

**EVALUATION OF EFFECTIVENESS OF CASHLESS
TRANSACTION IN THE PERSPECTIVE OF CUSTOMERS**

Dissertation work submitted to Mahatma Gandhi University, Kottayam.

In partial fulfillment of the requirement for the award of

MASTER'S DEGREE IN COMMERCE

Submitted by

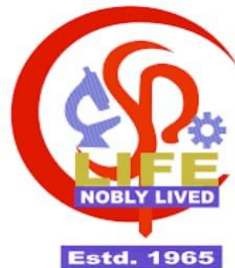
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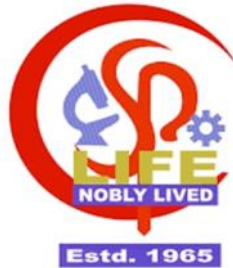
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This is to certify that the dissertation work entitled “*EVALUATION OF EFFECTIVENESS OF CASHLESS TRANSACTION IN THE PERSPECTIVE OF CUSTOMERS*” is exclusively a bonafide work done by, Ms. NEFZIA K.A (Reg. no: 180011024113), in partial fulfilment of the requirement for the degree in Master of Commerce under the guidance of Lt. Dr. VARUN V VARGHESE, Assistant Professor, Post Graduate Department of Commerce and Research Centre.

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CHAPTER I
INTRODUCTION

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Cashless transaction is a process of buying goods and services against money where there is no physical currency is involved. The physical currency is replaced by a number of methods that are powered by digital information technology and are capable to transfer money from one person's bank account to another persons. All these money transfer 3 methods have their own, features, qualities, and mechanisms that work together with other devices or equipments; therefore, they are termed as "systems". 1 As for any trading activity, the issue of safe and reliable money exchange between transacting parties is also essential. In a cashless environment, payments take the form of money exchange in an electronic form which makes it safe and reliable. Merchant sells the goods to customer and customer pays the price with the help of cashless methods with safety and reliability where as in offline world the payments are made with cash or through cheque that may be counterfeited. There are many reasons behind the people's choice to do cashless transactions like convenience, improved and trusted digital technology, need to acquire things faster and cheaper along with maintaining a track record for the taxation purposes. The credit and Debit cards were the most common for cashless transactions in India like other countries but a shift in the demand and after the historical decision of demonetization taken by the Hon Prime Minister of India "Mr. Narendra Modi" boosted other methods of cashless transaction. The shifting paradigm gave a new height to the cashless transactions in the country and also influenced consumers and their perception towards these methods of transaction.

Cashless India is a mission propelled by the Government of India driven by Prime Minister Narendra Modi to diminish reliance of Indian economy on money and to bring crowds of reserved dark cash lying unused into the managing an account framework. The nation left upon this move to a cashless economy when the administration made the progressive stride of demonetisation of old money notes of Rs 500 and Rs 1000 on

November 08, 2016. Nonetheless, the advantages of this move have now begun streaming in with an ever-increasing number of individuals changing to computerized methods of accepting and making installment. India is slowly transitioning from a money driven to cashless economy. Advanced exchanges are traceable, accordingly effectively assessable, ruling out the course of dark cash. The entire nation is experiencing the procedure of modernisation in cash exchanges, with e-installment administrations increasing extraordinary energy. A substantial number of organizations, even road merchants, are presently tolerating electronic installments, provoking the general population to figure out how to execute the cashless path at a speedier pace than any time in recent memory.

1.2 STATEMENT OF PROBLEM

India has passed through various transformations in the recent years that are responsible for the industrialization, international trade, and economic growth. Despite the various growth indicators, the percentage of total cashless transactions in India is very less if compared within the group of BRICS nations like Brazil, Russia, India, China, and South Africa that have a similar economic growth rate. The total transactions carried out without physical currency in India is around 2% if compared in the group of BRICS nations.

The need and urgent for transaction give emphasis on cashless transaction. People can access to various cashless transaction methods only when they are properly designed such that it should be user friendly, easy access etc. So, effect of cashless transactions are to be evaluated in perspective of customers to boost up scheme of digitalisation. The evaluation of effects of such transaction thus arise as problem for study.

1.3 SIGNIFICANCE OF STUDY

The emergence of new technology and need for a global business made the cashless transactions more popular. There were various methods of cashless transactions that were frequently used, but due to the economic advancements the need for other faster and reliable methods has motivated many entrepreneurs and economist to introduce reliable and easy to use methods of cashless transaction. The research will evaluate the effectiveness of cashless transactions in the perspective of customers.

The study can find out the major factors responsible for the cashless transactions, and their role play in the various portals and schemes that are recently started in India, for

e.g.: Digital India, Smart City Mission and, other schemes under NITI Ayog. These schemes are aimed towards the economic and national development where cashless transactions play an important and crucial role in the success of these schemes. The study will benefit in several sectors like income tax, and trade as their development will prove to be very beneficial in a country like India which is fiscally constrained.

The study will cover up major methods of cashless transactions that have never been studied together either in national or international researches. There are a very limited number of studies in conjunction with the basic mechanism of these methods and limitations of their components resulting in failure of the system.

1.4 OBJECTIVES OF THE STUDY

- 1) To identify the factors responsible for cashless transactions.
- 2) To analyse the effects of demographic characteristics on customer performance in cashless transaction.
- 3) To examine the challenges in cashless transaction methods.
- 4) To evaluate the role of government in reinforcing cashless transaction system.

1.5 HYPOTHESIS OF STUDY

H_0 = Age and customer performance in cashless transaction are independent.

H_1 = Age and customer performance in cashless transaction are not independent.

H_0 = Gender and customer performance in cashless transaction are independent.

H_1 = Gender and customer performance in cashless transaction are not independent.

H_0 = Education and customer performance in cashless transaction are independent.

