Adjusted R-square depicts the generalization of the results. The value in this case should be close to the R square. In this study all values are close to R square, so it is good fit model.

d. Therefore the model summary table is good and satisfactory to proceed to the next step.

ANOVA Table

Table 4.36. ANOVA

Model		Sum of Squares	df	Mean Square	F-value	p-value
1	Regression	147.645	1	147.645	335.306	.0001**
	Residual	131.218	298	.440		
	Total	278.862	299			
2	Regression	185.509	2	92.755	295.095	.0001**
	Residual	93.353	297	.314		
	Total	278.862	299			
3	Regression	195.334	3	65.111	230.736	.0001**
	Residual	83.528	296	.282		
	Total	278.862	299			
4	Regression	201.762	4	50.441	192.996	.0001**
	Residual	77.100	295	.261		
	Total	278.862	299			
5	Regression	203.044	5	40.609	157.467	.0001**
	Residual	75.819	294	.258		
	Total	278.862	299			

This table depicts that whether the model is significant to determine the outcome. In other words whether the model has predicts the dependent variable in a significant manner. To know this we have to see two values in this table. These are:

a. **P-value:** the p value is generally seen at 95% of confidence interval or 5% level of significance. When the P value is < the level of significance than null hypothesis will rejected and result considered as significant. In this case the P value in all the terms is less than 0.05, so we can say that the result is significant and we reject the null hypothesis. And accept the alternate hypothesis which denotes as there is effect of digital payment attributes in the adoption of digital payment system in rural area after demonetisation. The regression model is significant enough to predict the outcome variable.

b. **F-ratio:** F-ratio help in improvement in the prediction of variable, if there is any inaccuracy in the model. The value of F should be greater than 1. In our study the value of F lies between 150-350, so we can say that the model is good for the study.

The third table in regression analysis is coefficients

Table4.37. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	p-value	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.835	.143		5.840	.0001**	.554	1.117
	Infrastructural Level	.706	.039	.728	18.311	.0001**	.630	.782
2	(Constant)	.108	.138		.787	.432	-.163	.380
	Infrastructural Level	.562	.035	.579	16.004	.0001**	.493	.631
	Usage	.362	.033	.397	10.976	.0001**	.297	.427
3	(Constant)	-.639	.182		-3.512	.001**	-.997	-.281
	Infrastructural Level	.523	.034	.539	15.417	.0001**	.456	.590
	Usage	.350	.031	.385	11.199	.0001**	.289	.412
	Innovative Acceptance	.254	.043	.193	5.901	.0001**	.169	.338
4	(Constant)	-.892	.182		-4.890	.0001**	-1.251	-.533
	Infrastructural Level	.496	.033	.511	14.994	.0001**	.431	.561
	Usage	.298	.032	.327	9.329	.0001**	.235	.361
	Innovative Acceptance	.235	.042	.179	5.642	.0001**	.153	.316
	Security/ Trust	.176	.035	.170	4.959	.0001**	.106	.246
5	(Constant)	-.995	.187		-5.323	.0001**	-1.364	-.627
	Infrastructural Level	.492	.033	.507	14.952	.0001**	.428	.557
	Usage	.285	.032	.313	8.846	.0001**	.222	.349

	Innovative Acceptance	.225	.042	.171	5.419	.0001**	.143	.307
	Security/ Trust	.174	.035	.168	4.924	.0001**	.104	.243
	Cost	.079	.035	.071	2.229	.027*	.009	.148

The coefficient table predicts the dependent variable with the help of an equation. It shows the strength of relationship or the significance of variables in the model and the impact on the dependent variable. The value of p in all the cases is < 0.05.We rejects the null hypothesis. The relationship between independent and dependent variable is positive which means that independent variables have a significant impact on the dependent variable.

The regression equation in each case as:

The regression equation will be

$$Y= bx+a$$

For this data, y is the adoption of digital payment system and x is the digital payment attributes. The regression equations in all the five cases are as follows:

a) The regression equation of infrastructure level and adoption of digital payment system is

Adoption of digital payment system= 0.492(Infrastructure Level) + (-0.995)

b) The regression equation of Usage and adoption of digital payment system is

Adoption of digital payment system= 0.285(Usage) + (-0.995)

c) The regression equation of Innovation Acceptance and adoption of digital payment system is

Adoption of digital payment system= 0.225(Innovation Acceptance) + (-0.995)

d) The regression equation of Security and adoption of digital payment system is

Adoption of digital payment system= 0.174(Security) + (-0.995)

e) The regression equation of Cost and adoption of digital payment system is

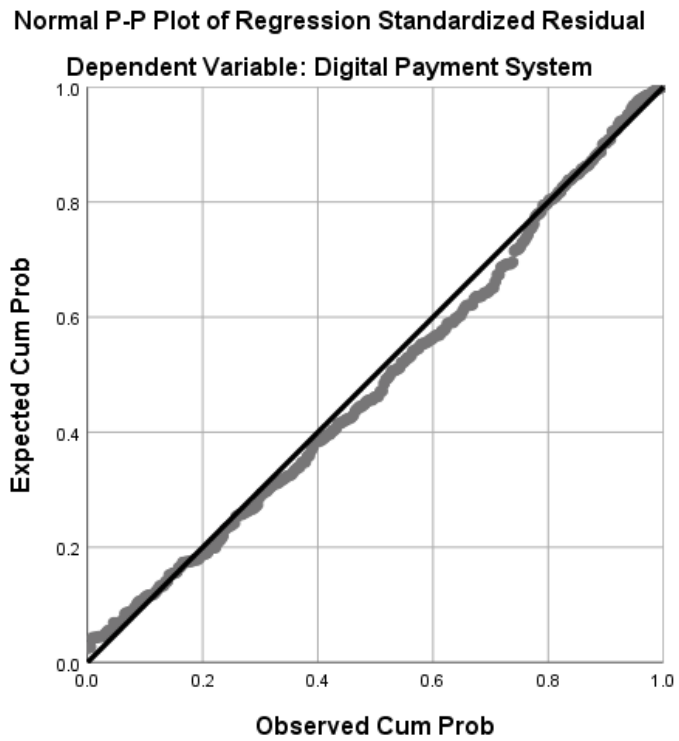
Adoption of digital payment system= 0.079(Cost) + (-0.995)

This is the analysis of rural area with the help of regression. Now the analysis will be done on urban area with the help of regression.

First we will check the data of urban area and its assumptions for the regression analysis.

- Assumption 1: The very first assumption states that the two variables should be measured in continuous level. It means the data should be in interval or ratio. In this study the data is in ratio or interval in nature. So first assumption of regression analysis has been met. Now we can move towards second assumption.
- Assumption 2: Second assumption states about the linear relationship between two variables. The linearity of variables can be checked with the help of scatterplot in SPSS. This assumption has been met. As we can see a diagonal line with a bunch of small circles. The data is normal in this case. The normal P-P plot which shows the linearity of data is as follows:

Figure 4.9 Normal P-P plot



- Assumption 3: No significant Outliers:

No significant outliers in the data. As we can see from the P-P plot that al values lying on the diagonal line. No point is lying below or above the plot. An outlier can be defined as "*an observed data point that has a dependent variable value that is very different to the value predicted by the regression equation*." If there is outlier then there can be the negative effect on the regression analysis. In this study no point is far away the linear line. We can say that there is no outlier in this study and we can move further in this analysis.

- Assumption 4: Independence of observations:

  The independence of observation can be check with the help of Durbin-Watson method. This method is used to check the auto correlation in the residuals. The rule of thumb is in the range of 1.5-2.5, which consider as normal. If the value lies between this range then we can say that there is no auto correlation in the residual. The value of this test is as under:

Sig.F change	Durbin-Watson
0.000	1.865

  As the value lies between the range, so this assumption is also met.

- Assumption 5: Homoscedasticity:

  It means that the variances should move along with the line. There should not be any pattern. The plot looks like the shots out of a gun at different places. The points are equally distributed in X and Y axis. In the figure given below we can see that there is no specific pattern of dots. This assumption has also been met.

Figure 4.10.Homoscedasticity

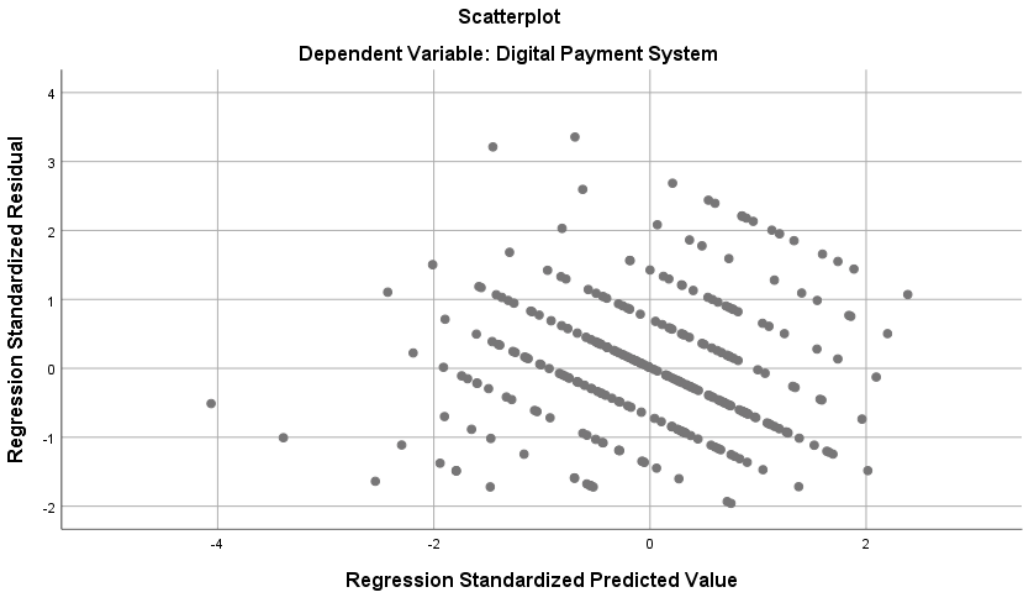


Table 4.38.Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.599	.204		7.828	.000		
	Security/ Trust	.173	.028	.306	6.267	.000	.917	1.091
	Usage	.065	.033	.097	2.013	.045	.937	1.067
	Infrastructural Level	.117	.034	.164	3.391	.001	.935	1.069
	Cost	.089	.029	.146	3.073	.002	.962	1.039
	Innovative Acceptance	.198	.032	.305	6.137	.000	.883	1.133

a. Dependent Variable: Digital Payment System

- Assumption 6: Multi collinearity:

  There should be absence of multi-collinearity in the data. To check this VIF values taken into consideration. The VIF values should be below 10, which

indicate that the assumption has been met. The above table shows that all the values are below 10. So again this assumption has been met.

As all the assumptions have been met, in this case we can go further with the analysis and interpretation part of regression analysis.

Before start the interpretation of result firstly the objective and the hypothesis related to the objective are as follows:

The first objective of the study is

- **To examine the effect of Digital Payment attributes on adoption of Digital Payment system on customers of rural and urban area after demonetisation.**
- **The null and alternate hypothesis for the urban area is as under:-**
  - **Null Hypothesis Ho1: There is no effect of Digital Payment Attributes on adoption of digital payment system on customers of urban area after demonetisation.**
  - **Alternate Hypothesis Ha1: There is effect of Digital Payment Attributes on adoption of digital payment system on customers of urban area after demonetisation.**

The above hypothesis can be analyzed with the help of regression analysis.

Table 4.39. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.44	.194	.191	.39375	.194	71.631	1	298	.0001**
2	0.547	.299	.294	.36786	.105	44.418	1	297	.0001**
3	0.575	.331	.324	.35989	.032	14.304	1	296	.0001**
4	0.592	.350	.341	.35531	.019	8.678	1	295	.003**
5	0.599	.359	.348	.35349	.009	4.051	1	294	.045*

The first table which explained in this analysis is model summary. The table shows the value of R and R^2. The R value represents correlation and R^2 represent how much variation of dependent variable that explains by the independent variable. In this study

the dependent variable is adoption of digital payment system while the independent variables are the five attributes of digital payment system.

e. The R value represents the correlation between dependent and independent variables. If the R value is more than 0.4 than we can move further and it is considered as good value for further analysis. In this study the value of R in all five attributes is more than 0.4, which is good. The value for infrastructural level is 0.575, for usage is 0.599, for innovation acceptance is0.44, for security is0.547 and for cost is 0.592.

f. R square state the variation in dependent variable which explained by the independent variable. Value more than 0.5 showed that the model is fit to determine the relationship. In this case all values are less than 0.5, which is not considered as good and fit model. R square in this study depicts that adoption of digital payment system variation has been explained by digital payment attributes. In this case the highest one is 35.9%.

g. Adjusted R-square depicts the generalization of the results. The value in this case should be close to the R square. In this study all values are close to R square, so it is good fit model.

h. Therefore the model summary table is good and satisfactory to proceed to the next step.

Table 4.40.ANOVA Table

ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	p-value
1	Regression	11.106	1	11.106	71.631	.0001**
	Residual	46.202	298	.155		
	Total	57.307	299			
2	Regression	17.116	2	8.558	63.243	.0001**
	Residual	40.191	297	.135		
	Total	57.307	299			
3	Regression	18.969	3	6.323	48.818	.0001**
	Residual	38.338	296	.130		
	Total	57.307	299			

4	Regression	20.064	4	5.016	39.733	.0001**
	Residual	37.243	295	.126		
	Total	57.307	299			
5	Regression	20.571	5	4.114	32.925	.0001**
	Residual	36.737	294	.125		
	Total	57.307	299			

This table depicts that whether the model is significant to determine the outcome. In other words whether the model has predicts the dependent variable in a significant manner. To know this we have to see two values in this table. These are:

c. P-value: the p value is generally seen at 95% of confidence interval or 5% level of significance. If the P value is < the level of significance, null hypothesis will rejected and result should be considered as significant. In this case the P value in all the terms is < 0.05, so we can say that the result is significant and reject the null hypothesis. The alternate hypothesis accepted, which denotes as there is effect of digital payment attributes in the adoption of digital payment system in urban area after demonetisation. The regression model is significant enough to predict the outcome variable.

d. F-ratio: F-ratio help in improvement in the prediction of variable, if there is any inaccuracy in the model. The value of F should be greater than 1. In our study the value of F lies between 30-72, so we can say that the model is good for the study.

The third table in regression analysis is coefficients

Table4.41. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t-value	p-value	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.877	.134		21.457	.0001**	2.613	3.141
	Innovative Acceptance	.285	.034	.440	8.463	.0001**	.219	.352
2	(Constant)	2.347	.148		15.819	.0001**	2.055	2.639

	Innovative Acceptance	.237	.032	.366	7.342	.0001**	.174	.301
	Security/ Trust	.188	.028	.332	6.665	.0001**	.133	.244
3	(Constant)	1.938	.181		10.702	.0001**	1.582	2.294
	Innovative Acceptance	.210	.032	.325	6.500	.0001**	.147	.274
	Security/ Trust	.192	.028	.338	6.925	.0001**	.137	.246
	Infrastructural Level	.131	.035	.184	3.782	.0001**	.063	.199
4	(Constant)	1.764	.188		9.364	.0001**	1.393	2.134
	Innovative Acceptance	.208	.032	.320	6.489	.0001**	.145	.271
	Security/ Trust	.179	.028	.315	6.465	.0001**	.124	.233
	Infrastructural Level	.125	.034	.175	3.632	.0001**	.057	.192
	Cost	.086	.029	.141	2.946	.003**	.028	.143
5	(Constant)	1.599	.204		7.828	.0001**	1.197	2.002
	Innovative Acceptance	.198	.032	.305	6.137	.0001**	.134	.261
	Security/ Trust	.173	.028	.306	6.267	.0001**	.119	.228
	Infrastructural Level	.117	.034	.164	3.391	.001**	.049	.184
	Cost	.089	.029	.146	3.073	.002**	.032	.146
	Usage	.065	.033	.097	2.013	.045*	.001	.129

The coefficient table predicts the dependent variable with the help of an equation. It shows the strength of relationship or the significance of variables in the model and the impact on the dependent variable. As the value of p in all the cases < 0.05 so the null hypothesis has been rejected. The relationship between independent and dependent variable is positive which means that independent variables have a significant positive impact on the dependent variable.

The regression equation in each case as:

The regression equation will be

$$Y= bx+a$$

For this data, y is the adoption of digital payment system and x is the digital payment attributes. The regression equations in all the five cases are as follows:

f) The regression equation of infrastructure level and adoption of digital payment system is

Adoption of digital payment system= 0.117(Infrastructure Level) + 1.599

g) The regression equation of Usage and adoption of digital payment system is

Adoption of digital payment system= 0.065(Usage) + 1.599

h) The regression equation of Innovation Acceptance and adoption of digital payment system is

Adoption of digital payment system= 0.198(Innovation Acceptance) + 1.599

i) The regression equation of Security and adoption of digital payment system is

Adoption of digital payment system= 0.173(Security) + 1.599

j) The regression equation of Cost and adoption of digital payment system is

Adoption of digital payment system= 0.089(Cost) + 1.599

This is the analysis of urban area. In this also shows that as P value is less than 0.05, so we reject the null hypothesis and accept the alternate hypothesis.

To conclude we can say that there is effect of Digital Payment Attributes on the adoption of digital payment system on customers of rural and urban area.

4.14.<u>The second objective of the study is:</u>

- **To identify the relativeness of different Digital Payment attributes with the adoption of Digital Payment System on customers of rural and urban area after demonetisation**.

To analyse this objective the method use is correlation. In order to find out the relativeness between dependent and independent variables, correlation analysis has been used.

Correlation analysis is the statistical method of analysis. This analysis is used to know the relationship between two variables. It also shows that what type of relationship exists between the two variables, whether it is strong or weak. This analysis used to test the relationship between two quantitative variables. Correlation analysis helps to predict the future decision. It tells the relationship between two variables and based on that information one can take the decision about the future relationship.

4.14.1. The Correlation Coefficients (for Second objective)

“The correlation coefficient means to give the value to the relationship. The value of correlation coefficient lies between -1 to +1. +1 means perfect positive correlation and -1 means perfect negative correlation. Zero value means that there is no correlation between the variables. The value of correlation denote with the symbol ’r’. When the data is normally distributed then Pearson coefficient of correlation will be used.”

4.14.2. **Pearson correlation**:

This is the most widely used method of correlation. It measures the linear relationship strength between two or more variables. To use the Pearson correlation , some requirements should be fulfilled. These are as follows:

a. The variables should be in interval or ratio scale.
b. There should not be any missing value in the data.
c. There should be linear relationship between the variables which means that the data should be normally distributed.
d. There should not be any relationship between the values of variables.
e. There should not any outliers.

So these are the requirements which must be fulfilled in order to run the correlation test.

If the analysis applied manually then formula of correlation has to be applied. The formula is:

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[\, n\Sigma x^2 - (\Sigma x)^2 \,][\, n\Sigma y^2 - (\Sigma y)^2 \,]}}$$

Here the correlation depict with the symbol ’r’. The value of r should lie between -1 to +1. This indicates the strength of relationship.

a. -1 means there is perfect negative linear relationship between variables.

b. 0 means no relationship between variables.

c. +1 means there is perfect positive relationship between variables.