H_1 = Education and customer performance in cashless transaction are not independent.

H_0 = Occupation and customer performance in cashless transaction are independent.

H_1 = Occupation and customer performance in cashless transaction are not independent.

H_0 = Monthly income and customer performance in cashless transaction are independent.

H_1 = Monthly income and customer performance in cashless transaction are not independent.

1.6 SCOPE OF STUDY

The study was restricted to Ernakulam district. The study focused mainly on effectiveness of cashless transaction. The research is based on customer perspective, it avoids corporates. The target group of respondents are people in Ernakulam with mostly all age groups. The study includes private employee, government employee, student, self-employee. All findings and conclusions are arrived from the responses gathered from 100 samples who are residing in Ernakulam.

1.7 RESEARCH METHODOLOGY

1. UNIVERSE

The people of Ernakulam were the universe of the study.

2. SOURCE OF DATA

The data for the study will be collected through both primary and secondary sources. The primary data will be collected from the respondents through structured questionnaire. The secondary data will be collected from various sources like websites, online and offline annual reports, magazines, journals, newspapers, and thesis.

3. SAMPLE SIZE

The sample size of study was 100 respondents from Ernakulam including both male and female

4. TOOLS USED FOR DATA ANALYSIS

Data analysis has been done by appropriate mathematical and statistical tools such as percentage, mean, standard deviation and chi-square test

5. TOOLS FOR PRESENTATION OF DATA

Charts and tables are used for presentation of data.

1.8 LIMITATIONS

- 1) The study is limited to people in Ernakulam.
- 2) The study focused on effect of cashless transaction in customer perspective
- 3) The findings are based on the assumption that respondents are given correct answers.

1.9 CHAPTERISATION

- 1) Chapter one deals with introduction, design and methodology of study.
- 2) Chapter two gives the available literature on earlier studies.
- 3) Chapter three reviews an overview about the theoretical framework.
- 4) Chapter four analyse the effects of cashless transaction methods on consumers.
- 5) Chapter five gives the summary of findings, conclusion and suggestion resulting there from.
- 6) Bibliography gives the references of books, journals, etc.
- 7) Appendix gives the structured questionnaire of the project.

CHAPTER II
REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

In this chapter ,different studies conducted by different researchers on this area are shown:

Dewan and Chen, 2005; Kreyeretal. (2003) "Acknowledgment and Use of Mobile Payments “Studies recommend that there is a general buyer enthusiasm towards utilizing versatile instalment applications. The underlying reception of portable instalments has not, nonetheless, been as fast or far reaching of course.

Mallat (2007) “Investigating shopper appropriation of versatile instalments – A subjective report” This paper exhibits a subjective report on customer reception of portable instalments. The discoveries recommend that the relative preferred standpoint of versatile instalments is not quite the same as that predefined in appropriation hypotheses and incorporate freedom of time and place, accessibility, conceivable outcomes for remote instalments, and line evasion. Besides, the reception of portable instalments was observed to be dynamic, contingent upon certain situational elements, for example, an absence of other instalment strategies or criticalness. A few different hindrances to selection were additionally distinguished, including premium evaluating, many-sided quality, an absence of minimum amount, and saw dangers.

Dahlberg et. Al., (2007) “Past, present and eventual fate of portable instalments inquire about: A writing audit” proposed a structure of four possibility and five aggressive drive elements of versatile instalment look into. The examination analysed the two most essential calculates contemporary portable instalments explore to be specific, versatile instalment advances and shopper point of view of portable instalments.

MandeepKaur and KamalpreetKaur(2008), in their article, “Improvement of Plastic Cards Market: Past, Present and Future Scenario in Indian Banks” presume that Indian saving money segment is tolerating the test of data innovation as every one of the gatherings of investors have now remembered it as fundamental necessity for their survival and development in future Despite the solid advances in instalments, an

expected 90 percent of individual utilization consumption in India is as yet made with money which shows the gigantic development capability of this business. So, this can be considered as insignificant starting which shows the brilliant future prospects of plastic card showcase in India.

Nayak, Tapan Kumar and Manish Agarwal (2008) in their paper “Buyer’s conduct in choosing Mastercard’s” talked about the elements impacting the choice of charge cards among customers. The central point calls attention to buy them are benefit offers, limited time offers, premium advantages, money benefits, simplicity of instalments, instalment charges, card advantages and time advantage.

Ashish Das, and Rakhi Agarwal, (2010) in their article “Cashless Payment System in India-A Roadmap” Cash as a method of instalment is a costly suggestion for the Government. The nation needs to move far from money based towards a cashless (electronic) instalment framework. This will help diminish money administration cost, track exchanges, check charge evasion/misrepresentation and so forth., upgrade budgetary consideration and incorporate the parallel economy with standard.

(Pulina,2011) “Do Digital Wallets as a Payment Method Influence Consumer in Their Buying Behaviour? With the coming of innovation, customers have a huge exhibit of instalment modes which encourages instalment for exchanges by being more advantageous, worthy and open.

Bamasak (2011) “Investigating shoppers’ acknowledgment of versatile instalments – an exact examination” demonstrated that there is a splendid future for m-instalment in Saudi Arabia as dominant part of respondents demonstrated their ability to take part in such a movement. In any case, security of versatile instalment exchanges and the unapproved utilization of cell phones to make an instalment were observed to be of incredible worries to the cell phone clients.

Anupama Sharma (2012) in her examination paper “Plastic card fakes and the counter measures towards a more secure instalment component” have tossed light on the quantity of cheats expanded impressively in the utilization of plastic cards as if there

should be an occurrence of plastic card fakes the most influenced parties are the vendors of products and ventures as they need to hold up under the full obligation for misfortunes because of fakes, the banks additionally bears some cost particularly the circuitous cost though the cardholders are minimum influenced due to restricted customer risk and reasoned that every one of these misfortunes can be managed by making the judicious utilization of the new innovation and taking the separate counter measures.

Bansi Patel and Urvi Amin (2012) in their exploration paper “Plastic Money : Road may Towards Cash Less Society” examined that now days in any exchange Plastic cash winds up noticeably unavoidable piece of the exchange and with it life turns out to be all the more simple and advancement would assume better position and alongside the plastic cash it ends up plainly conceivable that control the cash clothing and viable usage of budgetary framework would end up noticeably conceivable which would likewise accommodating for charge enactment.

Olalekan S. Akinola (2012) “Cashless Society, Problems and Prospects, Data Mining Research Potentials” depicted that there is most likely, our current society is step by step getting the cashless disorder. E-instalments, ATM cards and others are presently the request of the day at our work-places. This paper investigates the achievability of presenting cashless methods for business exchanges into our general public and the security

dangers related with it. The paper clarifies the possibilities of applying information mining procedures to successfully control the security dangers lastly introduces a model for learning extraction in a cashless domain. They additionally represent various difficulties and dangers identified with, in any event, specialized measures, information security, lawful issues and purchaser conduct.

Braga and Mazzon (2013) Do Digital Wallets as a Payment Method Influence Consumer in Their Buying Behaviour?” proposed an exhaustive ‘Instalment Mode Influencing Consumer Purchase Model’, considering the fleeting partition, worldly

introduction, discretion and agony of instalment develops, and including the computerized wallet as another instalment mode.

Mc Kinsey and Co. (2014) “Speedier instalments: Building a business, not only a framework “the US purchasers’ excitement for specific advantages empowered by portable instalments stayed high, particularly around less demanding use of coupons and reliability focuses. In any case, fervour is directing as conveyance of these advantages stays divided crosswise over numerous suppliers, with none of them normally acknowledged by a wide arrangement of traders. Truth be told, the outcomes demonstrated that customers were less amped up for a large number of the different incentives empowered by versatile instalments (counting “leaving their wallet at home”), and they were more incredulous about the wide guarantees of portable wallets than they were one year prior.

SushmaPatil (2014) “Effect Of Plastic Money On Banking Trends In India” is inspected that Indian clients think that its less demanding to make physical instalment (Visa or charge card instalments) as opposed to conveying excessively money adding to the development of plastic cash in the nation. It benefits the buyer through improved item offerings at a lower cost and that too with lucrative arrangements enchanted with rewards conspire, steadfastness extra focuses, limited time battles and so forth. The landing of shopping centres multiplexes, web-based shopping stores and shopping buildings urge the clients to make utilization of plastic cards

KhuramShafiq and Khalil Ahmad (2015) Is plastic Money Matter for Consumer Buying Behaviour? This examination gives the affirming data since buyers feel good in spending through plastic cash .as of late because of extraordinary advancement of innovation use of plastic cash has turned out to be acknowledged all around the globe. Overall population has likewise ended up being a gigantic client of these plastic cash modes. The essential reason behind leading this investigation was to watch the utilization conduct of client. The discoveries from led examines have discover to be generally positive.

Babita Singla, Manish Bansal (2015) in their investigation the creators have supported that the shoppers are happy with plastic use, and the non-platinum card clients are intrigued to utilize the card for buys and mean to utilize the card in not so distant future. The mindfulness level and nature with such instalment framework is additionally high however advertisers and bank experts are not giving careful consideration to increment such charge card utilize. Additionally, the exploration highlights the issues confronted by customers while utilizing the card for instalment. The most critical element impacting their check card instalment conduct was seen convenience and helpfulness of card.

Bappadiya Mukhopadhyay (2016) broke down by enabling MFIs to create and keep up the basic systems of cashless exchanges, the impetus for the MFIs to advance cashless is produced. Note that given that cashless exchanges will leave computerized impressions, distorting of cashless exchanges will be completely evaded. It additionally proposed that further suggest certain tax exempt or motivating force on cashless exchanges for family unit costs. Mindfulness about the upsides of cashless instalments: A deliberate push to make people mindful of the benefits of cashless instalments is the beginning stage. Boost instalments into accounts: The positive connection between customary inflows into accounts and cashless instalments is solid. Evacuation of e-instalment costs: Merchant Discount Rates and accommodation accuses related of e-instalments must be diminished.

Dr. Stith Shewta Rathore (2016) “Appropriation of Cashless Transaction by Consumers” her investigations disclose to us computerized wallets are rapidly getting to be standard method of online instalment. Customers are embracing advanced wallets at end unfathomably quick pace, to a great extent because of comfort and convenience. Furthermore, additionally prescribe advertising and advancements projects should directed to make mindfulness among non-clients. Rebate offers and reward focuses on making instalments through cashless transaction can increment its notoriety and appropriation also. To expand the utilization of advanced wallet, it is required to instruct shoppers about the advantages of a cashless transaction in rearranging and streamlining their buying encounters.

RoopaliBatra , NehaKalra (2016) “Are Digital wallets The New currency?” her investigations let us know in a period of digitalization, the examination intends to contemplate the client recognition, utilization design inclinations and fulfilment level with respect to advanced wallets in view of an investigation of 52 respondents. It additionally recognizes the hindrances and difficulties to the selection of the same. The outcomes demonstrate that there exists a tremendous undiscovered market for computerized wallets both regarding expanding mindfulness and also its use. Likewise, the recurrence and estimation of every exchange utilizing advanced wallets stays restricted. Web based shopping risen as the prime reason for use of advanced wallets. The investigation watched that respondents lean toward utilizing wallets since they spare time and are anything but difficult to utilize and get to. In any case, security of cash executed remains their real concern. Security issues as far as dread of money misfortune and absence of ease of use for worldwide exchanges are the prime obstructions to its reception. While the time of respondent had some huge effect on sorts, sum and heaps of computerized wallets, sex simply affected the heap of advanced wallets. Additionally, research could investigate in more noteworthy profundity the relationship between other statistic factors like salary level, instructive level, nature of occupation, conjugal status and so forth.