The values of correlation vary between -1 to +1.

a. If r is 0.1 to 0.3 then it is called weak correlation.

b. If r value is 0.3 to 0.5 then it is called moderate correlation.

c. If r value more than 0.5 then it is called strong relationship.

To analyze the relationship between variables first we should create the hypothesis:

Null Hypothesis: the population correlation is zero; means there is no relationship between adoption of digital payment system and attributes of digital payment system in rural area after demonetisation.

H0; p=0

Alternate Hypothesis: the population correlation is not zero; means there is relationship between adoption of digital payment system and attributes of digital payment system in rural area after demonetisation.

H1; p≠0 (population correlation is greater than zero or positive correlation or population correlation less than 0 or weak correlation)

To analyse this objective, correlation has to run in SPSS. The data use in this case is rural area. The correlation table for rural area is as follows:

Table 4.42. Correlations

		Security/ Trust	Usage	Infrastructural Level	Cost	Innovative Acceptance	Digital Payment System
Security/ Trust	Pearson Correlation	1	.412**	.309**	.150**	.172**	.494**
	Sig. (2-tailed)		.000	.000	.009	.003	.000
	N	300	300	300	300	300	300
Usage	Pearson Correlation	.412**	1	.374**	.248**	.142*	.614**
	Sig. (2-tailed)	.000		.000	.000	.014	.000
	N	300	300	300	300	300	300
Infrastructural Level	Pearson Correlation	.309**	.374**	1	.166**	.232**	.728**
	Sig. (2-tailed)	.000	.000		.004	.000	.000
	N	300	300	300	300	300	300
Cost	Pearson Correlation	.150**	.248**	.166**	1	.150**	.283**
	Sig. (2-tailed)	.009	.000	.004		.009	.000
	N	300	300	300	300	300	300
Innovative Acceptance	Pearson Correlation	.172**	.142*	.232**	.150**	1	.373**
	Sig. (2-tailed)	.003	.014	.000	.009		.000
	N	300	300	300	300	300	300

Digital Payment System	Pearson Correlation	.494**	.614**	.728**	.283**	.373**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	300	300	300	300	300	300

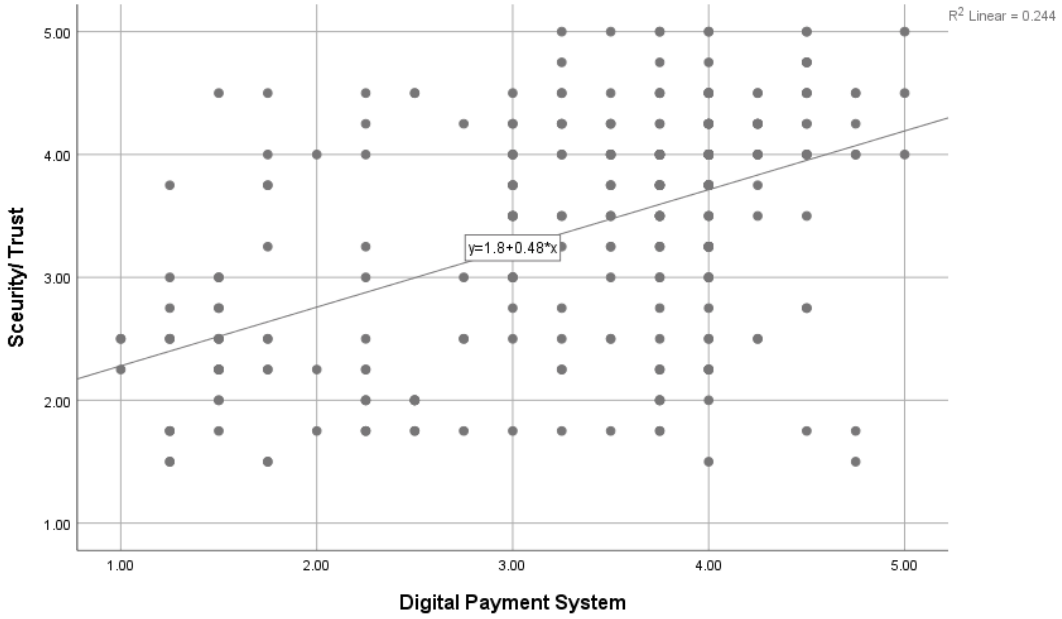
**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

This analysis has been done with the help of SPSS. This analysis will help in the interpretation of second objective of this study. The relationship between digital payment attributes and adoption of digital payment system has been found out with the help of correlation.

To analyse the very first thing that we should consider is to locate the variables of interest intersect. Here intention to use digital payment system is the dependent variable and digital payment attributes are independent variables. The relationship between different variables will be discussed below:

4.14.3. Relationship between security/trust and intention to use digital payment system"



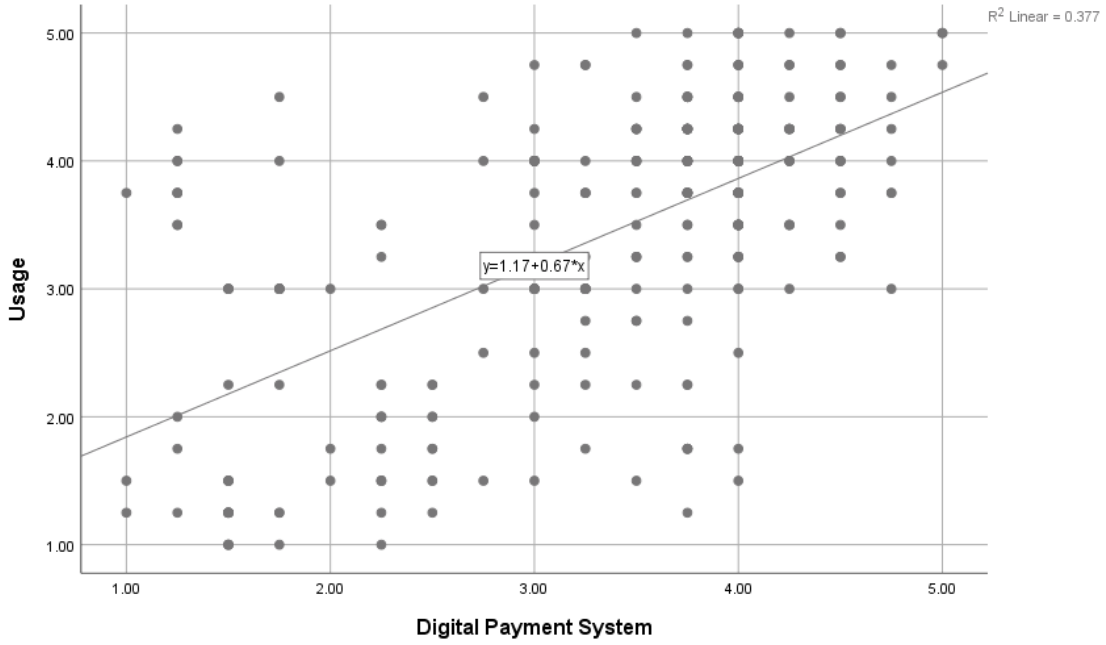
Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between security and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Security has a statistically significant linear relationship.
- In this case r= 0.494 and p value < 0.05.
- The direction of the relationship is positive that means the intention to use digital payment system and security or trust are positively correlated.

- It means that if there is more security to use digital payment system then consumer will use digital payment modes.
- The magnitude of strength, of the association is approximately moderate as(. 3< r <.5)

4.14.4. Relationship between Usage or digital literacy and intention to use digital payment system

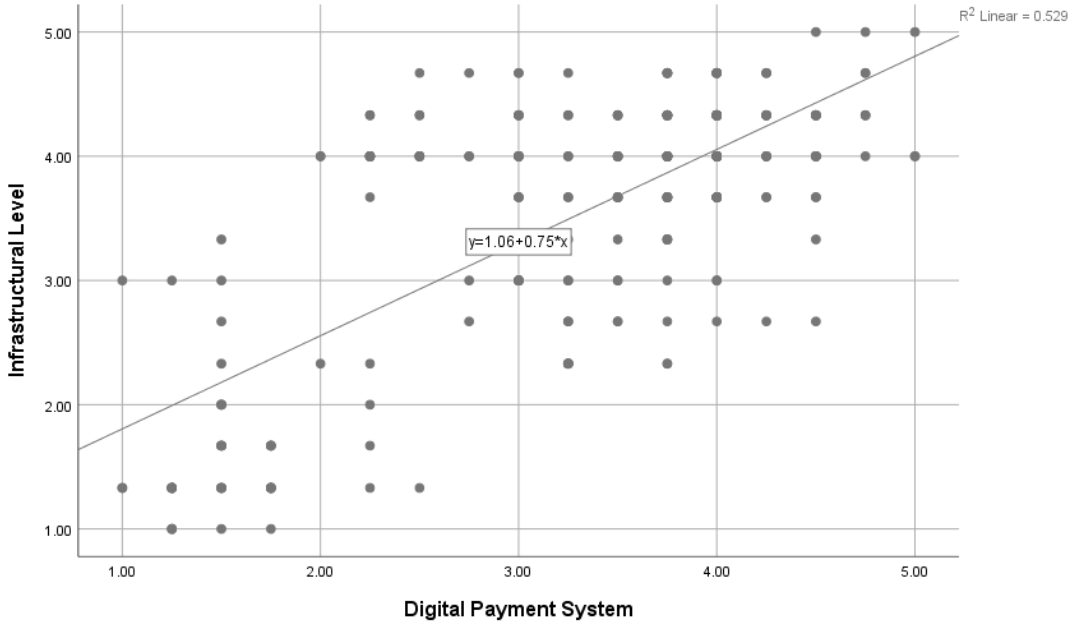


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between usage and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Usage has a statistically significant linear relationship.
- In this case r= 0.614 and p value < 0.05.
- The direction of the relationship is positive that means the intention to use digital payment system and usage or digital literacy are positively correlated.
- It means that if there is digital literacy to how to use digital payment system then consumer will use digital payment modes.
- The magnitude of strength, of the association is approximately strong (. 5< r)

4.14.5. Relationship between infrastructural level and intention to use digital payment system

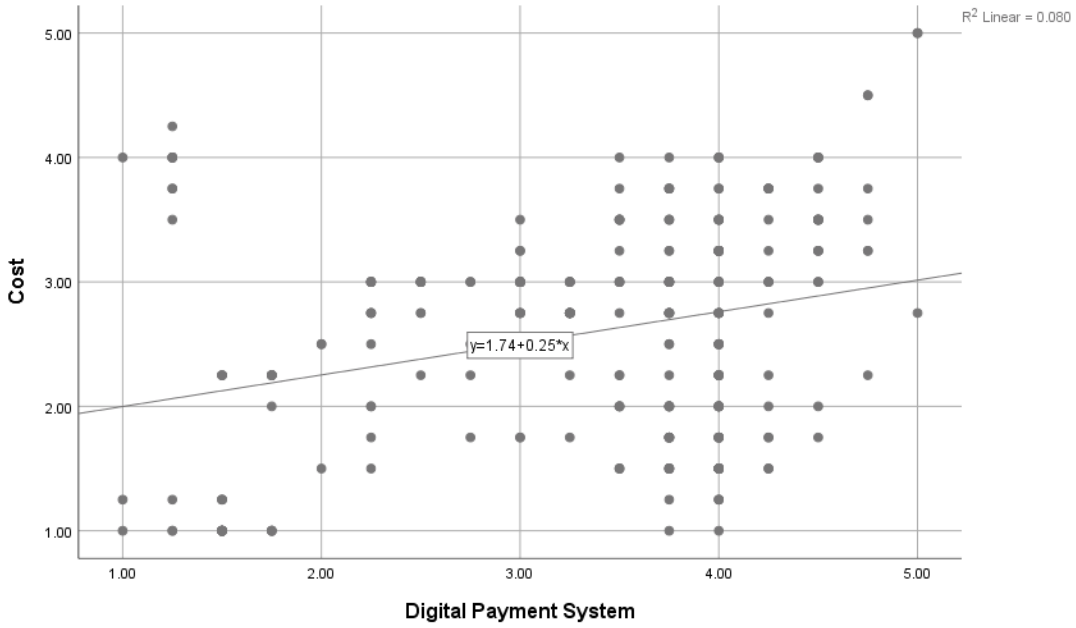


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between infrastructural level and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Infrastructural level has a statistically significant linear relationship.
- In this case r= 0.728 and p value is less than 0.05.
- The direction of the relationship is positive that means the intention to use digital payment system and infrastructural facilities are positively correlated.
- It means that if there is more infrastructural facilities available to use digital payment system then the usage of digital payment modes will be increased.
- The magnitude of strength, of the association is approximately strong (. 5< r)

4.14.6. Relationship between cost and intention to use digital payment system

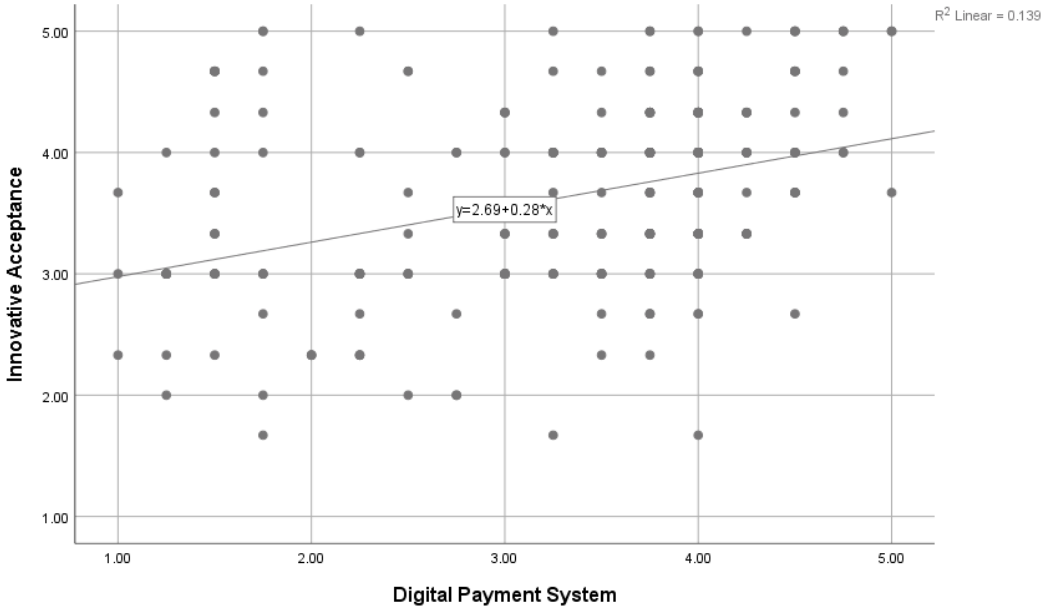


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between cost and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Cost has a statistically significant linear relationship.
- In this case r= 0.283 and $p < 0.05$.
- The direction of the relationship is positive that means the intention to use digital payment system and cost are positively correlated but the relationship is weak..
- It means that if there is less cost to use digital payment system then the usage of digital payment modes will be increased.
- The magnitude of strength, of the association is approximately weak ($r<0.3$)

4.14.7. Relationship between Innovation Acceptance and intention to use digital payment system



Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between innovation acceptance and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Innovation acceptance has a statistically significant linear relationship.
- In this case r= 0.373 and p value < 0.05.
- The direction of the relationship is positive that means the intention to use digital payment system and Innovation acceptance are positively correlated.
- It means that consumers may or may not be able to use new technologies to use digital payment system..
- The magnitude of strength, of the association is approximately moderate as(. 3< r <.5)

So after calculating all the above relationship, conclusion is that there is relationship between attributes of digital payment systems and intention to use digital payment systems. In this the alternate hypothesis will be accepted.

Alternate Hypothesis: the population correlation is not zero; means there is relationship between adoption of digital payment system and attributes of digital payment system in rural area after demonetisation.

H1; p≠0 (population correlation is greater than zero or positive correlation or population correlation less than 0 or weak correlation)

In this study the population correlation is greater than zero in all the cases. So the alternate hypothesis will be accepted in rural area.

- Now we will discuss about the correlation between attributes of digital payment system and intention to use digital payment system in urban area,

Null Hypothesis: the population correlation is zero; means there is no relationship between adoption of digital payment system and attributes of digital payment system in urban area after demonetisation.

H0; p=0

Alternate Hypothesis: the population correlation is not zero; means there is relationship between adoption of digital payment system and attributes of digital payment system in urban area after demonetisation.