K. C. Balaji and K. Balaji (2016)”A Study on Demonetization and Its Impact on Cashless Transactions” considered that the development of the cashless exchange framework is achieving new statures. Individuals tend to move to cashless exchanges. It is on the right track to state that the cashless framework is a prerequisite as well as a requirement for the general public. However, then again, the danger of digital wrongdoing is especially higher as all the cashless exchanges are done over web. So appropriate and finish mindfulness must be made to the general population to keep their charge and Mastercards safe and to utilize the web saving money and the advanced wallet in a most secure manner. So as to rebuff the digital lawbreakers, the legitimately organized digital police compel with top of the line criminological labs and innovation must be made.

KunalTaheam, Rahul Sharma and saurabhGoswami (2016) “Drivers of Digital Wallet Usage: Implications for Leveraging Digital Marketing” The outcomes from this investigation highlighted on various elements that inspired individuals to utilize computerized wallets for making instalments. Individuals in Punjab have been found have been discovered utilizing advanced wallets because of the intentions of controllability and security, societal impact and helpfulness and requirement for execution improvement. This investigation demonstrates that individuals of Punjab utilize any sort of advanced wallet because of one or these distinguished intentions. Advertisers have to base their arrangements for advancing computerized wallets around these thought processes that individuals consider while utilizing such items or administrations.

END NOTES

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CHAPTER III
THEORETICAL FRAMEWORK

CHAPTER III

THEORETICAL FRAMEWORK

Cashless Transaction System: Historical Evolution & Growth in India

Cashless economy is an economy where maximum transactions are done without using the physical cash or the means of hard cash. It is the economy where economic transactions are done with the facilities like credit card, debit cards and on line transactions by means of fund transfer and using e-wallets. The introduction of cashless economy with the help of information technology these days is fully supported by the national government in India. This initiative has not only helped the fast transactions but at the same time it has saved lot of time and money in the country. If we see the global trend in the market it is clear that all over the world people have started taking interest in cashless transactions. Academicians, politicians, administrators and above all the economists all over the world has strongly advocated about going cashless from the cash rich economy Cashless Transaction System is a new and easier way of paying for goods and services.

A cashless transaction refers to an economic setting whereby goods and services are transacted without cash (Paul and Friday 2012), either through electronic transfer or cheque payment. Looking back in history, the effect of cashless payment on an economy can be analysed by the Diffusion of Innovation Theory (DOI). The concept was first introduced by Roger in 1962 where he explained how innovation is diffused to members of a social system over time (Rogers, 1995). According to DOI, the adoption of a new idea or innovations is caused by interaction between individuals through interpersonal networks. In this context, diffusion is the spread of cashless payment where consumers seek improved and convenient transaction, while businesses seek new profit opportunities. The diffusion of cashless payment will result in the adoption of cashless transactions within the society or community, subject to the types of innovation adopters and innovation-decision process. Since the consequences of diffusion in cashless payment depend on how quickly the society is willing to adopt

cashless payment through different stages of innovation processes, the consequences of the adoption of cashless payment differs in different society.

Today, the use of electronic payment has continued to increase due to its convenience, safety and swift mode of payment. Oyewole et al. (2013) discovered that adopting electronic payment will positively affect economic growth and trade. Hasan et al. (2012) examined the fundamental relationship between the adoption of electronic retail payment and overall economic growth across 27 European countries from the period 1995–2009. They discovered that migration to an effective electronic retail payment would stimulate the overall economic growth, consumption, and trade. However, the impact of credit and debit card payment, fund transfers and cheques payment on the economy are relatively low.

A cashless transaction is an automated or online operation that may take place between two people, business, or organisations. A digital transaction is a cashless transaction which specifically involves no paper for completion of the transaction. Purchasing goods from e-commerce websites, signing of business contracts online, or even buying movie tickets through your smartphone app fall under the umbrella of digital transactions. Such operations are accurate, quicker, convenient, and certainly easier. Many are unwilling to accept that there are benefits to a cashless transaction simply because they cannot navigate their way around digital devices, or are just happier to transact using cash. Read on about an array of cashless transactions that simplify day-to-day trading.

Types of Cashless Payment Methods

There are numerous ways to go cashless. Here are some of the best methods to help you pilot your way into a cash-free world:

1. Cheques and Demand Drafts

A cheque is one of the safest and oldest methods of cashless payment. A cheque is issued to a person or business for a specific amount. This cheque is deposited in the receiver's bank, and the money is received through a payment processed by a clearinghouse. A demand draft is safer than a cheque because it cannot be defaulted or dishonoured, unlike a cheque. The DD is signed by a banker to ensure that sufficient

funds are available for a successful transaction. The disadvantage of cheques and DDs are that they are time-consuming because a person has to visit the bank and then wait for the cheque or DD to clear.

2. Debit and Credit Cards

Debit and credit cards have caught on as a method of cashless trading. A debit card is considered by many to be safer because you are transacting with money in your account. The risk with a credit card is overspending. Debit and credit cards can be used to make purchases online as well as over-the-counter at a store.

3. UPI Applications

UPI stands for Unified Payment Interface. UPI has changed the way we transact. At the core of a UPIs functionality is the fact that our mobile numbers are registered with our respective banks and linked to our accounts. A virtual payment address helps to send or receive money without entering any bank related information. Merchants would need to have a current account to receive UPI payments. UPI applications that are currently popular are BHIM, PhonePe, Google Pay/ Tez, ICICI Pocket, and SBI Pay.