H1; p≠0 (population correlation is greater than zero or positive correlation or population correlation less than 0 or weak correlation)

To analyze this objective, correlation has to run in SPSS. The data use in this case is urban area. The correlation table for urban area is as follows:

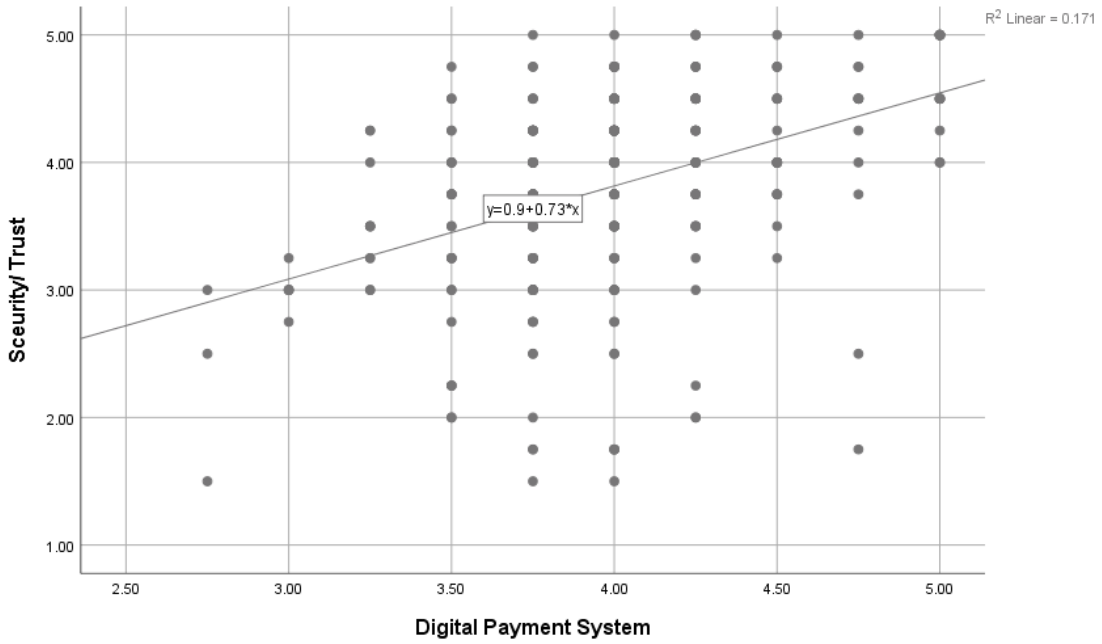
Table no 4.43. Correlations

		Security/ Trust	Usage	Infrastructural Level	Cost	Innovative Acceptance	Digital Payment System
Security/ Trust	Pearson Correlation	1	.128*	.019	.169**	.223**	.414**
	Sig. (2-tailed)		.027	.741	.003	.000	.000
	N	300	300	300	300	300	300
Usage	Pearson Correlation	.128*	1	.149**	-.019	.201**	.219**
	Sig. (2-tailed)	.027		.010	.747	.000	.000
	N	300	300	300	300	300	300
Infrastructural Level	Pearson Correlation	.019	.149**	1	.075	.217**	.261**
	Sig. (2-tailed)	.741	.010		.193	.000	.000
	N	300	300	300	300	300	300
Cost	Pearson Correlation	.169**	-.019	.075	1	.082	.233**
	Sig. (2-tailed)	.003	.747	.193		.157	.000
	N	300	300	300	300	300	300
Innovative Acceptance	Pearson Correlation	.223**	.201**	.217**	.082	1	.440**
	Sig. (2-tailed)	.000	.000	.000	.157		.000
	N	300	300	300	300	300	300
Digital Payment System	Pearson Correlation	.414**	.219**	.261**	.233**	.440**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	300	300	300	300	300	300

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.11. Relationship between security/trust and intention to use digital payment system

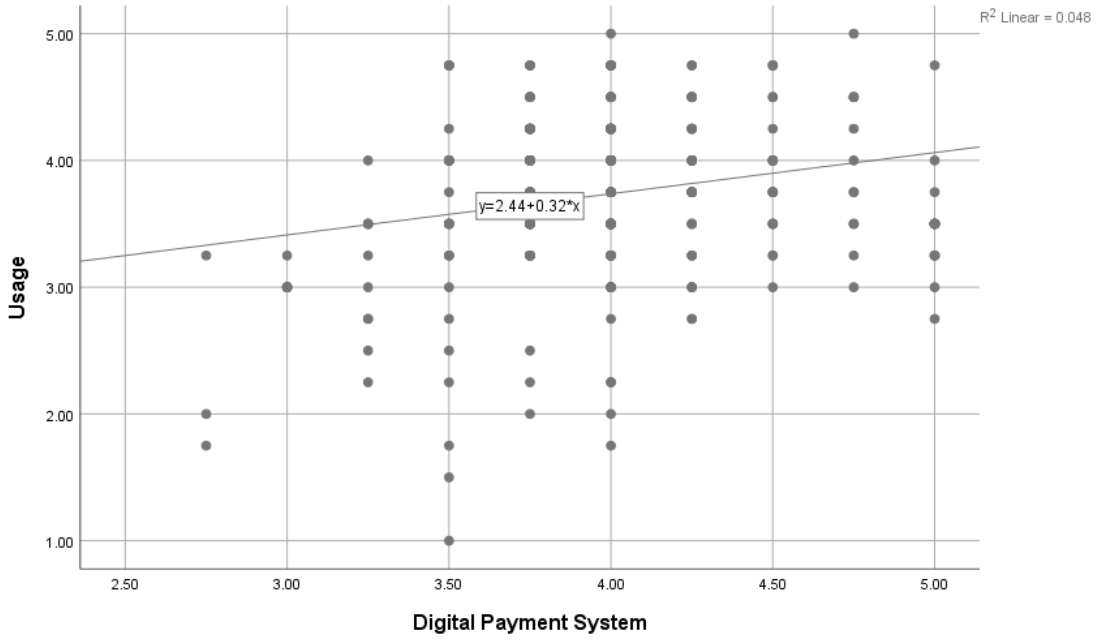


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between security and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Security has a statistically significant linear relationship.
- In this case r= 0.414 and $p < 0.05$.
- The direction of the relationship is positive that means the intention to use digital payment system and security or trust are positively correlated.
- It means that if there is more security to use digital payment system then consumer will use digital payment modes.
- The magnitude of strength, of the association is approximately moderate as(. $3< r <.5$)

Figure 4.12. Relationship between Usage or digital literacy and intention to use digital payment system

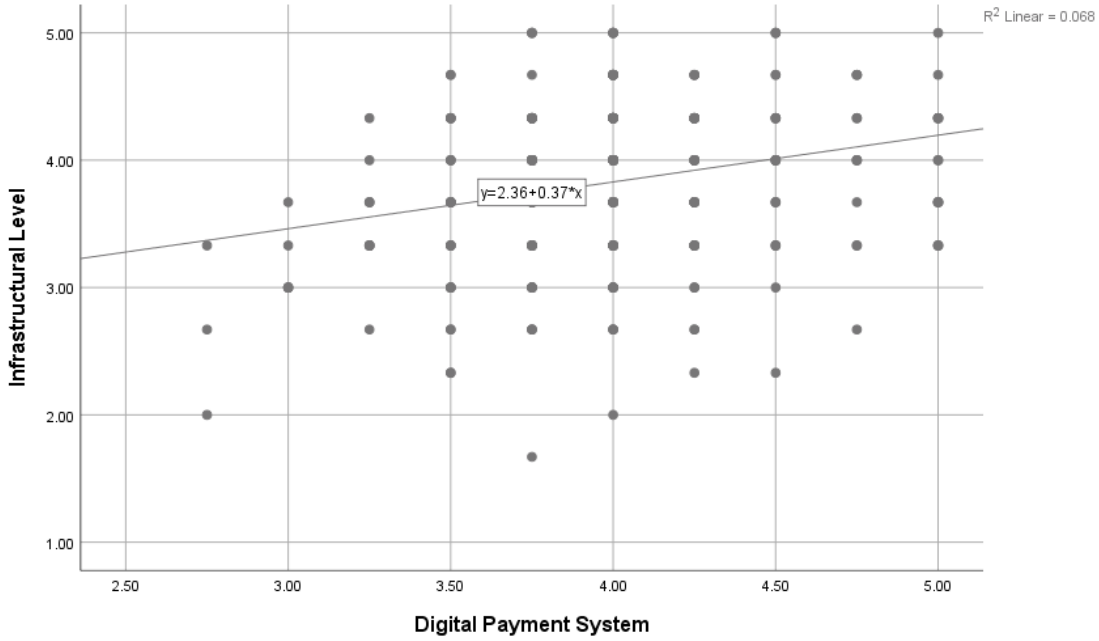


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables In this case the linear line is upward trending. So we can say that there is positive relationship between usage and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Usage has a statistically significant linear relationship.
- In this case r= 0.219 and $p < 0.05$.
- The direction of the relationship is positive but very weak that means the intention to use digital payment system and usage or digital literacy are positively but slowly correlated.
- It means that in urban area consumers are not much serious about the digital literacy.
- The magnitude of strength, of the association is approximately weak ($r < .3$)

Figure 4.13. Relationship between infrastructural level and intention to use digital payment system

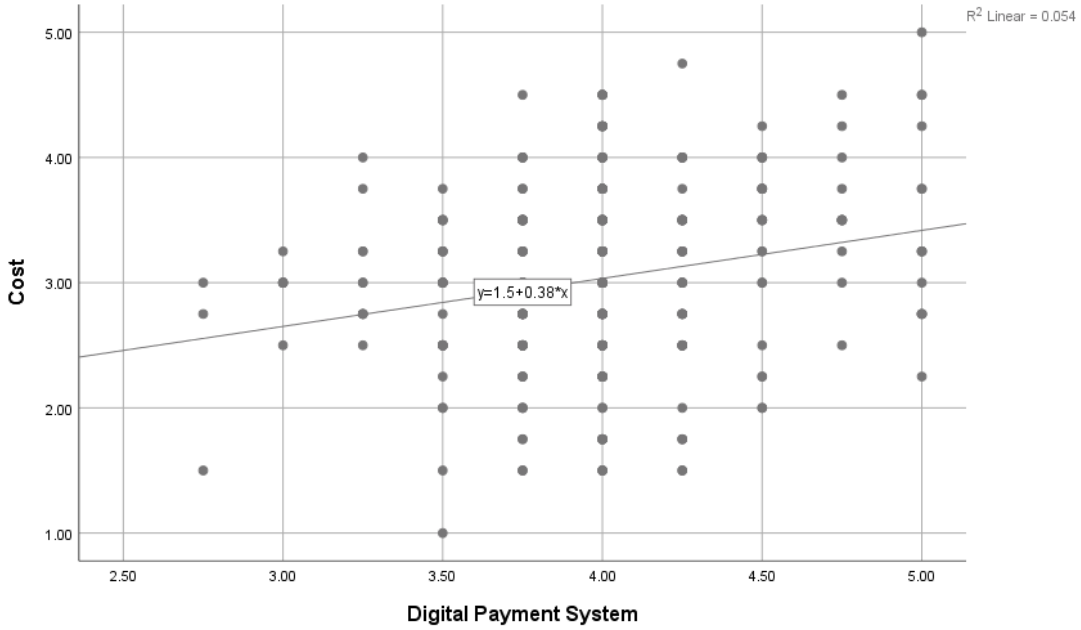


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between infrastructural level and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Infrastructural level has a statistically significant linear relationship.
- In this case r= 0.261 and $p < 0.05$.
- The direction of the relationship is positive that means the intention to use digital payment system and infrastructural facilities are positively correlated but it is very weak.
- It means that consumers of urban area have not much concern for the infrastructure facilities because these facilities are already there.
- The magnitude of strength, of the association is approximately weak (r <.3)

Figure 4.14. Relationship between cost and intention to use digital payment system

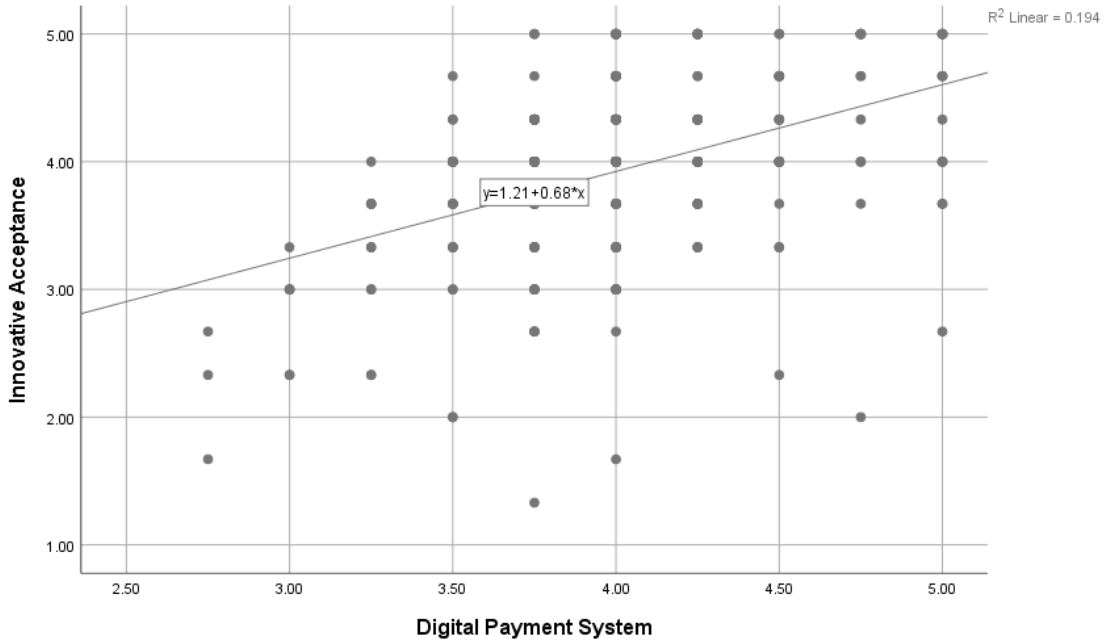


Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between cost and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Cost has a statistically significant linear relationship.
- In this case r= 0.233 and $p < 0.05$.
- The direction of the relationship is positive that means the intention to use digital payment system and cost are positively correlated but the relationship is weak.
- It means that if there is less cost to use digital payment system then the usage of digital payment modes will be increased.
- The magnitude of strength, of the association is approximately weak ($r<0.3$)

Figure 4.15. Relationship between Innovation Acceptance and intention to use digital payment system



Before running the Pearson correlation formula first we have to formulate with the help of scatter plot the linear relationship of variables. In this case the linear line is upward trending. So we can say that there is positive relationship between innovation acceptance and intention to use digital payment system.

Now after finding the linear relationship, the Pearson correlation applied, to find out the relationship between two variables. The result of the analysis is:

- Intention to use digital payment system and attributes of digital payment system that is Innovation acceptance has a statistically significant linear relationship.
- In this case r= 0.440 and $p < 0.05$.
- The direction of the relationship is positive that means the intention to use digital payment system and Innovation acceptance are positively correlated.
- It means that consumers may or may not be able to use new technologies to use digital payment system.
- The magnitude of strength, of the association is approximately moderate as(. 3< r <.5)

- So after calculating all the above relationship, conclusion is that there is relationship between attributes of digital payment systems and intention to use digital payment systems. In this the alternate hypothesis will be accepted.

- **Alternate Hypothesis: the population correlation is not zero; means there is relationship between adoption of digital payment system and attributes of digital payment system in urban area after demonetisation.**
- **H1; p≠0 (population correlation is greater than zero or positive correlation or population correlation less than 0 or weak correlation)**
- In this study the population correlation is greater than zero in all the cases. So the alternate hypothesis will be accepted in urban area.

4.15.<u>The third objective of the study is</u>

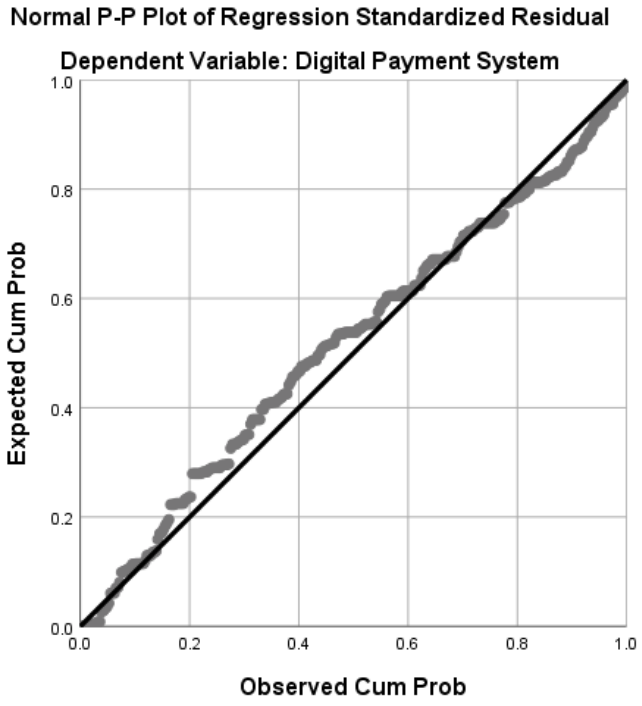
- **To identify how Digital Literacy influence the intention of customers of rural and urban area to use digital payment system after demonetisation.**

To analyse this objective we use regression analysis. Regression analysis use to predict the value of predicted variable with the help of independent variable. Here, for digital literacy usage use as independent variable and usage will be taken as dependent variable. The analysis is as under:

4.15.1. First we will check the data of rural and its assumptions for the regression analysis.

- Assumption 1: The very first assumption states that the two variables should be measured in continuous level. It means the data should be in interval or ratio. In this study the data is in ratio or interval in nature. So first assumption of regression analysis has been met. Now we can move towards second assumption.
- Assumption 2: Second assumption explains about the linear relationship of variables. The linearity of variables can be checked with the help of scatterplot in SPSS. This assumption has been met. As we can see a diagonal line with a bunch of small circles. The data is normal in this case. The normal P-P plot which shows the linearity of data is as follows:

Figure 4.16 Normal P-P plot



- Assumption 3: No significant Outliers:

  No significant outliers in the data. As we can see from the P-P plot that al values lying on the diagonal line. No point is lying below or above the plot. An outlier can be defined as "*an observed data point that has a dependent variable value that is very different to the value predicted by the regression equation*." If there is outlier then there can be the negative effect on the regression analysis. In this study no point is far away the linear line. We can say that there is no outlier in this study and we can move further in this analysis.

- Assumption 4: Independence of observations:

  The independence of observation can be check with the help of Durbin-Watson method. This method is used to check the auto correlation in the residuals. The rule of thumb is in the range of 1.5-2.5, which consider as normal. If the value lies between this range then we can say that there is no auto correlation in the residual. The value of this test is as under:

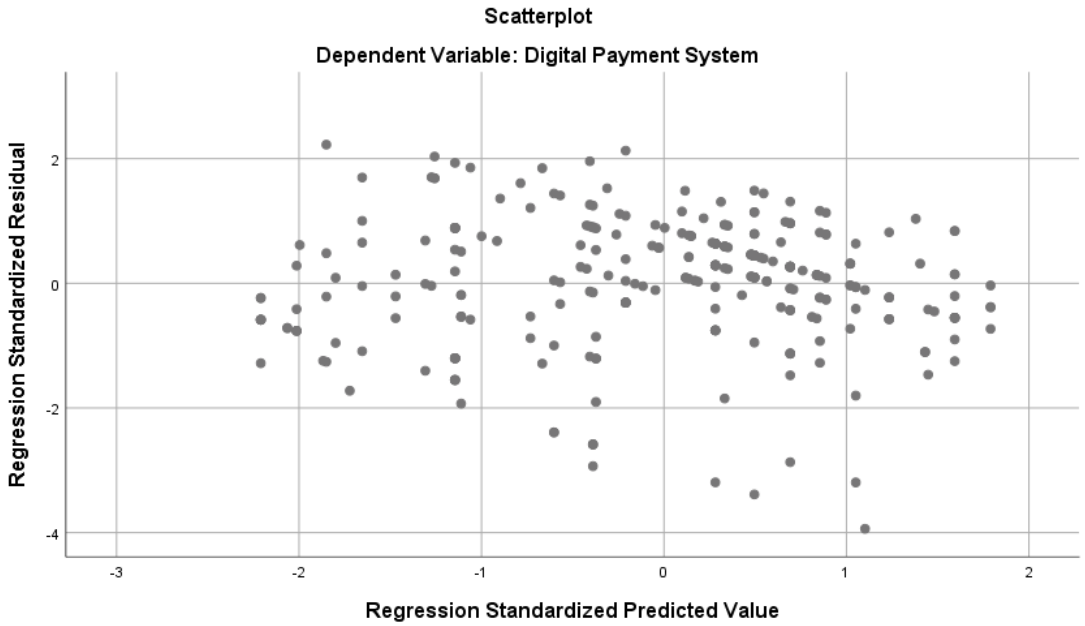
Sig.F change	Durbin-Watson
0.000	2.048

As the value lies between the range, so this assumption is also met.

- Assumption 5: Homoscedasticity:

It means that the variances should move along with the line. There should not be any pattern. The plot looks like the shots out of a gun at different places. The points are equally distributed in X and Y axis. In the figure given below we can see that there is no specific pattern of dots. This assumption has also been met.