4. Mobile Wallets

Mobile wallets have become a convenient way of making payments without cash. Once you load money into your mobile wallet, you can use it wherever it is accepted. The most popular mobile wallet that is trending is Paytm. The disadvantage with mobile wallets is that it isn't linked to your account. Once you load the money into your mobile wallet, you can only spend it with a merchant who accepts payment through the said app.

5. NEFT & RTGS

National Electronic Fund Transfer and Real Time Gross Settlement are electronic payment systems that allow convenient fund transfer between bank accounts. Both facilities are maintained by the RBI (Reserve Bank of India). The facilities can be used to transfer money only within India. The RTGS transfer window is from 8 am to 4.30pm on weekdays and bank working days. NEFT settlements happen in deferred batches

between 8 am to 7 pm on bank working days. There is no facility for ‘stop payment’ instructions in case of either systems and the payments made are irrevocable.

6. IMPS

IMPS, which stands for Immediate Payment Service, is a service that was initiated by the National Payment Corporation of India. The pre-condition to avail IMPS services is that a user needs to also register for mobile banking. Once registered, the user may avail of the IMPS service even through internet banking. Money can be sent or received 27*7, and there is no cut-off time for transactions. IMPS can be done using the receivers MMID (Mobile Money Identifier) or IFSC code and bank account number. The advantage of IMPS over NEFT and RTGS is that it is received instantly.

7. USSD

Unstructured Supplementary Service Data is a cashless option for those who do not carry a smartphone or tablet. It works without an internet connection as opposed to most of the other digital payment services. It is a form of mobile banking where you must dial *99# to use the service. The service mirrors the IMPS service and uses MMID with a mobile number or IFSC code with the account number for the transaction to be successful.

8. ECS

ECS stands for Electronic Clearance Service. It is a convenient method to make bulk payments, especially to pay off your utility services, equated monthly instalments, and for financial institutions to disburse payments like pensions, salaries, or dividend interest. ECS can be used for both debit as well as credit services. Authorisation has to be provided to your bank for periodic debits or credits to be made. It is a safe method because instructions can be given regarding maximum sum to debit, validity period for the said mandate, or purpose of the transaction.

9. QR Codes

QR codes are an extension of the mobile wallet payment services. You simply scan the code of the merchant service to complete your transaction. This would require a smart

device with a camera and a scanning facility. It is a quick and hassle-free method of transacting digitally.

10. Net Banking

Net banking is an alternative to using your debit or credit card. The user needs to login to their net banking account to approve a payment. Net banking gives you the flexibility of transacting even if you have misplaced your debit card or lost it. You can use internet banking to make utility payments, purchase goods and services online, or send and receive money.

11. Gift Cards or Vouchers

Gift vouchers are a handy way of going cashless and are a great gift idea because the receiver can decide what they would like to purchase with the voucher. Stores also give out discounts on gift vouchers which work well for the purchaser as well.

India is yet to buy its freedom from cash. As a country with \$1 trillion worth of personal consumption expenditure (PCE) annually, 97 percent of our everyday transactions in shopping, grocery, fuel, education, departmental stores, utility bill payments, taxes, travel, entertainment, restaurants, and hotels, are still in cash. Of the 3 percent annual spend conducted electronically, nearly 80 percent is transacted across the top ten cities that are covered by possibly less than 15 percent of bank branches in the country. Most leading banks focus on issuing credit cards barely across 10-20 cities, even though debit cards are issued across almost the entire country with most banks migrating to core banking platforms (CBS).

India is a cash friendly economy and citizens consider it convenient to carry large amounts of cash for a variety of transactions. The benefits of electronic payments are yet to sink in, as consumers are habitually used to sending and receiving cash.

Changing consumer behaviour from cash to digital currency requires significant efforts in education around benefits of cashless payments and the associated convenience and security benefits. Visa and its bank partners are investing heavily in programs to provide incentives on cashless payments and working towards a ubiquitous acceptance network and participation of more players in driving the issuance of cards.

The silver lining is that we are moving in the right direction. All we need to do is increase our efforts and broaden the participation of players to push growth. This positive trend is reflected in the increase in transactions from Rs 13,000 per card in 2004-5 to Rs 55,000 crore estimated for the current year.

With over 270 million debit cards and transactions growing at nearly 40 percent, India is one of the fastest-growing markets in the world. Yet, despite this surge, cash remains a big challenge, as consumer behaviour seems rigid. Debit cards are more often used to dispense cash from ATMs. Customers need incentives to recognize that they can directly settle their bills with cards at over 600,000 merchants in India and millions more abroad. With many cooperative banks migrating to core banking solutions, adoption of debit cards should accelerate in the coming years.

For Visa, India is a dream market with 97 percent of all the payments still in cash. The growth opportunities are phenomenal. We believe the whole world, including India, is going through a secular shift to electronic payments. Visa sits right in the middle of this as a global leader and has prioritized India as one of its most important markets for growth. Visa operates in nearly 200 countries and has demonstrated that shared infrastructure which is interoperable can drop costs and allow for rapid adoption of technology and financial inclusion globally with nearly two billion customers.

The RBI-backed NPCI (National Payment Corporation of India) initiative to launch a domestic payment gateway is a welcome step to drive the secular shift across the country. For us, our biggest competitor today is cash and if there were more players, it would only speed up the electronic payment system in the country. The most important proposition in the card business is to give a secure and safe option for customers, and consumers will choose the product that best suits their needs. Visa would continue to innovate and offer superior and secure products for the best payment option for everyone, everywhere.

The Reserve Bank of India and the government are taking a number of steps to change consumer behaviour and drive an efficient cashless economy. One of the fine examples is allowing business core respondents to participate in driving financial inclusion. The one product that I will cherish for a long time is Visa's partnership

with DCB Bank and ITZ Cash as a business correspondent to launch open-loop Visa prepaid cards called Freedom Card. Traders who carry large amounts of cash are now able to deposit that into a prepaid account and withdraw the money when they require it from Visa ATMs or pay directly at merchant outlets for their business purchases.

This development can be transformational and definitely.

Efforts of Government of India towards Cashless Transaction System: -

The government of India makes many efforts to increase Cashless Transaction System. Some of the followings are: -

- **Aadhar Card-** For an electronic payments system to work, two major requirements are the ability to identify a beneficiary correctly, and a way to ensure that the money is reaching only the intended recipient. This is where Aadhaar is a 12-digit individual identification number issued by the Unique Identification Authority of India on behalf of the Government of India. This number will serve as a proof of identity and address, anywhere in India. Aadhaar letter received via India Post and e-Aadhaar downloaded from UIDAI website are equally valid. Aadhaar now serves as a link between the government and the people, making it easy both for the authorities to transfer payments to the correct individual's bank account, and for people to easily

withdraw money using Aadhaar to authenticate their identity. Aadhaar will be:

- A. Easily verifiable in an online, cost-effective way
- B. Unique and robust enough to eliminate the large number of duplicate and fake identities in government and private databases
- C. A random number generated, devoid of any classification based on caste, creed, religion and geography.

- **Prime Minister's People Money Scheme (PMJDY)**– PMJDY is National Mission for Financial Inclusion to ensure access to financial services, namely Banking Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner. The Prime Minister Narendra Modi launched this financial inclusion campaign on 28 August 2014. He had announced this scheme in his first Independence Day speech on 15 August 2014. Run by Department of Financial Services, Ministry of Finance, on the

inauguration day, 1.5 Crore (15 million) bank accounts were opened under this scheme. Guinness World Records Recognizes the Achievements made under PMJDY, Guinness World Records Certificate says "The most bank accounts opened in 1 week as a part of financial inclusion campaign is 18,096,130 and was achieved by Banks in India from 23 to 29 August 2014". By May 2016, the scheme had opened 21.74 crore accounts, with Rs. 37,445 crores in deposits.

- **Subsidy Scheme and Pension, MNREGA Fund-** Government plan to give subsidy on LPG and kerosene Oil directly to the beneficiary account so government organized a campaign of KYC after that transferred fund direct to beneficiary Account. As well all the pension related to government and wages of Manrega directly transfer fund on beneficiary Account.
- **No Service charge-** Government of India announces that no service charge from 1st July 2016 on booking of railway tickets on IRCTC website.

Therefore, these are the schemes promoting Cashless Transaction System and the government wanted that the society slowly move from cash to cashless system.

Benefits of Using Cashless Transaction System

The ease of conducting financial transactions is probably the biggest motivator to go digital. Cash less payments have several advantages, which were never available through the traditional modes of payment, some of which are; privacy, integrity, compatibility, good transaction efficiency, acceptability, convenience, mobility, low financial risk, anonymity (Keck, 2012). There are many benefits of a cashless discussed as under:

- **Ease of Conducting Financial Transactions:** First of all, there is an ease of conducting financial transactions, which is probably the biggest motivators to go digital. In cashless payment there is no need to carry wads of cash or even stand in long queues in bank. It will be easy to carry money with you during travelling. It will be especially useful in case of medical emergencies. You can pay easily during working hours as well.
- **Reduce Risk:** The policy will help fight against corruption/money laundering and reduce the risk of carrying cash, reduced cost, corruption and money laundering.
- **Reduced Tax Avoidance:** Thirdly, the cashless economy gets benefit of reduced tax avoidance. The recent waiver of service tax on card transactions also promotes digital

transactions. This has been followed by a series of cuts and freebies. People will get discount on digital purchase which will cut their cost. Add to these the cash back offers and discounts offered by mobile wallet like Paytm, as well as the reward points and loyalty benefits on existing credit and store cards, and it could help improve your cash flow marginally (Dave, 2016).

- **Reduced Tax:** Taxation with lesser availability of hard cash at homes and more in banks, there is lesser scope of hiding income and evading taxation and when there is more taxpayer it ultimately leads to a lesser rate of taxation for the whole country (Sparrow, 2016).
- **Transparency:** It is not just the easiest way to transact but also brings about a lot more transparency in the financial system, which helps to curb generation of black money.
- **Reduce prices of real estate:** Further, it will reduce real estate prices because of curb on black money as most of black money is invested in real estate prices which inflates the prices of real estate markets. In India, every year RBI spent lots of money (2 billion, 2015) on just the activity of currency issuance and management. It will also lead to lesser funding for illegal trades and activities including terrorism.
- **Hygiene:** It will also help in improving hygiene on site eliminating the bacterial spread through handling notes and coins.
- **Reduced Fear of Theft:** It will lower risk, it is easy to block a credit card or mobile wallet remotely, but it is impossible to get your cash back.
- **Reduced Red Tapism and Bureaucracy:** With cashless transactions through electronic means the wire transfers are tracked and people are accountable which in turn reduces corruption and improve service time.
- **Lesser Interest Rates:** More currency in bank will mean more circulation of money in the economy, leading to greater liquidity and would eventually mean lesser interest rates (Sparrow, 2016)
- **Efficiency:** Cash collection made simple as time spent on collecting; counting and sorting cash is eliminated, it will lead to efficiency gains. There will be greater efficiency in welfare programmes as money is wired directly into the account of recipients. Further it reduces transfer/processing fees, increases processing/transaction time, offers multiple payment options and gives immediate notification on all transactions on customers' account.