Figure 4.17. .Homoscedasticity



4.44. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.460	.142		10.264	.000		
	UQ1	.139	.060	.165	2.324	.021	.365	2.741
	UQ2	.481	.060	.575	8.056	.000	.363	2.756
	UQ3	-.128	.057	-.166	-2.253	.025	.342	2.927
	UQ4	.095	.065	.117	1.448	.149	.281	3.564

a. Dependent Variable: Digital Payment System

- Assumption 6: Multi collinearity:

  There should be absence of multi-collinearity in the data. To check this VIF values taken into consideration. The VIF values should be below 10, which indicate that the assumption has been met. The above table shows that all the values are below 10. So again this assumption has been met.

  As all the assumptions have been met, in this case we can go further with the analysis and interpretation part of regression analysis.

The third objective of the study is

- **To identify how Digital Literacy influence the intention of customers of rural and urban area to use digital payment system after demonetisation.**
- **To analyse this objective first rural area will be analyzed, then urban area**
- **The null and alternate hypothesis for the rural area is as under:-**
  - **Null Hypothesis Ho1: there is no influence of digital literacy on the intention of rural customers to use digital payment system, after demonetisation.**
  - **Alternate Hypothesis Ha1: there is influence of digital literacy on the intention of rural customers to use digital payment system, after demonetisation.**

4.45. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.674[a]	.455	.448	.71780	2.048

a. Predictors: (Constant), UQ4, UQ2, UQ1, UQ3

b. Dependent Variable: Digital Payment System

- The first table which explained in this analysis is model summary. The table shows the value of R and R^2. The R value represents correlation and R^2 represent how much variation of dependent variable can be explained by the independent variable. In this study the dependent variable is adoption of digital payment system while the independent variables are the five attributes of digital payment system.
- The R value represents the correlation between dependent and independent variables. If the R value is more than 0.4 than we can move further and it is considered as good value for further analysis. In this study the value of R digital literacy is more than 0.4, which is good.
- R square state the variation in dependent variable which explained by the independent variable. Value equal to 0.5 showed that the model is fit to determine the relationship. In this case value is equal to 0.5, which considered as good and fit model. R square in this study depicts that adoption of digital payment system variation has been explained by digital payment attributes

- Adjusted R-square depicts the generalization of the results. The value in this case should be close to the R square. In this study all values are close to R square, so it is good fit model.
- Therefore the model summary table is good and satisfactory to proceed to the b=next step.

4.46. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.867	4	31.717	61.557	.000[b]
	Residual	151.996	295	.515		
	Total	278.862	299			

a. Dependent Variable: Digital Payment System

b. Predictors: (Constant), UQ4, UQ2, UQ1, UQ3

This table depicts that whether the model is significant to determine the outcome. In other words whether the model has predicts the dependent variable in a significant manner. To know this we have to see two values in this table. These are:

- **P-value:** The p value is generally seen at 95% of confidence interval or 5% level of significance. If the P value < the level of significance than null hypothesis will be rejected and result should be considered as significant. In this case the P value in all cases < 0.05, so we can say that the result is significant and we reject the null hypothesis. The alternate hypothesis accepted which denotes as there is effect of digital payment attributes in the adoption of digital payment system in rural area after demonetisation. The regression model is significant enough to predict the outcome variable.
- **F-ratio:** F-ratio help in improvement in the prediction of variable, if there is any inaccuracy in the model. The value of F should be greater than 1. In our study the value of F is 61.557, so we can say that the model is good for the study.

The third table in regression analysis is coefficients

4.47. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.460	.142		10.264	.000		
	UQ1	.139	.060	.165	2.324	.021	.365	2.741
	UQ2	.481	.060	.575	8.056	.000	.363	2.756
	UQ3	-.128	.057	-.166	-2.253	.025	.342	2.927
	UQ4	.095	.065	.117	1.448	.149	.281	3.564

a. Dependent Variable: Digital Payment System

As the value of question no 3 and 4 is not significant so in this case stepwise method of regression will be used. This method will remove the variable which has low reliability of information. Stepwise method resolves the problem faced in enter method. SPSS inspect that which one predictor really contribute to predict the dependent variable and excludes the one who don't. So in this case we end up with the fewer predictors than we initially specifies. The result of step wise regression in case of rural area is as under

4.48. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.656	.430	.428	.73046	.430	224.634	1	298	.0001**
2	0.667	.445	.441	.72189	.015	8.119	1	297	.005**

The first table which explained in this analysis is model summary. The table shows the value of R and R^2. The R value represents correlation and R^2 represent the variation of dependent variable explained by the independent variable. In this study the dependent variable is adoption of digital payment system while the independent variable is the digital literacy of digital payment system.

- The R value represents dependent and independent variables correlation. If the R value is more than 0.4 than we can move further and it is considered as good value for further analysis. In this study the value of R in two questions is more than 0.4, which is good. The value for question 1 is 0.656 and for question 2 is 0.667.

- R square depicts the variation in dependent variable explained by the independent variable. R square in this study depicts that adoption of digital payment system variation has been explained by digital literacy. In this case the highest one is 44.1%.
- Adjusted R-square depicts the generalization of the results. The value in this case should be close to the R square. In this study all values are close to R square, so it is good fit model.
- Therefore the model summary table is good and satisfactory to proceed to the next step.

4.49. ANOVA Table

ANOVA						
Model		Sum of Squares	df	Mean Square	F-value	p-value
1	Regression	119.858	1	119.858	224.634	.0001**
	Residual	159.004	298	.534		
	Total	278.862	299			
2	Regression	124.089	2	62.045	119.060	.0001**
	Residual	154.773	297	.521		
	Total	278.862	299			

- This table depicts that whether the model is significant to determine the outcome. In other words whether the model has predicts the dependent variable in a significant manner. To know this we have to see two values in this table. These are:
- **P-value:** The p value is generally seen at 95% of confidence interval or 5% level of significance. If the P value < the level of significance than null hypothesis will be rejected and result considered as significant. In this case the P value in all the terms is less than 0.05, so we can say that the result is significant and we reject the null hypothesis. The alternate hypothesis which denotes as there is effect of digital literacy in the adoption of digital payment system in rural area after demonetisation accepted. The regression model is significant enough to predict the outcome variable.
- **F-ratio:** F-ratio help in improvement in the prediction of variable, if there is any inaccuracy in the model. The value of F should be greater than 1. In our study the value of F lies between 110-230, so we can say that the model is good for the study.

The third table in regression analysis is coefficients

Table 4.50 Coefficients

Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	p-value	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.499	.043		81.008	.0001**	3.414	3.584		
	UQ2	.581	.039	.656	14.988	.0001**	.505	.658	1.000	1.000
2	(Constant)	3.512	.043		81.793	.0001**	3.428	3.597		
	UQ2	.473	.054	.533	8.757	.0001**	.367	.579	.504	1.985
	UQ1	.153	.054	.174	2.849	.005**	.047	.258	.504	1.985

The coefficient table predicts the dependent variable with the help of an equation. It shows the strength of relationship or the significance of variables in the model and the impact on the dependent variable. The value of p in all the cases < 0.05. Reject the null hypothesis. The relationship between independent and dependent variable is positive which means that independent variables have a significant positive impact on the dependent variable.

The regression equation in each case as:

The regression equation will be

$$Y= bx+a$$

For this data y is the adoption of digital payment system and x is the digital literacy, the regression equations in all the cases are as follows:

- The regression equation of UQ1 and adoption of digital payment system is
  - **Adoption of digital payment system= 0.473(UQ1) + (3.512)**
- The regression equation of UQ2 and adoption of digital payment system is
  - **Adoption of digital payment system= 0.153(UQ2) + (3.512)**

This is the analysis of rural area with the help of regression. Now the analysis will be done on urban area with the help of regression.

The result of step wise regression in case of urban area is as under

4.51. Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.479	.229	.226	.38504	.229	88.553	1	298	.0001**
2	0.56	.314	.309	.36394	.084	36.540	1	297	.0001**
3	0.608	.370	.363	.34936	.056	26.313	1	296	.0001**

In urban area while applying enter method, question no 3 comes as low reliability or which can't help in predicting the dependent variable.

The first table which explained in this analysis is model summary. The table shows the value of R and R^2. The R value represents correlation and R^2 represent how much variation of dependent variable explained by the independent variable. In this study the dependent variable is adoption of digital payment system while the independent variable is the digital literacy of digital payment system.

- The R value represents the correlation between dependent and independent variables. If the R value is more than 0.4 than we can move further and it is considered as good value for further analysis. The R value in two questions is more than 0.4, which is good. The value for question 1 is 0.479, for question 2 is 0.56 and for question no 4 is 0.608.
- R square state the variation in dependent variable that explained by the independent variable. R square in this study depicts that adoption of digital payment system variation has been explained by digital literacy. In this case the highest one is 37%.
- Adjusted R-square depicts the generalization of the results. The value in this case should be close to the R square. In this study all values are close to R square, so it is good fit model.
- Therefore the model summary table is good and satisfactory to proceed to the next step.

ANOVA Table

4.52. ANOVA					
Model	Sum of	df	Mean	F-value	p-value

		Squares		Square		
1	Regression	13.128	1	13.128	88.553	.0001**
	Residual	44.179	298	.148		
	Total	57.307	299			
2	Regression	17.968	2	8.984	67.827	.0001**
	Residual	39.339	297	.132		
	Total	57.307	299			
3	Regression	21.180	3	7.060	57.842	.0001**
	Residual	36.128	296	.122		
	Total	57.307	299			

- This table depicts that whether the model is significant to determine the outcome. In other words whether the model has predicts the dependent variable in a significant manner. To know this we have to see two values in this table. These are:
- **P-value:** The p value is generally seen at 95% of confidence interval or 5% level of significance. If the P value < the level of significance than null hypothesis will be rejected and result should be considered as significant. In this case the P value in all the terms is less than 0.05, so we can say that the result is significant. Reject the null hypothesis. The alternate hypothesis which denotes as there is effect of digital literacy in the adoption of digital payment system in urban area after demonetisation accepted. The regression model is significant enough to predict the outcome variable.
- **F-ratio:** F-ratio help in improvement in the prediction of variable, if there is any inaccuracy in the model. The value of F should be greater than 1. In our study the value of F lies between55-90, so we can say that the model is good for the study.

The third table in regression analysis is coefficients

4.53. Coefficients									
Model	Unstandardized Coefficients		Standardized Coefficients	t-value	p-value	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF

1	(Constant)	3.930	.023		168.532	.0001**	3.884	3.976		
	UQ1	.257	.027	.479	9.410	.0001**	.203	.310	1.000	1.000
2	(Constant)	3.919	.022		177.293	.0001**	3.876	3.963		
	UQ1	.290	.026	.540	10.991	.0001**	.238	.341	.957	1.045
	UQ4	-.126	.021	-.297	-6.045	.0001**	-.166	-.085	.957	1.045
3	(Constant)	3.904	.021		182.175	.0001**	3.862	3.946		
	UQ1	.217	.029	.405	7.511	.0001**	.160	.274	.731	1.368
	UQ4	-.114	.020	-.269	-5.664	.0001**	-.153	-.074	.944	1.059
	UQ2	.142	.028	.271	5.130	.0001**	.087	.196	.764	1.310

The coefficient table predicts the dependent variable with the help of an equation. It shows the strength of relationship or the significance of variables in the model and the impact on the dependent variable. As the value of p in all the cases < 0.05. Reject the null hypothesis. The relationship between independent and dependent variable is positive which means that independent variables have a significant positive impact on the dependent variable.

The regression equation in each case as:

The regression equation will be

Y= bx+a

For this data y is the adoption of digital payment system and x is the digital literacy, the regression equations in all the cases are as follows:

- The regression equation of UQ1 and adoption of digital payment system is
  - **Adoption of digital payment system= 0.217(UQ1) + (3.904)**

- The regression equation of UQ2 and adoption of digital payment system is
    - **Adoption of digital payment system= 0.142(UQ2) + (3.904)**
- The regression equation of UQ4 and adoption of digital payment system is
    - **Adoption of digital payment system= -0.114(UQ4) + (3.904)**

After doing this analysis, the conclusion is that in this case the null hypothesis will be rejected and alternate hypothesis accepted. This means that digital literacy have influence on the adoption of digital payment system in both areas rural and urban. But in urban area the effect of this variable is less as compared to rural area.

We can say that in urban area the correlation between digital literacy and adoption of digital payment system is less. The influence is also very less in urban area as compared to rural area.

4.16.Comparison of Rural and Urban area

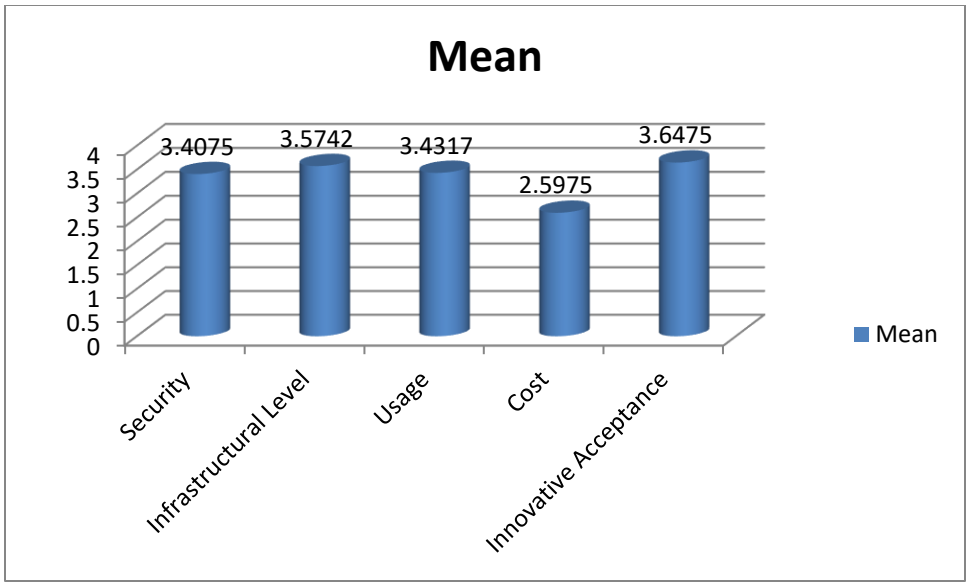
Now after considering all the three objectives of this study, the comparison between rural and urban area should be done with the help of mean of both the area. The mean value indicate that which area has more intention to use digital payment system. The more mean value, the more will be the intention to use digital payment system.

Firstly, the mean value of both areas will be calculated with the help of SPSS. The mean value of rural area is as under:

4.54. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Security/ Trust	300	1.50	5.00	3.4075	.93474
Infrastructural Level	300	1.00	5.00	3.5742	.99519
Usage	300	1.00	5.00	3.4317	1.06023
Cost	300	1.00	5.00	2.5975	.86595
Innovative Acceptance	300	1.67	5.00	3.6475	.73575
Digital Payment System	300	1.00	5.00	3.3592	.96574
Valid N (list wise)	300				

Figure no 4.18



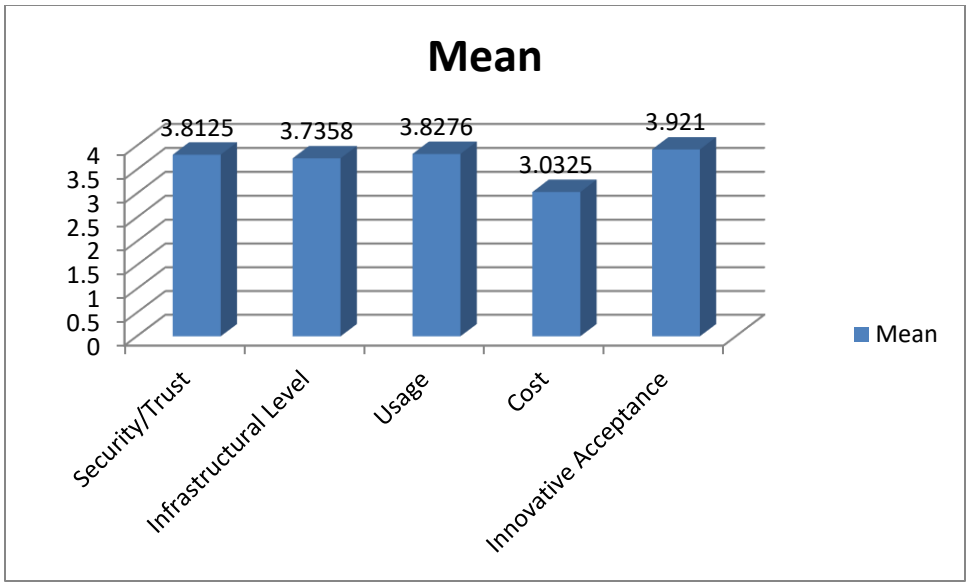
The mean value of five attributes has been between the range of 2.5 to 3.6. The maximum mean is 3.64 and the minimum mean is 2.59. The lowest mean value is in the case of cost.

The mean value of urban area is as under:

4.55. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Security/ Trust	300	1.50	5.00	3.8125	.77187
Usage	300	1.00	5.00	3.7358	.64916
Infrastructural Level	300	1.67	5.00	3.8276	.61524
Cost	300	1.00	5.00	3.0325	.71941
Innovative Acceptance	300	1.33	5.00	3.9210	.67560
Digital Payment System	300	2.75	5.00	3.9958	.43779
Valid N (list wise)	300				

Figure no 4.19



The mean value of five attributes has been range between3.03 to 3.99. The maximum value of mean is 3.9958 and minimum value of mean is 3.0325. The lowest mean value is in the case of cost.

The mean value of urban area is more than the rural area in all attributes. The mean value of rural area is less than the urban area.

So we can say that the intention to use digital payment methods is more in urban area as compared to rural area

4.17. Interpretation of data in case of preference of using different attributes by the consumers

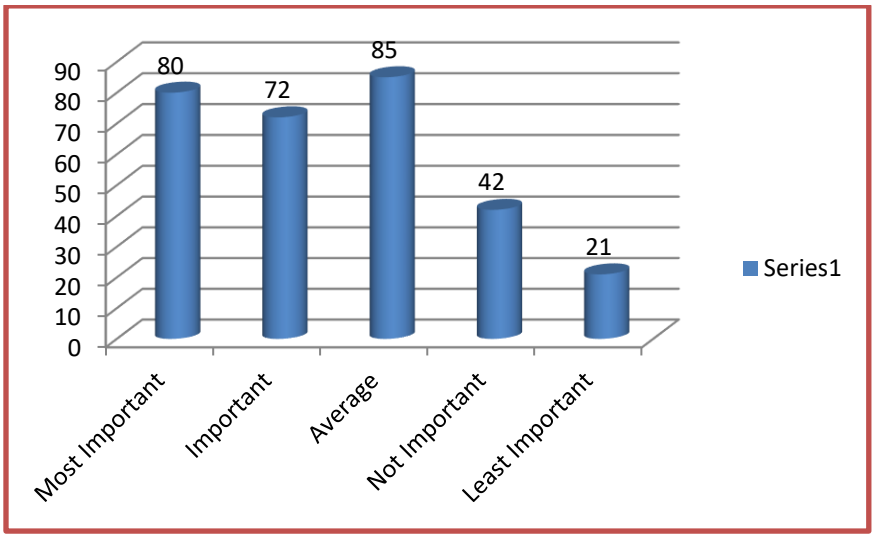
The preference of using different attributes by the consumers has been different. Question has been asked from the consumers in order to get their preference for using digital payment system. What is most important for them and what is less important. This analysis has been done to interpret the results more clearly. From this we come to know that for customers what is most important and which one is not. The analysis has been done with the help of table and bar diagram. It shows the frequency of using digital payment system preference wise. In this question we ask respondents to compare the list of items and arrange them in order of preference. The preference has been given in the form of most important, important, average, less important and least important.