- **Track on Spending:** If all transactions are on record, it will be very easy for people to keep track of their spending.
- **Benefits to Banks:** It is also beneficial to the banks and merchants; there are large customer coverage, international products and services, promotion and branding, increase in customer satisfaction and personalized relationship with customers and easier documentation and transaction tracking (Ashike, 2011).
- **Benefit to Government:** The government will benefit from the cashless economy in the area of Adequate budgeting and taxation, improved regulatory services, improved administrative processes (automation), and reduced cost of currency administration and management (Ashike, 2011). Jimi Agbaje, one of the former governorship candidates on the platform of DPA in Lagos State states that the advantages of a cashless society range from regulating and controlling to securing the financial system of our economy.

Factor affecting the growth of Cashless Transaction

A cashless transaction in the economy is defined as a situation where there is very little flow of cash in the society and thus the electronic media do much of the purchases. It does not refer to an outright absence of cash transactions in the economic setting but one in which the amount of cash-based transactions is kept to the barest minimum. Transactions are not done predominantly in exchange for actual cash in an economic system. There are many factors affecting the growth of cashless transaction. Some important factors of the growth of cashless transaction are given below;

- **Growth of Internet and Localization of Internet content**
Digital revolution and its application in banking and financial sector have changes the consumer behaviour and created the drive to go for electronic transaction. Localization of internet content in Hindi and other language has grown significantly in the past year., which is significantly higher than the growth of content search in English. Hindi with incremental growth in mobile subscriber coming mostly from people who are comfortable with languages other than English, online retailers see this emergent segment as new growth driver.
- **Growth in the tier cities beyond metros**
About 20 per cent of India's population lives in cities outside of metros. There are several pointers that suggest this large group of city dwellers have significant purchasing

power. Consumer demand is rising rapidly even in small towns and cities. The research report clearly shows that non-metro cities offer a huge growth potential for many. The facilities of metros in these small cities also drive them to go for cashless.

- **Growth of mobile commerce**

Online retailers' growing rich in non-metro cities is being driven by the rise in usage of mobile internet in the country. According to Internet and Mobile Association of India, the number of mobile internet users in the country stood at 173 million in December 2014. It is set to grow manifold by 2020. A Confederation of Indian Industry report estimates that in the next six years, the number of people accessing the internet through mobile is set to reach 600 million. "This growth will be spurred by a sharp rise in smartphone adoption, expected to reach 50 per cent penetration by 2020," says the report. "Given the increased mobile penetration and smartphone adoption in these areas, mobile is certainly one of the major factors driving this trend".

- **Growing usage of debit cards for cashless transaction**

There has been a net addition of nearly 140 million debit cards in the country in the past two years. What is more, the usage of debit cards at point of sale terminals has seen a growth of 86 per cent in the same period. It indicates the willingness to use debit cards for purposes other than withdrawing money at ATMs has increased. With many online retailers still insisting on use of cards for high value transactions, it is a welcome change. It will allow e-tailors to reach out to many areas and many more customers in coming years. Currently, cash on delivery constitutes nearly 70 per cent of all transactions for online retailers. But online retailers say the usage of cards for online transactions is steadily rising.

Drawbacks of Cash Transaction

The reason being that money in the form of cash has more than it takes away from us than it gives us. Outlined here are some major drawbacks of cash-

- ❖ At an individual level, cash is inconvenient to carry and manage. It cannot be tracked or insured, as cash once lost or stolen cannot be recovered.
- ❖ Cash is expensive to print, inspect, move, store and guard.
- ❖ Counterfeiting is always going to be a problem as long as paper currency

exists.

- ❖ Criminals favour hand-to-hand currency, as it does not leave a paper trail.
- ❖ Cash transactions are not tractable in nature, thus providing no transparency. This leads to corrupt practices and financial crimes such as excessive money laundering.
- ❖ Monitoring of tax compliance is difficult for the Government.
- ❖ High cash usage results in a substantial amount of money outside the formal economy, thus stunting the effectiveness of policies aimed at managing inflation rates.
- ❖ From a global perspective, the economic growth imperative inherent in the current monetary system plays a major role in global warming and other environmental crises. In the wake of the issues highlighted above, some governments are already viewing the use of cash in a negative light. In fact, according to the U.S. Government, cash payments are now thought of as ‘suspicious’ activity that needs to be reported to the authorities.

We are discussed making India a cashless society, with the point of checking the stream of Black Money. However, what is a cashless economy? It can be

characterized as a circumstance in which the cash Transactions is not done only all exchanges must be through electronic channels, for example, direct debit, credit debit cards, electronic clearing, payment systems such as Immediate Payment Service (IMPS), National Electronic Funds Transfer and Real Time Gross Settlement (RTGS) in India.

Ever, the entry of banks got the requirement for paper money. Banks had a restricted supply of gold and silver and understood that their loaning limit was compelled by this. Henceforth, they began issuing paper notes in an overabundance of their stores. This was trailed by the legislatures printing takes note of that were redeemable for gold and silver. In any case, they printed notes in the abundance of their stores. The issue was when individuals lost trust in the paper notes and attempted to recover them for gold and silver, the framework is given way, for instance, in Germany after the

World War I. This marvel of individuals losing confidence in paper cash has been rehashed frequently. At whatever point governments have printed more coin than stores, the estimation of the money has deteriorated.

India keeps on being driven by the utilization of money; under 5% of all instalments happen electronically. This is because of the absence of access to managing an account for a huge part of the people and money being the main means accessible everyone. Extensive and little exchanges keep on being completed in real money. Indeed, even the individuals who can utilize electronic exchanges use the money. While cash Transaction remains the favoured decision, there has been a major develop in the Transaction system. There are more than 1 million purposes of offer terminals for more than 500 million debit and 20 million credit cards Money and cheque, which framed 94% of all exchanges in 2003, may tumble to 13% before this present decade's over.