The first interpretation has been given for the urban area. The first one is for security. The table and bar diagram is as follows:

Table 4.56 Preference for Security

		Frequency	Percent
Valid	Most important	80	26.7
	Important	72	24.0
	Average	85	28.3
	Not Important	42	14.0
	Least Important	21	7.0
	Total	300	100.0

Figure 4.20.



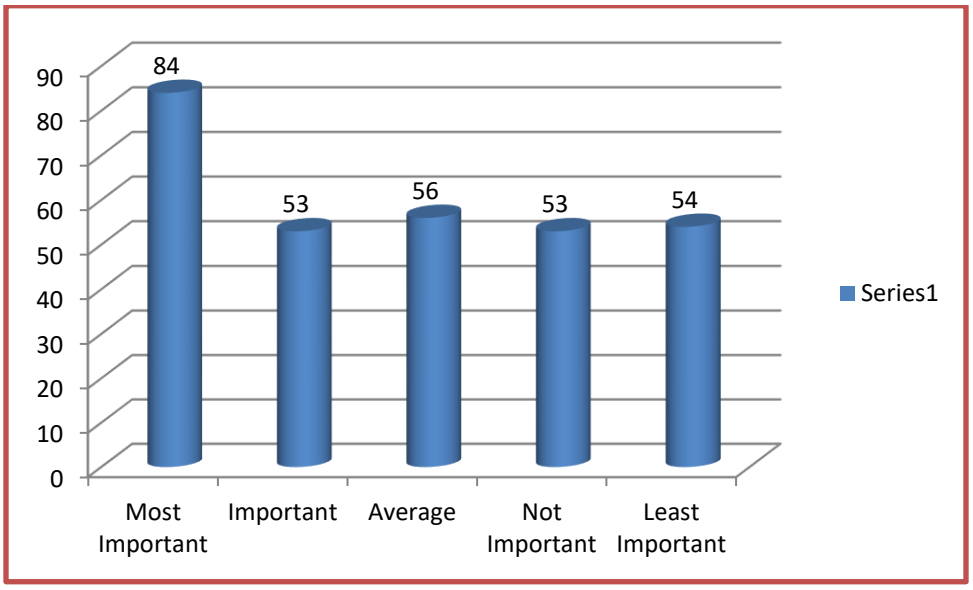
In the urban area security comes at important level for customers. As 80 customers preferred security as most important, 72 as important, 85 as average, 42 as not important and just 21 as least important. It shows that security for using digital payment system comes in the mind of customers whenever they make digital payments. Next one is usage or digital literacy of using digital payment systems in urban area. The data and bar diagram is as under:

4.57 Preference for Usage

		Frequency	Percent
Valid	Most important	84	28.0
	Important	53	17.7
	Average	56	18.7
	Not Important	53	17.7
	Least Important	54	18.0
	Total	300	100.0

4.57. **Usage**

Figure 4.21.

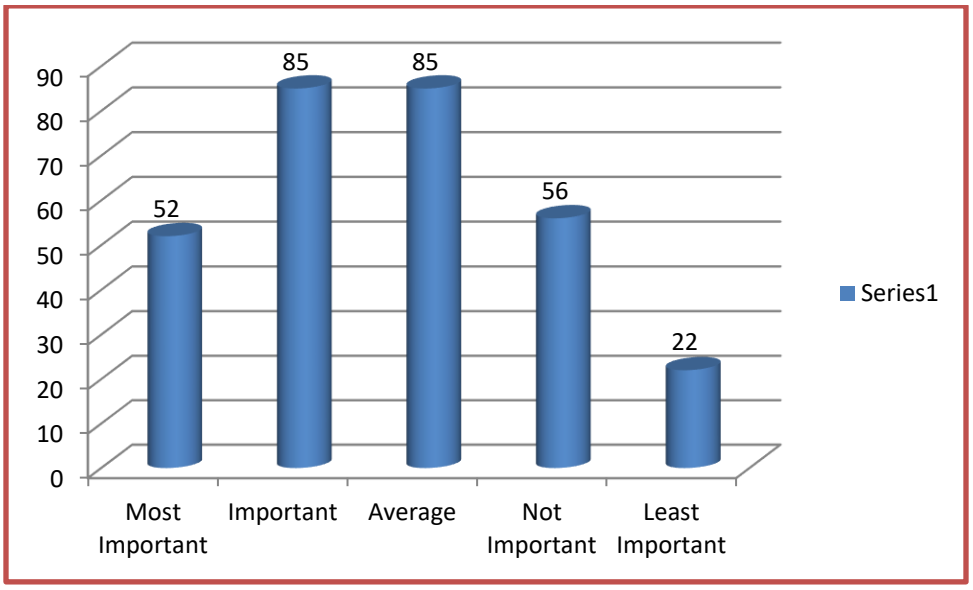


From the above data, it is clear that customers consider digital literacy as most important because it comes at 84 while for other preferences it comes near to 55. That means some customers thin it as important while other half not. It is a mix data related to using digital payment system in case of digital literacy. The next one is infrastructural level or infrastructure facilities. The data and the bar diagram is as under:

4.58. **Preference for Infrastructure Level**

		Frequency	Percent
Valid	Most important	52	17.3
	Important	85	28.3
	Average	85	28.3
	Not Important	56	18.7
	Least Important	22	7.3
	Total	300	100.0

Figure 4.22.

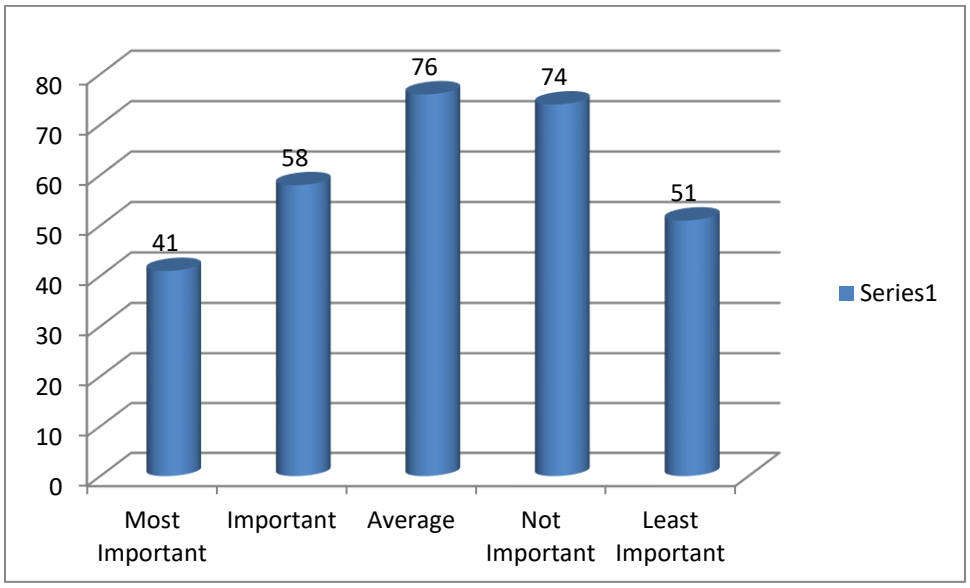


From the above data it is clear that infrastructural level is important for customers in urban area. It is not highly important as average data is also increasing in this case. This means that customers consider it as useful for using digital payment modes. If infrastructure is available then customers can use this. The next one is cost. The data and bar diagram for cost in urban area is as under:

Table no 4.59. Preference for Cost

		Frequency	Percent
Valid	Most important	41	13.7
	Important	58	19.3
	Average	76	25.3
	Not Important	74	24.7
	Least Important	51	17.0
	Total	300	100.0

Figure 4.23

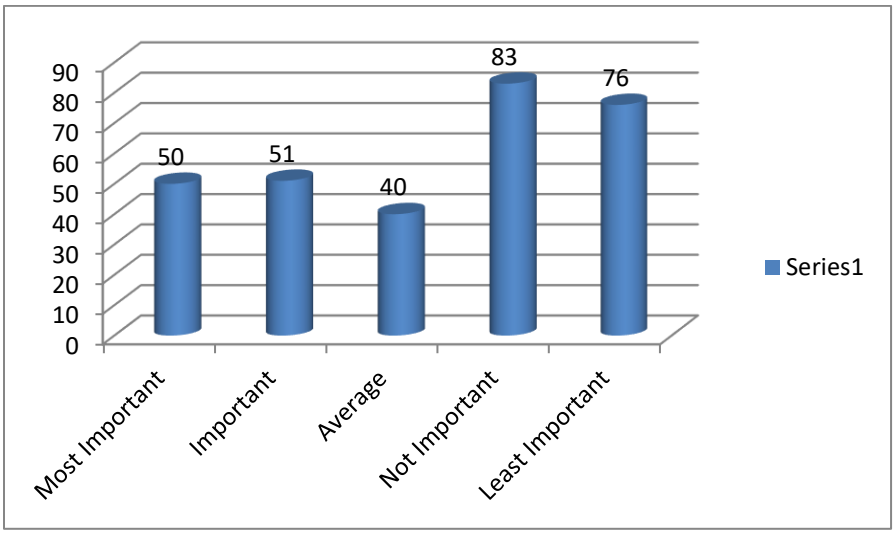


From the figure above it is clear that cost is not much important in urban area. The maximum data has been related with average. This means that the customers may or may not be considered cost important while using digital payment systems. The next attribute is innovation acceptance. The data and bar diagram is as under:

Table no 4.60. **Preference for Innovation Acceptance**

		Frequency	Percent
Valid	Most important	50	16.7
	Important	51	17.0
	Average	40	13.3
	Not Important	83	27.7
	Least Important	76	25.3
	Total	300	100.0

Figure no 4.24.



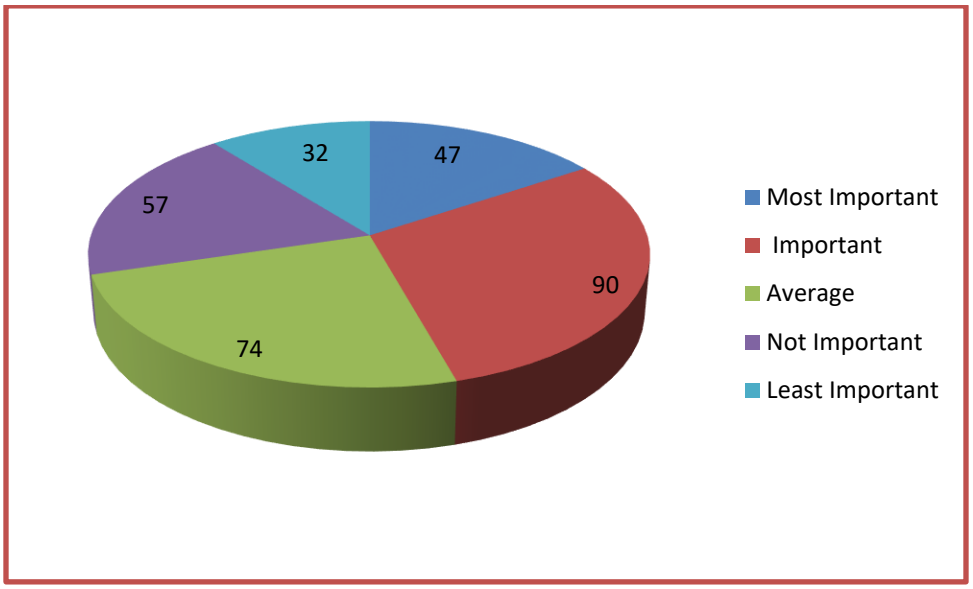
It is clear from the above figure that in urban area customers found it is not important to learn about the new technologies. Some customers have been agreed to learn new technologies but most of the customers not. So this is the analysis and interpretation of customers of urban area that how much preference they gave to different attributes of using digital payment systems. Now we will discuss about the rural area customers and their preference of using digital payment systems keeping in mind the attributes.

The first attribute which has to be discussing here is security. The data and pie chart of security in rural area is as under:

Table no 4.61. Preference for Security

		Frequency	Percent
Valid	Most important	47	15.7
	Important	90	30.0
	Average	74	24.7
	Not Important	57	19.0
	Least Important	32	10.7
	Total	300	100.0

Figure no 4.25.



From the picture above it is clear that security is one of the main attribute in rural area. It shows that if security increases then the usage of digital payment systems also increased at high rate. Because customers wants that their money and their personal information should be remain secure and not hacked by other person. The next attribute is usage. The data and bar diagram is as under:

Figure no 4.26.

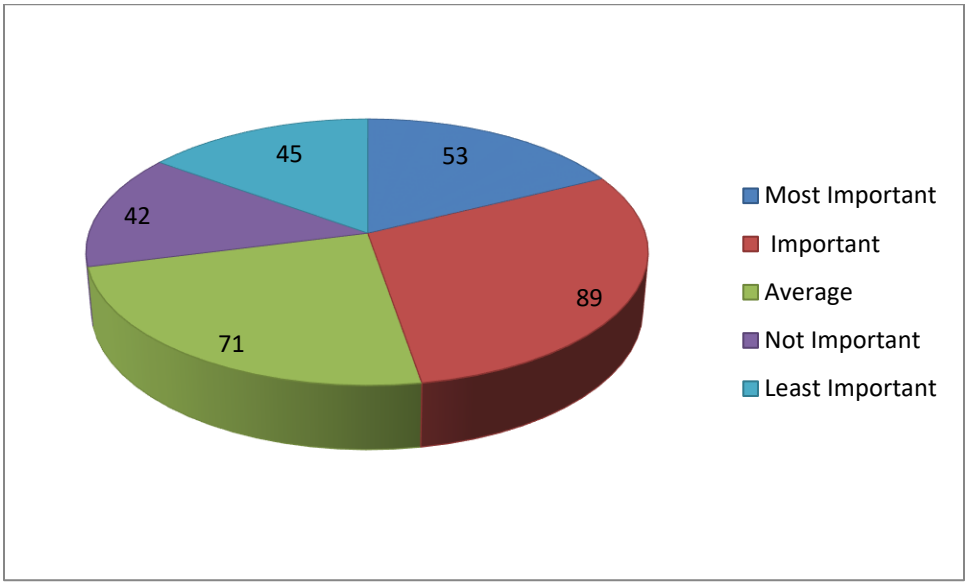


Table no 4.62. Preference for Usage

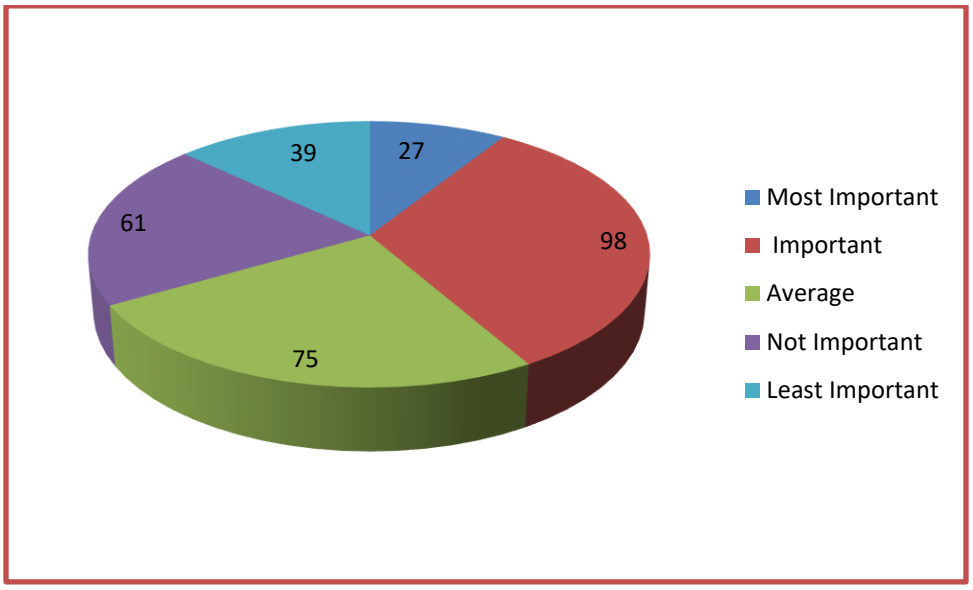
		Frequency	Percent
Valid	Most important	53	17.7
	Important	89	29.7
	Average	71	23.7
	Not Important	42	14.0
	Least Important	45	15.0
	Total	300	100.0

It is clear from the table above that usage again come as important attribute in rural area. As maximum preference has been given to important item in this case. So we can say that in the rural area customers want digital literacy as important term. If they are digitally literate then they can use digital payment systems more and more. The next attribute is infrastructural facilities. The data and figure is as under:

Table no 4.63. Preference for Infrastructure Facilities

		Frequency	Percent
Valid	Most important	27	9.0
	Important	98	32.7
	Average	75	25.0
	Not Important	61	20.3
	Least Important	39	13.0
	Total	300	100.0

Figure no 4.27.

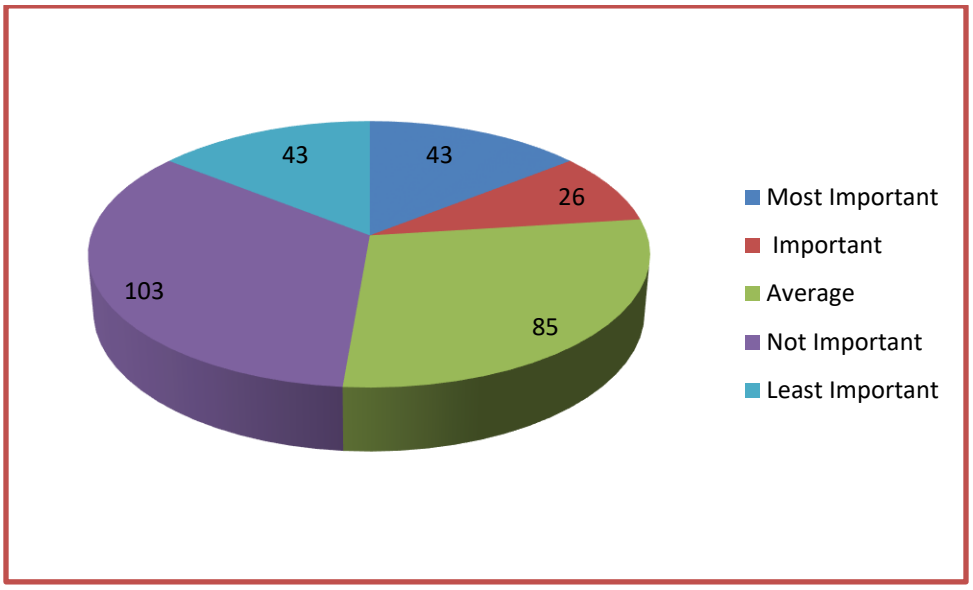


It is clear from the above data that infrastructure facilities also consider as an important attribute in rural area. As majority of customers are in favour of considering it while using digital payment systems. They said that if there are better infrastructure facilities then they can use more and more of digital payment systems. The next attribute is cost. The data and figure is as under:

Table no 4.64. Preference for Cost

		Frequency	Percent
Valid	Most important	43	14.3
	Important	26	8.7
	Average	85	28.3
	Not Important	103	34.3
	Least Important	43	14.3
	Total	300	100.0

Figure no 4.28.

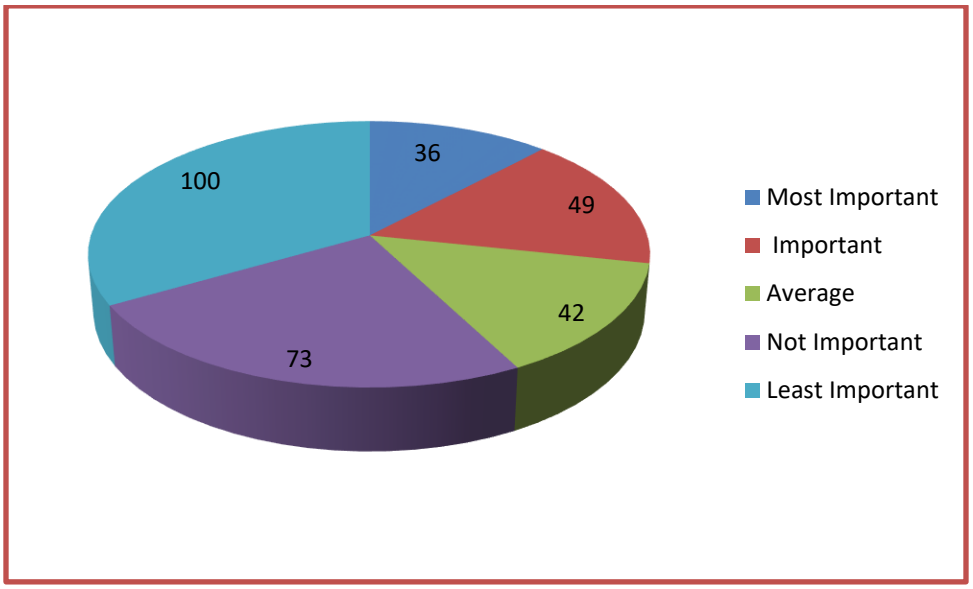


|it is clear from the above data that while using digital payment systems cost has not been consider as one of the main attribute. As majority of people consider it as not much important attribute of using digital payment system. The next attribute is innovation acceptance. The data and figure is as under:

Table no 4.65. Preference for Innovation Acceptance

		Frequency	Percent
Valid	Most important	36	12.0
	Important	49	16.3
	Average	42	14.0
	Not Important	73	24.3
	Least Important	100	33.3
	Total	300	100.0

Figure no 4.29.



As the data given above we can say that people in rural area has not much concerned for the new technologies. They thought that the basic knowledge is much important. Because if they have the basic knowledge of using digital payment systems even then they can use new innovations in digital world.

All above is the interpretation of attributes which kept in mind while using digital payment systems in urban and rural areas.

4.18. Chi Square Test

Now to check the dependency of independent variable on dependent variable, chi square test has been used. This test has been applied on preference questions. It has been applied on rural and urban area separately. The independent variables are attributes and dependent variable is intention to use digital payment system. a chi square test is the hypothetical test method. The chi square test of independence has been used in this case in order to find out the dependency of dependent and independent variables. In this we decide that whether two variables are related to each other or not. So in order to get the answer of this question, firstly null and alternate hypothesis should be framed.

Ho: The dependent and independent variables are independent or **there is no relation between independent and dependent variable in urban area.**

Ha: The dependent and independent variables are dependent on each other or **there is relation between independent and dependent variable in urban area.**

The value of alpha in this case is set at 0.05. So if the value of $p < 0.05$, then we reject null hypothesis. The analysis of chi square attributes wise, in case of urban area is as follows:

The first attribute is security where security is the independent variable and intention to use digital payment system is the dependent variable. The analysis is:

4.66.Chi-Square Tests (Security)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	108.426[a]	36	.000
Likelihood Ratio	113.585	36	.000
Linear-by-Linear Association	72.468	1	.000
N of Valid Cases	300		

4.67.Chi-Square Tests (Usage)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	119.617[a]	36	)00
Likelihood Ratio	135.015	36	.000
Linear-by-Linear Association	78.760	1	.000
N of Valid Cases	300		

4.68.Chi-Square Tests (Infrastructure Facility)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	171.059[a]	36	.000
Likelihood Ratio	180.035	36	.000
Linear-by-Linear Association	109.009	1	.000
N of Valid Cases	300		

4.69.Chi-Square Tests (Cost)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	153.150[a]	36	.000
Likelihood Ratio	177.556	36	.000
Linear-by-Linear Association	100.782	1	.000
N of Valid Cases	300		

4.70.Chi-Square Tests (innovation Acceptance)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	205.109[a]	36	.000
Likelihood Ratio	226.234	36	.000
Linear-by-Linear Association	138.355	1	.000
N of Valid Cases	300		

In all the above five tables, the P value is < 0.05, which is the rule of thumb to find out the significant difference between the variables. The value of P is less than 0.05 in all the five attributes, so we reject the null hypothesis and accept the alternate hypothesis. In this case we can say that there is relation between the five attributes and intention to use digital payment

systems in urban area. the result is significant- the result showed that the independent variables that is five attributes and dependent variable that is intention to use digital payment system are associated with each other in case of urban area. Now the analysis will be done for rural area.

4.71.Chi-Square Tests (Security)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	419.837[a]	68	.000
Likelihood Ratio	408.404	68	.000
Linear-by-Linear Association	133.732	1	.000
N of Valid Cases	300		

4.72.Chi-Square Tests (Usage)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	322.269[a]	68	.000
Likelihood Ratio	340.660	68	.000
Linear-by-Linear Association	90.952	1	.000
N of Valid Cases	300		

4.73.Chi-Square Tests (infrastructural Facilities)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	363.095[a]	68	.000
Likelihood Ratio	383.507	68	.000
Linear-by-Linear Association	148.992	1	.000
N of Valid Cases	300		

4.74.Chi-Square Tests (Cost)

	Value	df	Asymptotic Significance (2-sided)

Pearson Chi-Square	343.508[a]	68	.000
Likelihood Ratio	320.102	68	.000
Linear-by-Linear Association	134.664	1	.000
N of Valid Cases	300		

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4.75.Chi-Square Tests (Innovation Acceptance)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	503.551[a]	68	.000
Likelihood Ratio	505.876	68	.000
Linear-by-Linear Association	232.750	1	.000
N of Valid Cases	300		

The value of P in the rural case is also less than 0.05. So in this case also we reject the null hypothesis and can say that independent and dependent variables are associated with each other. They are dependent on each other.

CHAPTER 5

CONCLUSION

In this chapter the answers of objectives have been discussed and the result of hypothesis is shown. The detail of this chapter is as follows:

5.1 How the demographic factors affect the intention to use digital payment system?

5.2 Which area has more intention to use digital payment system?

5.3 How the digital payment attributes effect the intention to use digital payment system among the people of rural and urban area?

5.4 How the digital literacy influence the adoption of digital payment system among the people of rural and urban area?

5.5 How the digital payment attributes related with the adoption of digital payment system among the people of rural and urban area?

5.6 test result of hypothesis.

5.1 Demographic factors and adoption of digital payment system

Demographic analysis is the study of population on various factors. (Hayes,2021) In this study the factors are Age, education, Gender, Occupation and Residential status. This analysis is related with the collection of data from the specific population. In this we discussed about the usage or adoption of digital payment systems based on demographic profile of the customers. For analyzing various hypothesis have been framed and test applied with the help of SPSS. By using SPSS, the hypothesis can be rejected or accepted based on the P value in each case. The P value is the level of significance or the rule of thumb. If the P value is < 0.05 then reject the null hypothesis and if it is > 0.05 then accept the null hypothesis. The analysis demographic wise is as follows:

a. **Gender:** In this study gender includes male and female of the economy or the sample which has been used in this study. The P value in this case is 0.097 which is greater than 0.05, which means that the null hypothesis will be selected. To conclude we can say that the gender of a person put no significant difference on the adoption of digital payment system among rural and urban area. That means the person who use online mode can be male or female, it doesn't matter.

b. Age: In this study age comprises three parts. The parts are 18-25, 26-40 and 41-60. The P value in this case is 0.252, which is greater than 0.05 that means the null hypothesis will be accepted and we can say that there is no significant difference between age and adoption of digital payment systems. The person can be from any age group whether from young age or from old age group, can adopt the online payment modes. The age does not put any effect on the adoption of digital payment system.

c. Education: the education of a person in this study includes 10^{th} pass, 12^{th} pass and graduate. The P value in this case is 0.000 which is less than 0.05. So we reject the null hypothesis and conclude that there is no significant difference between education and adoption of digital payment systems. The person from any education level can use the online payment mode, provided that he or she should know how to use it.

d. Occupation: the occupation means the employment level of a person. In this study the occupation kept in the mind are Job, Self-employed and Unemployed. The P value in this case is 0.004 which is less than 0.05. So as per rule the null hypothesis will be rejected. There is no significant difference between the occupation and adoption of digital payment system.

e. Residence: In this study the data was collected from four cities; Jalandhar, Amritsar, Ludhiana and Chandigarh. The P value in this case is 0.000, which indicate that the null hypothesis will be rejected. There is no significant difference between residence and adoption of digital payment systems. The person from any city and from any area rural or urban can use digital payment system.

f. The overall or summary of first discussion i.e. demographic profile and its effect on the adoption of digital payment system is as under:

S

Table 5.1

Demographic feature	P value	Null hypothesis Accepted/rejected
Gender	0.097	Accepted
Age	0.252	Accepted
Education	0.000	Rejected
Occupation	0.004	Rejected
Residence	0.000	Rejected

In nutshell we can say that gender and age does not affect the intention to use digital payment system. Education, Occupation and Residence put impact on the intention to use digital payment systems.

5.2 Rural or urban areas, which one has more intention to use digital payment system

The intention to use digital payment system means the usage of online trading or online payment. The analysis has been done to make comparison between rural and urban area. This comparison has been calculated with the help of means of both the area. The different payment attributes of rural and urban areas has been selected and then means have been calculated with the help of SPSS. The area with higher means has more intention to use digital payment system. In this study the mean of urban area is more than the mean of rural area. That means we can say that the intention to use digital payment system has been more in urban area as compared to rural area. The table shows the means of both the areas:

Table 5.2 Mean of rural and urban area

Attributes	Mean of urban area	Mean of rural area
Security/ Trust	3.8125	3.4075
Usage	3.7358	3.5742
Infrastructure level	3.8276	3.4317
Cost	3.0325	2.5975
Innovative Acceptance	3.9210	3.6475
Digital Payment System	3.9958	3.3592

As we can see from the above table that means in case of all attributes is more in case of urban area, so the intention of people to use digital payment system is also more in this area as compared to rural area.

5.3 Digital payment attributes effect the intention to use digital payment system among the people of rural and urban area

To check the effect of attributes on the adoption of digital payment system among rural and urban area, regression analysis has been used. This analysis applied separately for rural and urban area. First of all the assumptions of using regression analysis has been calculated, in order to check whether we can use regression analysis or not. The assumptions of regression analysis are as follows:

a. The variables should be interval in nature.

b. The linear relationship between the variables. The linearity checked with the help of normal P-P plot by using SPSS.

c. There should be no significant outliers.

d. The observations should be independent in nature. This can be check with the help of Durbin-Watson method

e. There should be homoscedasticity. There is no pattern in the plot.

f. There should be absence of multi-collinearity. This check with the help of VIF values which should be below 10.

So all these assumption has been met in both the cases that is rural and urban area. That means we can run regression analysis.

To check the effect of digital payment attributes the hypothesis has been framed for rural and urban area.

In the rural and urban area the p value is less than 0.05 in all the cases of digital payment attributes. So when the P value is less than 0.05, then null hypothesis rejected and can be said that there is significant difference between two variables. The digital payment attributes put impact on the intention to use digital payment systems among the people of rural area. This analysis has been explained with the help of the table:

Table 5.3 Effect of attributes on adoption of digital payment system

Digital Payment	P value in Urban Area	P value in Rural Area

Attributes		
Infrastructural Level	0.0001	0.0001
Usage	0.0001	0.0001
Innovative Acceptance	0.001	0.0001
Security/Trust	0.002	0.0001
Cost	0.045	0.027

So from the above table it is clear that all the five attributes put impact on the intention of a customer to use digital payment system in rural as well as in urban area.

5.4 Digital literacy influences the adoption of digital payment system among the people of rural and urban area

Digital literacy means having the knowledge that how to use digital payment modes. If a person has knowledge then he can use the digital world. This can also be termed as usage of systems. This objective related with the influence of digital literacy on the adoption of digital payment systems among the customers of rural and urban areas. Regression analysis used in SPSS. Before running the analysis, assumptions have been checked.

a) The variables should be interval in nature.

b) Linear relationship between the variables. The linearity checked with the help of normal P-P plot by using SPSS.

c) There should be no significant outliers.

d) The observations should be independent in nature. This can be check with the help of Durbin-Watson method

e) There should be homoscedasticity. There is no pattern in the plot.

f) There should be absence of multi-collinearity. This check with the help of VIF values which should be below 10.

So all these assumption has been met in both the cases that is rural and urban area. That means we can run regression analysis.

When the assumptions of this analysis met, then regression applied on the selected data and result came. As some values comes in negative form while applying the enter method of regression. So then stepwise method use in this case, which ignore those variables which are not significant for the analysis. In rural area only two variables are left and in urban area three variables are left for the study. It means that in these area those variables are significantly relates

with the usage of digital payment system. The P value in both the areas comes < 0.05, reject the null hypothesis. The digital literacy put significant impact on the adoption of digital payment systems. It means that if a person is digitally literate or having knowledge of systems that how to use these, then he or she can step forward to use the system. The analysis can be showing with the help of

Table no 5.4: Digital literacy influence on adoption of Digital Payment system

Digital literacy	P value in urban area	P value in rural area	Null hypothesis Accepted or rejected
Usage variables	0.0001	0.0001	Rejected

So as we can see from the above table that digital literacy influences the adoption of digital payment systems among the customers of urban and rural areas.

5.5 The digital payment attributes has been related with the adoption of digital payment system among the people of rural and urban area.

After calculation of influence, now we calculate the relationship between digital payment attributes and the adoption of digital payment systems. Exactly how much relationship is there between attributes and adoption in rural and urban areas. This relationship checked with the help of correlation in SPSS. To check this analysis the linear relationship between variables has been checked, so that the analysis can be run. The result of analysis among rural and urban area is as under with the help of a table:

Table 5.5 Urban Area

	Security/Trust	Usage	Infrastructural level	Cost	Innovation Acceptance
Pearson Correlation	0.414	0.219	0.261	0.233	0.440
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Table 5.6 Rural Area

	Security/Trust	Usage	Infrastructural	Cost	Innovation

			level		Acceptance
Pearson Correlation	0.494	0.614	0,728	0.282	0.373
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

From the tables above it is clear that there is relationship between digital payment attributes and adoption of digital payment systems. Some relationship is good while some is moderate and week. In urban area the relationship is positive and moderate. Some cases it is week also. It indicates that in urban area as the facilities are there so people don't take extra care for digital literacy, infrastructural facilities. The infrastructural facilities are available in urban areas so people don't take initiative to introduce much better facilities. The knowledge is also there among the people to how to use digital payment methods, so they don't put extra effort in order to get more knowledge. But in urban area as the people are financially sound and having digital literacy so they put initiative to use new technologies of payment systems. Relationship is good in urban area between the attributes and adoption of digital payment systems.

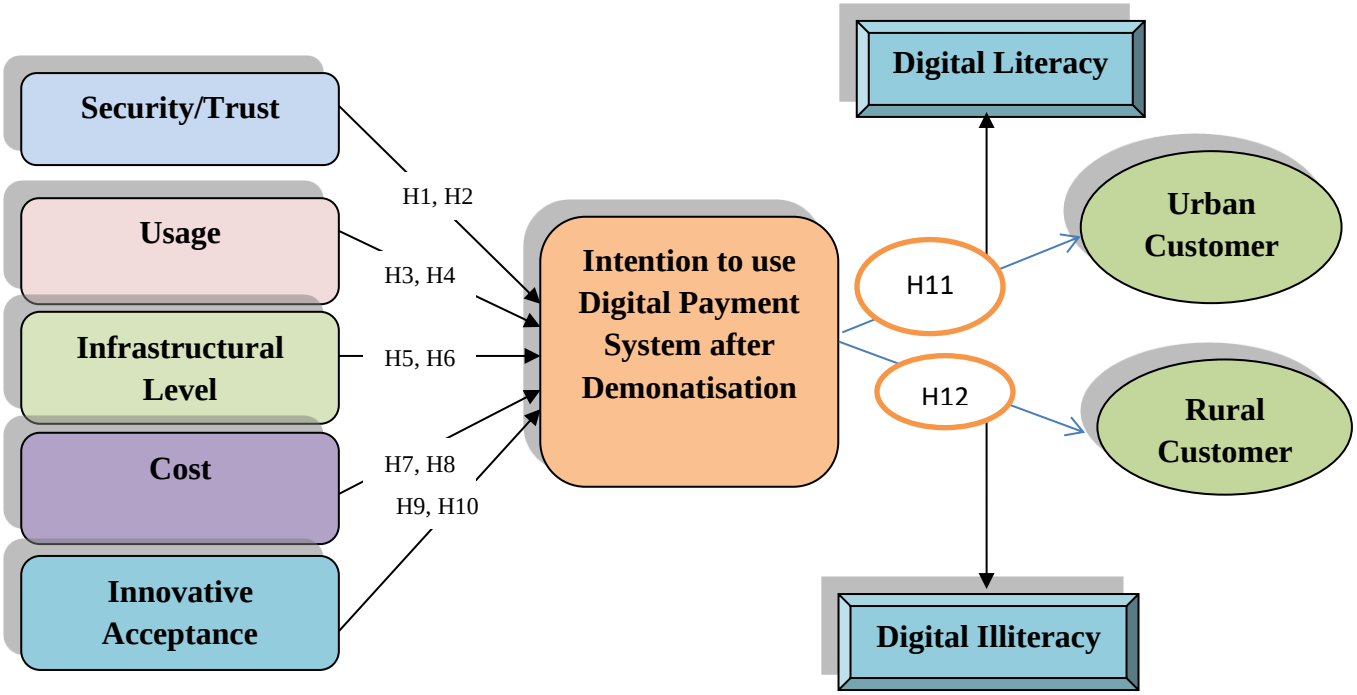
Now if we talk about the relationship between attributes and adoption of digital payment systems in rural area, then it comes as good and strong also. The relationship between usage and infrastructural level is strong. It indicates that in rural area people are keen enough to get the knowledge of usage of digital payment systems. A rural person wants to know how to use different method, so that they can make their life easier. They also want good infrastructure facilities, so that there is no barrier in the usage of digital payment systems. Rural area people are no longer lacking behind in the adoption of digital payment systems. They want these systems as a part of their life. The relationship between cost and adoption is not strong. It is week. People in rural area have not much money to spend on the usage of digital payment systems. They also want more security while using digital payment systems. But when we talk about the new innovations then its adoption is less as compared to urban area. Because people in rural area has been wanted to get the knowledge of existing systems rather than new technologies.

The relationship between different attributes and adoption of digital payment system is strong, week and moderate in rural and urban area. But we can say that relationship is there.

5.6 Test result of Hypothesis

In this study, I framed 10 hypothesis. These 10 hypothesis are related with the conceptual framework framed for this study.

Conceptual Framework



The overall result of hypothesis is as under:

Table 5.7 Overall Summary of Hypothesis Analysis

Hypothesis	Attribute	Residence	Correlation value	P value	Alternate Hypothesis Accepted/ Rejected
H1	Security	Rural	0.494	0.000	Accepted
H2	Security	Urban	0.414	0.000	Accepted
H3	Usage	Rural	0.614	0.000	Accepted
H4	Usage	Urban	0.219	0.000	Accepted
H5	Infrastructure Facilities	Rural	0.728	0.000	Accepted
H6	Infrastructure	Urban	0.261	0.000	Accepted

	Facilities				
H7	Cost	Rural	0.283	0.000	Accepted
H8	Cost	Urban	0.233	0.000	Accepted
H9	Innovation Acceptance	Rural	0.373	0.000	Accepted
H10	Innovation Acceptance	Urban	0.440	0.000	Accepted

The above is the summary of hypothesis analysis in this study. Hypothesis has been framed according to the conceptual framework of the study. All hypothesis has been related with found out the relationship between attributes and intention to use digital payment systems among rural and urban customers. As per the data collected, the analysis used in this case is correlation. The value of correlation analysis is positive in all the cases. However the positive correlation is weak, moderate and strong in separate cases. The hypothesis no H10 and H11 has been analysed with the help of third objective. And all other hypothesis has been calculated separately and also with the help of second objective. The analysis has been discussed in detail in interpretation chapter of the study. As the P value < 0.05 in all cases, so the alternate hypothesis has been accepted. In research language, there is significant relationship between all the attributes and intention to use digital payment system among the customers of rural and urban area.

CHAPTER 6

RESEARCH CONTRIBUTION

The research contribution is both theoretical and practical. Theoretically, this study has created a new model for the adoption of digital payment systems based on literature review. Various studies related to adoption and factors effecting adoption of digital payment system has been gone through in order to understand the various factors in a better way. Thus a conceptual model has been derived in this study. In that model independent and dependent variables has been used.

Now, if we talk about the practical aspect, then this study has spotlighted various factors which influence the adoption of digital payment system in rural and urban area. One factor has strong correlation in rural area and the same factor has moderate correlation in urban area. So, it will help the managers/CEO's/Government to understand these factors in a better way. This study also helps the academicians and the students as it will provide the interest in this study and also guide for some future studies.

6.1.The findings of this study are as follows:-

a. Most of the respondents are of the point of view that there is lack of infrastructural facilities. The infrastructure should be 100% developed in the country, especially in rural area, so the government of India should provide these facilities at a low cost.

b. The cost of using digital payment system should be low, because customers in rural as well as in urban area get frustrated to use online payment modes because of charges charged while using these systems. The digital service providers should maintain online free of cost payment methods, so that customers feel less burdened while using these. Like when we use NEFT, RTGS, IMPS then charges has been charged. So all of these methods should be deleted and payment system remains cost free.

c. While doing study it was found out that the people in rural area wanted to use digital payment system but the digital literacy and infrastructural facilities put a great obstacle in using digital payment system.

d. The five attributes has put impact on the adoption of digital payment system in rural and urban area. However the influence is more in rural area as compared to urban area.

e. The relationship between attributes and digital payment system is high in rural area as compared to the urban area. It shows that in rural area people want to have more digital knowledge and better infrastructure facilities.

f. The digital literacy also put significant impact on the adoption of digital payment system.

g. When we talk about the demographic feature and its influence on adoption of digital payment system then gender and age put no significant impact on the adoption of digital payment system, while education, occupation and residence put significant impact on the adoption of digital payment system.

h. The hypothesis of this study shows that there is significant relationship between the adoption of digital payment system and the attributes of digital payment systems. The attributes of this study are security, cost, infrastructural facilities, usage and innovation acceptance.

i. When we talk about the comparison between rural and urban area in the adoption of digital payment system, then the intention to use is more in urban area as compared to rural area. The reasons are digital literacy and infrastructure facilities.

j. For doing comparison, when we consider five attributes separately then we can see that percentage of giving preference to security, usage and infrastructure facilities is more in rural area. While customers in rural area does not give preference to cost and innovation acceptance in adoption of digital payment systems.

k. There is dependency between dependent and independent variables. This analysis has been done with the help of chi-square test.

6.2. Suggestions of the study:

1. Security should be strongly addressed as it hinder in the adoption of digital payment systems. The cyber laws should be strong, which will make the customers more confident to adopt the online systems. There should be quick action for them who will hack the data of the customers. Customers in rural as well as in urban area need security, as it is their main concern while using digital modes.

2. The digital service providers should make it ensure the hurdles in various factors such as security, usage, infrastructure facilities, and cost and innovation acceptance need to overcome in order to make the digital payment systems more user-friendly.

3. The security and privacy risk should be minimize. This can be done by providing timely help to the customers. In case of any need then government should help and take corrective action in order to make people confident and reliable towards their study.

4. The active role should be played by the digital service providers in spreading the digital literacy and also to make customers aware about the security and other online related protocols. (e.g this can be done by organizing a camp in different areas and the people in those camp show some demo of how to use digital payment system in an easy way.)
5. The digital service providers should encourage people to use new technologies which help in learning the digital payment systems in a better and easy way, especially in the rural India. (E.g.snapdeal has partnered with the National Payments Corporation of India. It allows customers to make payment at the time of accepting the delivery of their order through QR- based digital payment)
6. This study helps the policymakers to have a key insight in the adoption of digital payment system promoted under the "Digital India" program in future. The government of India wants to make India totally digitalized. Whether the person will use this system or not but he or she should have full knowledge of using digital payment system. this can be done by providing facilities especially in rural area free of cost and make people confident and secure.
7. The shift in the mind of people is necessary related to the usage of digital payment system apart from the awareness and training; so the government of India and policymakers can consider the outcome of this study for developing the policies.
8. There is a need on the part of government of India to promote some effective program especially in the rural area, which help in digital awareness and also providing the infrastructural facilities to the people.
9. There should be more Government service center which helps in providing awareness regarding the usage of digital payment systems. The worker in service center should solve the problems of people while using digital payment system. More service center should be opened in the rural area.

6.3. Similarity with previous studies:

Factors/ Other Studies	**Sivathanu 2017**	**Liu, Lu, Yu et.al 2004 and Paim,**	**K.Vinitha, Shanmugam, 2020**	**Kim et al, 2010**	**Liua, Luc et al, 2004**	**Yu, His et al, 2002**	**Chavda.V, and Naikwade**	**Sabaawi, Alshaher et al, 2021**	**Ligon et al, 2019**

		2012					2018		
Security/Trust	✓	✓	✓	✓	✓	✓		✓	
Usage	✓		✓	✓	✓		✓		
Infrastructural Facilities							✓		
Cost		✓				✓		✓	✓
Innovation Acceptance	✓							✓	

The above table shows the various papers done on these five attributes. As per my research a very less paper was found on infrastructure facilities, cost and innovation acceptance. While for security and usage a lot of work has been done by using the primary data. If we talk about the work done by brijesh then we can see that according to him there is effect of security and innovation acceptance on the adoption of digital payment systems. The tick mark shows that the above attribute put significant impact on the adoption of digital payment systems.

6.4. Limitations of the study

The limitations of the study are as follows:

- The data was collected from four cities of Punjab due to which it lacks generalizations.
- The variables used in this study have been derived from the existing literature. There may be some more variables which may affect the adoption of digital payment system.
- The lack of coordination, lack of knowledge, busy schedule etc. may have affected the precision of the results.

6.5. Scope for future research

Research is a never ending process. Future research can be conducted in the following areas:

- Qualitative research can be done in order to get the depth understanding of the mindset of people
- The interview based research can be done with the help of small sample.
- The small sample taken separately from rural and urban area, and then the comparison can be made.
- Factors related to some other online methods like social media, e-banking etc., can be studied.
- Current model can be improved by adding some more variables in order to further validate the model.

REFERENCES

- Abrazhevich, D. (2001). Electronic payment systems: issues of user acceptance. In *In B. Stanford-Smith and E. Chiozza (Eds.), E-work and E-commerce*.
- Ahuja, K. (2019). Challenges for Indian E-Payment System. *Mmu Journal Of Management Practices*, *10*(1), 27-29.
- Ahuja, K. (2019). Challenges for Indian E-Payment System. *Mmu Journal Of Management Practices*, *10*(1), 27-29.
- Baddeley, M. (2004). Using e-cash in the new economy: An economic analysis of micro-payment systems. *Journal of Electronic Commerce Research*, *5*(4), 239-253.
- Baghla, A. (2018). A study on the future of digital payments in India. *International Journal of Research and Analytical Reviews*, *5*(4), 85-89.
- Bajpai, N., Biberman, J., & Sachs, J. D. (2018). Post-Demonetization E-Payment Trends.
- Balaji, K. C., & Balaji, K. (2017). A study on demonetization and its impact on cashless transactions. *International Journal of Advanced Scientific Research & Development*, *4*(3), 58-64.
- Bhatnagar, H. (2017). Demonetization to digitalization: a step toward progress. *Manag Econ Res J*, *3*(2017), 1762.
- Chandrasekhar, C. P., & Ghosh, J. (2018). The financialization of finance? Demonetization and the dubious push to cashlessness in India. *Development and change*, *49*(2), 420-436.
- Cheung, C., & Lee, M. K. (2000). Trust in Internet shopping: A proposed model and measurement instrument. AMCIS 2000 Proceedings, 406.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Deepak, S. (2018). Impact Of Demonetization On The Indian Retail Industry. *Frontiers of Inclusive Growth*, *1*(1), 289-303.
- Dua, S. (2017). Digital India: Opportunities and Challenges. International Journal of Science Technology and Management, 6(3), 6.

- Fatonah, S., Yulandari, A., & Wibowo, F. W. (2018, December). A review of e-payment system in e-commerce. In *Journal of Physics: Conference Series* (Vol. 1140, No. 1, p. 012033). IOP Publishing.
- Ganesan, G., & Gajendranayagam, B. (2017). Impact of demonetization on Indian Economy. *International Journal of Applied Research*, *3*(9), 433-436.
- Gefen, D., & Straub, D. W. (1997). Gender differences in the perception and use of e-mail: An extension to the technology acceptance model. *MIS quarterly*, 389-400.
- Goswami, S., & Mathur, M. (2011). Retail Goes Online-An Indian Perspective. *International Journal of Management and Tourism*, *19*(2), 1-11.
- Hadi, N. U., Abdullah, N., & Sentosa, I. (2016). An easy approach to exploratory factor analysis: Marketing perspective. *Journal of Educational and Social Research*, *6*(1), 215-215.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Factor analysis. Multivariate data analysis. *NJ: Prentice-Hall*, *3*, 98-99.
- Hartono, E., Holsapple, C. W., Kim, K. Y., Na, K. S., & Simpson, J. T. (2014). Measuring perceived security in B2C electronic commerce website usage: A respecification and validation. *Decision support systems*, *62*, 11-21.
- http://ijariie.com/AdminUploadPdf/Demonetisation_and_its_impact_on_rural_economy_1430.pdf
- http://ijsrcseit.com/CSEIT183323
- http://www.dynamicpublisher.org/gallery/100-s12-s13.pdf
- http://www.iosrjournals.org/iosr-jhss/papers/Conf.DAGCBEDE/Volume-1/3.%2008-10.pdf
- https://anubooks.com/wp-content/uploads/2020/03/JGV-SPECIAL-ISSUE-COMPLETE-K-Mittal.pdf#page=71
- https://assets.kpmg/content/dam/kpmg/in/pdf/2017/04/Digital_payments_Analysing_the_cyber_landscape.pdf
- https://bizfluent.com/how-7507577-make-receive-payments-debit-card.html
- https://blog.flexmr.net/correlation-analysis-definition-exploration
- https://core.ac.uk/download/pdf/161421228.pdf

- https://economictimes.indiatimes.com/industry/banking/finance/view-cashless-india-could-be-a-model-for-the-world/articleshow/69669960.cms?from=mdr
- https://en.wikipedia.org/wiki/Regression_analysis
- https://en.wikipedia.org/wiki/Regression_analysis
- https://gocardless.com/guides/posts/basics-online-payment-processing/
- https://inc42.com/buzz/digital-payments-grows-at-55-over-past-five-years-reveals-rbi-data/
- https://rauterberg.employee.id.tue.nl/publications/PhD thesis/PhDThesis%20(Abrazhevich%202004).pdf
- https://razorpay.com/learn/digital-payments-india-definition-methods-importance/
- https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CDDP03062019634B0EEF3F7144C3B65360B280E420AC.PDF
- https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/CASHB74203395BD64E2ABC1BD5F68D8AEF13.PDF
- https://research-methodology.net/research-methods/quantitative-research/regression-analysis/
- https://scand.com/company/blog/digital-wallet-benefits-and-disadvantages/
- https://shodhganga.inflibnet.ac.in/bitstream/10603/18606/8/08_chapter%203.pdf
- https://shodhganga.inflibnet.ac.in/bitstream/10603/190128/5/chapter%203.pdf
- https://shodhganga.inflibnet.ac.in/bitstream/10603/198850/9/09_chapter% 203.pdf
- https://shodhganga.inflibnet.ac.in/bitstream/10603/211275/9/09_chapter% 201.pdf
- https://shodhganga.inflibnet.ac.in/bitstream/10603/218449/6/06_chapter%201 .pdf
- https://shodhganga.inflibnet.ac.in/bitstream/10603/36054/8/08_chapter%204.pdf
- https://smallbusinessfirst.kochiesbusinessbuilders.com.au/advantages-and-disadvantages-of-online-payments/
- https://wealthhow.com/disadvantages-of-electronic-payment-systems
- https://www.alliedwallet.com/blog/blog-posts/payment-processing-timeline-steps-involved-online-payment-processing/

- https://www.entrepreneur.com/article/342061#:~:text=RBI%20data%20shows%20a%20spurt,October%202016%20and%20December%202016.
- https://www.google.com/search?q=cash+on+delivery+method+usage+percentage+in+India&sxsrf=ALeKk02gMXPNWtVhfzuva4Y24lcBA2oy2w:1594466621378&tbm=isch&source=iu&ictx=1&fir=ju3AgVlaEJsGrM%252CreD4Nzyltd7drM%252C_&vet=1&usg=AI4_-kRCz1G9fBNFmAOyYKERpd2EXMczlQ&sa=X&ved=2ahUKEwiz5sqEi8XqAhWNbysKHUsGC64Q9QEwAHoECAYQAw&biw=1366&bih=657#imgrc=jPIg4M2ntrfWAM
- https://www.indianeconomy.net/splclassroom/what-are-the-impacts-of-demonetisation-on-indian-economy/
- https://www.intellias.com/how-online-payment-processing-platforms-work/
- https://www.investopedia.com/terms/d/demographics.asp
- https://www.investopedia.com/terms/d/durbin-watson-statistic.asp#:~:text=A%20rule%20of%20thumb%20is,not%20applicable%20in%20certain%20situations.
- https://www.lyra.com/in/e-payments/
- https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19417
- https://www.researchgate.net/publication/344546518_Impact_of_Covid-19_Outbreak_in_Digital_Payments
- https://www.theindianwire.com/business/digital-payments-market-grows-55-since-demonetisation-india-secures-first-position-in-terms-of-transactions-295847/
- Jain, S., Dubey, S., & Jain, S. (2016). Designing and validation of questionnaire. International dental & medical journal of advanced research, 2(1), 1-3.
- Kaur, H. (2017). Impact of Demonetization on E-Commerce in Indian Economy. *Journal of Commerce and Trade*, *12*(2), 142-147.
- Krishnan, D., & Siegel, S. (2017). Effects of Demonetization: Evidence from 28 Slum Neighborhoods in Mumbai. *Available at SSRN 2896026*.
- Krishnan, N. K., Johri, A., Chandrasekaran, R., & Pal, J. (2019, January). Cashing out: digital payments and resilience post-demonetization. In *Proceedings of the Tenth*

International Conference on Information and Communication Technologies and Development (pp. 1-16).

- Kulkarni, A.M., & Naikwade, P .V. Impact of Demonetization on farmers and other people from rural background and their perception on Demonetization.
- Kumar, S. V., & Kumar, T. S. (2016). Demonetization and complete financial inclusion. *International Journal of Management Research and Reviews*, *6*(12), 1703.
- Lian, J. W., & Lin, T. M. (2008). Effects of consumer characteristics on their acceptance of online shopping: Comparisons among different product types. *Computers in Human Behavior*, *24*(1), 48-65.
- Liu, C., Marchewka, J. T., Lu, J., & Yu, C. S. (2005). Beyond concern—a privacy-trust-behavioral intention model of electronic commerce. Information & Management, 42(2), 289-304.
- Mattoo, S. K., Basu, D., Malhotra, A., & Malhotra, R. (2002). Motivation for addiction treatment-Hindi scale: Development and factor structure. *Indian journal of psychiatry*, *44*(2), 131.
- Mehta, S., Patel, K., & Mehta, K. (2016). Demonetization: shifting gears from physical cash to digital cash. *Voice of Research*, *5*(3), 47-50.
- Memdani, L. (2012). An Overview of Digitalization of Rural India and Its Impact on the Rural Economy. *Arts and Education*, *1*(6), 12-15.
- Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer affairs*, *35*(1), 27-44.
- Munjal, D. (2017). Digitalization–Solution of demonetization. *International Journal of Applied Research*, *3*(7), 823-825.
- Omar, N. A., Osman, L. H., Alam, S. S., & Sanusi, A. (2015). Ecological conscious behaviour in Malaysia: The case of environmental friendly products. *Malaysian Journal of Consumer and Family Economics*, *18*, 17-34.
- Pandey, A. C., Jamwal, M., & Soodan, V. (2014). Transforming physical to digital marketplace-E-retail: An Indian Perspective. *International Journal of Research in Management*, *4*(4), 11-18.

- Paramahamsa, R. (2016). Demonetisation: To Deify or Demonize?. *Economic Survey, 2016*, 17.
- Prasad, A. P. Impact of Demonetization on Fast Moving Consumer Goods (FMCG) Retail Sector.
- Ramya, N., Sivasakthi, D., & Nandhini, M. (2017). Cashless transaction: Modes, advantages and disadvantages. *International Journal of Applied Research*, *3*(1), 122-125.
- Rao, S. S. (2005). Bridging digital divide: Efforts in India. *Telematics and informatics*, *22*(4), 361-375.
- Ravi, C. S. (2017). Digital payments system and rural India: A review of transaction to cashless economy. *International journal of commerce and management research*, *3*(5), 169-173. Manage journal
- REDDY, N. G., & NIKITHA, B. (2018). EFFECTS OF DIGITALISATION POST DEMONETIZATION.
- Roycroft, T. R., & Anantho, S. (2003). Internet subscription in Africa: policy for a dual digital divide. *Telecommunications Policy*, *27*(1-2), 61-74.
- Sanatani, T. (2017). Effects of Demonetization on Digital Payment Systems in India. *INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY*, *17*(11), 136-140.
- Sedgwick, P. (2014). Understanding statistical hypothesis testing. *Bmj*, *348*.
- Shah, A. Y.(2017). Impact of Demonetization on Rural India. International Journal of Scientific and Research Publications, 7(3), 220-223.
- Shahare, V. B. (2017). Assessing The Impact Of Demonetisation On Rural Economy. *Jharkhand Journal of Development and Management Studies, XISS, Ranchi*, *15*(2), 7311-7324.
- Shankar, K. G., & Raju, P. (2019). A Study on Opportunities and Challenges of Adopting Digital Wallet in India. *Our Heritage*, *67*(2), 127-136.
- Sheetal, J. U., Purohit, D. N., & Anup, V. (2019). Increase in number of online services and payments through mobile applications post demonetization. *Advances in Management*, *12*(1), 34-38.

- SHILPA, N., & AMULYA, M. IMPACT OF DEMONETIZATION ON E-PAYMENTS IN INDIA. *CHRIST COLLEGE*, 1.
- Singh, N. K., Sahu, G. P., Rana, N. P., Patil, P. P., & Gupta, B. (2018, June). Critical success factors of the digital payment infrastructure for developing economies. In *International Working Conference on Transfer and Diffusion of IT* (pp. 113-125). Springer, Cham.
- Singh, S., Srivastava, V., & Srivastava, R. K. (2010). Customer acceptance of mobile banking: A conceptual framework. *Sies journal of management*, *7*(1), 55.
- Singhal, S. (2017). Demonetisation and E-banking in India. *International Journal of New Technology and Research*, *3*(1).
- Sinha, A., & Rai, D. (2016). Aftermath of demonetization on rural population. *International Journal of Research in Economics and Social Sciences (IJRESS)*, *6*(11), 223-228.
- Sivathanu, B. (2019). Adoption of digital payment systems in the era of demonetization in India: An empirical study. *Journal of Science and Technology Policy Management*, *10*(1), 143-171.
- Teoh, W. M. Y., Chong, S. C., Lin, B., & Chua, J. W. (2013). Factors affecting consumers' perception of electronic payment: an empirical analysis. *Internet Research*.
- Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Research*.
- Thomas, S., & Krishnamurthi, G. (2017). Cashless rural economy–a dream or reality?. *Jharkhand Journal of Development and Management Studies XISS, Ranchi*, *15*(2), 7269-7281.
- Tiwari, N., & Singh, N. K. (2019). Factor affecting consumer satisfaction in cashless payment systems in India with respect to Paytm and BHIM. *International Journal of Recent Technology and Engineering (IJRTE)*, *8*, 10-15.
- Tiwari, P., Garg, V., & Singhal, A. (2019, January). A study of Consumer adoption of Digital Wallet special Reference to NCR. In *2019 9th International Conference on Cloud Computing, Data Science & Engineering (Confluence)* (pp. 664-669). IEEE.

- Undale, S., & Gaggad, K. (2016). One month after demonetization: what people say. *GE-International Journal of Management Research, Special Issue*.
- Universtiy, K. L., Greenfields, V., District, G., & Pradesh, A. (2018). A study on Digital payments in India with perspective of consumers adoption. *International Journal of Pure and Applied Mathematics*, *118*(24).
- Veerakumar, K. (2017). A study on people impact on demonetization. *International Journal of Interdisciplinary Research in Arts and Humanities*, *2*(1), 9-12.
- Verma, N., & Jain, J. K. (2017). Demonetization: Curbing the practice of holding unaccounted money and moving towards e-monetization. *Indian Journal of Accounting (IJA)*, 33-45.
- Wadkar, S. K., Singh, K., Chakravarty, R., & Argade, S. D. (2016). Assessing the Reliability of Attitude Scale by Cronbach's Alpha. Journal of Global Communication, 9(2), 113-117.
- www.ijcrt.org/papers/IJCRTRIETS030.pdf.
- www.ijmra.us/project%20doc/2019/IJRSS JANUARY2019/IJMRA-14939
- www.iosrjournals.org/iosr-jbm/papers/Conf.17037-2017/Volume.../9.%2050-55.pdf
- www.Iosrjournals.org/iosr-jhss/papers/Conf.DAGCBEDE/Volume.../5.%2015-16.
- Yadav, D. K., & Ramesh, R. (2019). Indian Rural Customer's Risk Perception of Electronic Payment System.
- Yu, H. C., Hsi, K. H., & Kuo, P. J. (2002). Electronic payment systems: an analysis and comparison of types. *Technology in Society*, *24*(3), 331-347.
- Zhu, H., Gupta, A., Majumder, B., & Steinbach, S. (2018). Short-term effects of India's demonetization on the rural poor. Economics Letters, 170, 117-121.

QUESTIONNAIRE/ प्रश्नावली

The topic of my study is "Intention to use digital payment system after demonetisation- A comparative study of rural and urban customer". There are five attributes used in my study i.e. Security and Trust, Usage, Cost, Infrastructural Facilities and Innovation Acceptance. The respondent of my study are those who are using Digital Payment System and their qualification should be 10th pass. The sampling method for this study is Judgemental sampling method. This questionnaire has been based on the above analysis. I assure you that your response will remain strictly confidential. Please put tick marks to indicate your response.

मेरे अध्ययन का विषय "नोटबंदी के बाद डिजिटल भुगतान प्रणाली का उपयोग करने का इरादा है- ग्रामीण और शहरी ग्राहक का तुलनात्मक अध्ययन"। मेरे अध्ययन में पांच विशेषताओं का उपयोग किया जाता है यानी सुरक्षा और विश्वास, उपयोग, लागत, ढांचागत सुविधाएं और नवाचार स्वीकृति। मेरे अध्ययन के प्रतिवादी वे लोग हैं जो डिजिटल भुगतान प्रणाली का उपयोग कर रहे हैं और उनकी योग्यता 10वीं पास होनी चाहिए । इस अध्ययन के लिए नमूना विधि निर्णयात्मक नमूना विधि है। यह प्रश्नावली उपरोक्त विश्लेषण पर आधारित है। मैं आपको विश्वास दिलाता हूं कि आपकी प्रतिक्रिया कड़ाई से गोपनीय रहेगी । कृपया अपनी प्रतिक्रिया इंगित करने के लिए टिक मार्क्स डाल दें।

.**General Questions**

1. Name (नाम): _____

2. Gender (लिंग):(a) Male (पुरुष) (b) Female (महिला)

3 .Age (उम्र) : (a) 18-25 years (b) 26-40 years (c) 41-60 years

4. Education (पढ़ाई): (a) 10th pass (b) 12th pass (c) Graduate

5. Occupation व्यवसाय: (a) Job (b) Self Employed (स्व नियोजित)
   (c) Unemployed (बेरोज़गार लोग)

6. Residential Status (आवासीय स्थिति): (a) Rural (ग्रामीण) (b) Urban (शहरी)

7. Which modes of digital payment system do you use from the following (You can choose more than one options): आप निम्नलिखित से डिजिटल भुगतान प्रणाली के कौन से तरीके उपयोग करते हैं (आप एक से अधिक विकल्प चुन सकते हैं):
   (a) ATM (एटीएम)
   (b) Debit and Credit card (डेबिट और क्रेडिट कार्ड)
   (c) Net Banking (नेट बैंकिंग)
   (d) UPI (यूपीआई)
   (e) E-Wallet (ई-वॉलेट)

8. Frequency of using digital payment systems . डिजिटल भुगतान प्रणाली का उपयोग करने की आवृत्ति:

(a) 5 times in a month एक महीने में 5 बार(b) 10 times in a month एक महीने में 10 बार (c) more than 10 time 10 से अधिक समय

Specific Questions विशिष्ट प्रश्न

Specific questions have been based on the satisfaction level of the customers on the basis of different attributes used in my study. विशिष्ट प्रश्न मेरे अध्ययन में उपयोग की जाने वाली विभिन्न विशेषताओं के आधार पर ग्राहकों के संतुष्टि स्तर पर आधारित हैं।

(A) On the basis of Security/Trust सुरक्षा/ट्रस्ट के आधार पर

		Strongly Disagree/ दृढ़ता से असहमत	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से सहमत
(i)	I trust digital technology मुझे डिजिटल तकनीक पर भरोसा है					
(ii)	I feel digital payment modes are safe and trustworthy. मुझे लगता है कि डिजिटल भुगतान मोड सुरक्षित और भरोसेमंद हैं।					
(iii)	I have positive experiences with use of digital payment systems. मैं डिजिटल भुगतान प्रणाली के उपयोग के साथ सकारात्मक अनुभव है ।					
(iv)	I will continue using digital payment systems in the future period मैं भविष्य की अवधि में डिजिटल भुगतान प्रणाली का उपयोग जारी रखूंगा					

(B) On the basis of usage उपयोग के आधार पर

		Strongly Disagree/ दृढ़ता से असहमत	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से सहमत
(i)	I have understanding of digital payment platforms and its offers & discounts मुझे डिजिटल भुगतान प्लेटफार्मों और इसके प्रस्तावों और छूट की समझ है					
(ii)	I feel comfortable while using digital payment modes because of convenience सुविधा के कारण डिजिटल भुगतान मोड का उपयोग करते समय मैं सहज महसूस करता हूं					
(iii)	I think I need to learn more about usage of digital payment modes. मुझे लगता है कि मुझे डिजिटल भुगतान मोड के उपयोग के बारे में अधिक जानने की आवश्यकता है।					
(iv)	I have no knowledge of digital payment platforms and its offers & discounts. मुझे डिजिटल भुगतान प्लेटफार्मों और इसके प्रस्तावों और छूट की कोई जानकारी नहीं है					

(C) On the basis of Infrastructural Level ढांचागत स्तर के आधार पर

		Strongly Disagree/ दृढ़ता से असहमत	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से सहमत
(i)	The availability of digital devices or internet facility is good in our area डिजिटल उपकरणों या इंटरनेट सुविधा की उपलब्धता हमारे क्षेत्र में अच्छी है					
(ii)	I am having access to digital payment systems मैं डिजिटल भुगतान प्रणाली के लिए उपयोग कर रहा हूँ					
(iii)	I prefer to make payment through cash only due to lack of infrastructural facilities e.g. net connectivity. मैं केवल ढांचागत सुविधाओं जैसे नेट कनेक्टिविटी की कमी के कारण नकद के माध्यम से भुगतान करना पसंद करता हूं ।					

(D) On the basis of Cost लागत के आधार पर

		Strongly Disagree/ दृढ़ता से असहमत	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से सहमत
(i)	Digital payment systems save extra cost in buying goods/services. डिजिटल भुगतान प्रणाली माल/सेवाओं को खरीदने में अतिरिक्त लागत की बचत					
(ii)	The transaction cost generally hidden while using digital payment mode डिजिटल भुगतान मोड का उपयोग करते समय लेनदेन लागत आम तौर पर छिपी हुई है					
(iii)	I got frustrated whenever I have to pay extra service or convenience charges for digital transaction जब भी मुझे डिजिटल लेनदेन के लिए अतिरिक्त सेवा या सुविधा शुल्क का भुगतान करना पड़ता है तो मैं निराश हो जाता हूं					
(iv)	I generally use the cash back offers provided by various apps while doing online shopping. मैं आम तौर पर ऑनलाइन शॉपिंग करते समय विभिन्न ऐप्स द्वारा प्रदान किए गए कैश बैक ऑफर का उपयोग करता हूं।					

(E) On the basis of Innovation Acceptance नवाचार स्वीकृति के आधार पर

		Strongly Disagree/ दृढ़ता से	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से

		असहमत				सहमत
(i)	Government campaign to make India as Digitalised India is positively accepted भारत को डिजिटलीकृत भारत बनाने के सरकारी अभियान को सकारात्मक रूप से स्वीकार किया गया है					
(ii)	I think it's better to use 5G in the coming future period. मुझे लगता है कि आने वाले भविष्य की अवधि में 5G का उपयोग करना बेहतर है।					
(iii)	The effort made by government to create awareness of digital India is appreciable. डिजिटल इंडिया के प्रति जागरूकता पैदा करने के लिए सरकार द्वारा किया गया प्रयास प्रशंसनीय है।					

Q) What are the main reasons for choosing digital payment modes? {Please give preference from 1 tp 5. (1 for Most Important, 2 for Important, 3 for Average, 4 for Not Important and 5 for the least important)} डिजिटल भुगतान मोड चुनने के मुख्य कारण क्या हैं? {1 टीपी 5 से वरीयता दें। (सबसे महत्वपूर्ण के लिए 1, महत्वपूर्ण के लिए 2, औसत के लिए 3, महत्वपूर्ण नहीं के लिए 4 और सबसे कम महत्वपूर्ण के लिए 5)} }

Security or Trust on payment mode(e.g. fear that people may read your personal information) भुगतान मोड पर सुरक्षा या विश्वास (उदाहरण के लिए डर है कि लोग आपकी व्यक्तिगत जानकारी पढ़ सकते हैं)	
Having knowledge of using digital payment mode डिजिटल भुगतान मोड का उपयोग करने का ज्ञान होना	
Good Infrastructural facilities like net connectivity नेट कनेक्टिविटी जैसी अच्छी ढांचागत सुविधाएं	
Better rates or low service charges बेहतर दरें या कम सेवा शुल्क	
New innovations e.g. new ways of payment नए नवाचार जैसे भुगतान के नए तरीके	

Q) Overall analysis of digital payment system डिजिटल भुगतान प्रणाली का समग्र विश्लेषण

		Strongly Disagree/ दृढ़ता से असहमत	Disagree/ असहमत	Neutral/ तटस्थ	Agree/ सहमत होना	Strongly Agree/ दृढ़ता से सहमत
1.	Digital payment system save my time and money डिजिटल भुगतान प्रणाली मेरा समय और पैसा बचाने के लिए					
2.	Digital payment systems are better than cash payment डिजिटल भुगतान प्रणाली नकद भुगतान से बेहतर हैं					
3.	A digital customer has to be alert to security issues when using digital payment systems डिजिटल भुगतान प्रणाली का उपयोग करते समय एक डिजिटल ग्राहक को सुरक्षा					

	समस्याओं के प्रति सचेत रहना होगा					
4.	Digital payment systems can be easily understood and readily adopted. डिजिटल पेमेंट सिस्टम को आसानी से समझा और आसानी से अपनाया जा सकता है।					

Signature

दस्तख़त

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E-Monetization Leads to Adoption of Digital Payment System

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E-Monetization Leads to Adoption of Digital Payment System

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Abstract

The Indian economy primarily is cash based economy. The announcement made by the Prime Minister on 8th November, 2016 hit our economy very badly especially rural economy where

people use cash for their daily transactions. The announcement was to make India cashless economy and also to stop the black money through Demonetisation. This decision creates chaos among the people in India. There was long snaking lines outside banks and ATM's. Due to lack of disposable income in the hands of consumers, the way of making payment has been changed. This paper focuses on the buying behavior of consumers that is how the purchasing pattern of consumers changed from physically to electronically. In the cashless economy it is become necessary for a consumer to have the knowledge of digital payment system. The analysis has been done with the help of UTAUT model. The data used in this study is secondary data as well as primary data. The result of this study will reveal that how different attributes related with the consumer intention to adopt the digital payment systems. The purpose of this study is to find out the actual usage of digital payment system in India. The conceptual framework used in this study is based on UTAUT model and other author's research papers. Data collected through questionnaire. This study will be helpful for the researchers, digital payment service providers for getting knowledge about the adoption of digital payments modes in India.

Keywords: Digital Payment Methods, UTAUT model, Perceived Risk, Hedonic Motivation

Demonetisation entail E-monetization; Impact on consumer's buying behavior

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Abstract

The Indian economy primarily is cash based economy. The announcement made by the Prime Minister on 8th November, 2016 hit our economy very badly especially rural economy where people use cash for their daily transactions. The announcement was to make India cashless economy and also to stop the black money through Demonetisation. This decision creates chaos among the people in India. There was long snaking lines outside banks and ATM's. Due to lack of disposable income in the hands of consumers, the way of making payment has been changed. This paper focuses on the buying behavior of consumers that is how the purchasing pattern of consumers changed from physically to electronically. In the cashless economy it is become necessary for a consumer to have the knowledge of digital payment system. The data used in this study is secondary data. The result of this study will reveal that how demonetisation effect the consumer's buying behavior in the digitalized age.

Keywords: Demonetisation, E-monetization, Buying Behavior

AN ASSESSMENT OF ONLINE FOOD ORDERING APPLICATIONS ON BUSINESS OF SELECTED RESTAURANTS WITH REFERENCE TO E-PAYMENT SYSTEM*

BY

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Abstract

New India is an Electronic India. The trend of buying goods and making payment has been changed from physically to electronically. The mindset of consumers and their gratifying level has been changed. Electronic market has also approach to the dining table of consumers. Consumer can buy food from various mobile apps in just one click. Now consumers have a wide range of restaurants. Consumer can make the choice to select the restaurants which provide best offers at reasonable price and also tasty food. This online system provide a huge growth to restaurant market with the help of mobile apps such as zomato, swiggy, uber eats etc. so we can say that from booking tickets, buying groceries and so on internet market has been growing in many ways and the recent development is food delivering apps. Consumer can order favorite food items in just one click and food reach at the doorstep of consumer. The research takes quantitative data for the study.

Keywords: Online food ordering apps, Zomato, Swiggy, UberEats

Impact of Demonetisation on Inclusive Financing in India

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Abstract

The Micro finance sector of India has been played a major role in the development of the Indian economy. This sector is serving to fulfill the needs of rural and semi-urban population. This sector helps in Financial Inclusion. Financial inclusion ensures that financial products and services should be available to vulnerable groups like poor people at an affordable cost and in a proper manner. Vulnerable groups include weaker section and poor people who don't have any source of savings. The main reason is illiteracy and lack of awareness. Since Nov. 2016, in India maximum poor people don't have bank accounts. But after Nov. 2016, when Government of India had announced demonetisation then within two to three months maximum poor people had opened no frill bank accounts under Jan Dhan Yozna. This task of opening huge no of accounts proves to be very much difficult for banks but through it poor people save their savings into banks and can also earn interest on their savings. To make it more easy banks also made KYC easy for them. The objective of the paper is to analyse the positive and negative effects of demonetisation on Micro finance in India. The study will put more insights on impact of demonetisation and other government policy on the Micro finance. The data used in this study is secondary data.

Keywords: Demonetisation, Financial Inclusion, PMJDY

Financial Inclusion for Inclusive Growth: Opportunities and Challenges

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