The telecom business is relied upon to help the advanced movement. Investigators anticipate that the cell phone business sector will show a development of four times throughout the following five years alongside a development of seven times in the quantity of clients utilizing portable managing an account. We can assess the upside potential from the way that India has under 40 million portable saving money clients while each of the main three Chinese banks have in abundance of 100 million. As per the annual report of the Reserve Bank of India (RBI) for 2013-14, the amount of currency in circulation stood at Rs.12.83 trillion with a compounded annual growth rate of 10% over the past two years. Around 5% of the sum is with banks. This suggests practically the whole sum is in the everyday course, which is reflected in the Rs.32.1 billion expense of simply printing the notes. Including and running ATMs costs banks Rs.1,520 crore a year. Indeed, even the RBI senator had as of late remarked that it costs banks about Rs.75 per exchange when a client uses another bank ATM and those clients executing less finance the continuous trans actors. Even by liberal estimates, the direct cost of running a cash-based economy is close to 0.25% of India's gross domestic product (GDP).

No requirement for lines outside ATMs, no cash out amid long occasions, no sitting tight for a saved check to be credited, and no danger of conveying money notes in the wallet. Cashless exchanges with the upgraded security methodology address each of these issues. Reducing use of cash would also stragulate the green economy, prevent money laundering and even increase tax compliance, which will ultimately benefit the customers at large. Use of cashless instruments would likewise guarantee that escape clauses openly frameworks are stopped, and the expected recipients can profit the advantages.

While there are numerous immediate advantages of going cashless, the roundabout advantages maybe convey more noteworthy criticality, most imperative of these being expansion in the pace of dissemination of cash. Money, being material, can be kept from the flow. For instance, money that a visitor brings back unused from a remote visit will lie unmoving until her next outing. Cards and electronic channels act to ease this grating and expand flow. In monetary terms, the "speed of cash" increments, and we see the impact of the Keynesian multiplier. An'llhumored's report pegged the effect of electronic exchanges to 0.8% expansion in Gross domestic product for developing markets and 0.3% increment for created markets.

Starting now, a blend of money and cashless exchanges occur. Now and again utilizing money is less expensive, while in others cashless exchanges are less expensive-trade exchange out banks versus utilizing a cheque, or sending a cash request versus exchanging cash online through, say, IMPS. In the course of recent years, numerous empowering influences have been set up to help this excursion. A tectonic shift, nevertheless, will originate from the cell phone wave. We can say that cashless society is not in India, but we move towards a cashless society.

Whether it is conveying saving money to the masses or the payment of government advantages, the current frameworks are plainly not able to keep pace with the requirements of India's population. Now and again, the reasons are monetary: it is costly to manufacture staff and work another bank office, and the sort of high-volume, low-esteem exchanges that occur in a country economy will not counterbalance these expenses. Thus, individuals are denied access to the money related administrations they require most: credit, so they can acquire in awful times; reserve funds and speculation items, with the goal that they can spare in great times; and protection, so they can secure themselves against unanticipated circumstances and demonstrations of nature - a mishap, an ailment, a product disappointment, or a surge. If the financial products related items are to be made accessible to everybody, the costs of such items must less, and the related dangers must be counterbalanced by spreading them over the whole population

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

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DATA ANALYSIS AND INTERPRETATION

The purpose of this chapter is to present and discuss the analysis of data collected from 100 samples of Ernakulam district. The data was analysed using the sample statistical techniques. The result of data analysis provided information that formed the basis for discussions and interpretations which paved ways for findings, recommendations and conclusions of the studies.

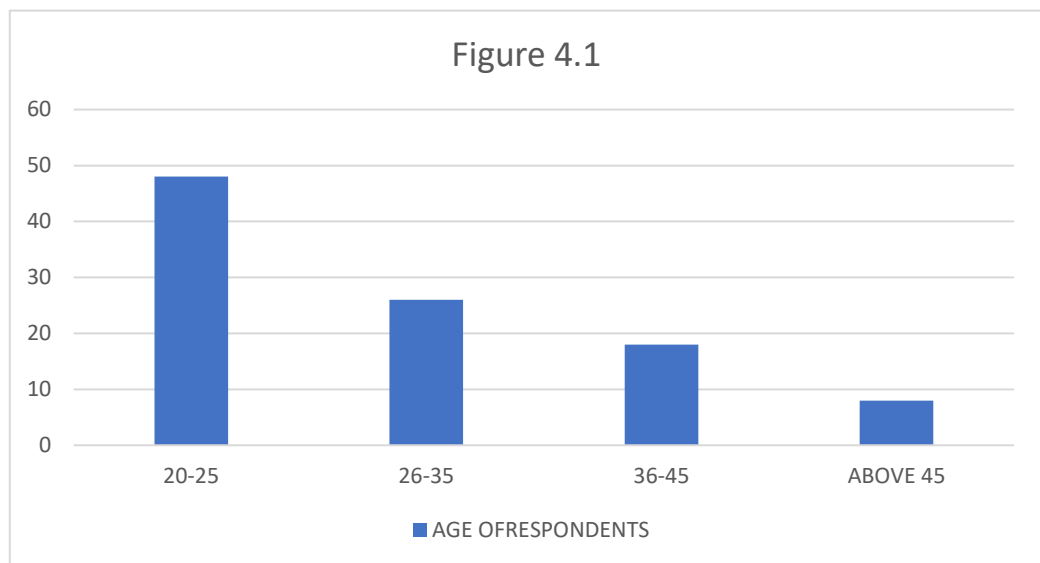
4.1 ANALYSIS BASED ON AGE

The following table shows the classification of respondents of the basis of age.

Table 4.1
Classification on the basis of age

AGE	RESPONDENTS	PERCENTAGE
20-25	48	48
26-35	26	26
36-45	18	18
Above 45	8	8
Total	100	100

(Source: primary data)



Interpretation: From the Table 4.1 and Figure 4.1 it is clear that among the four age groups, respondents among 20-25 age group make use of digital transactions. Among the 100 respondents, 48% were included in 20-25 age group followed by 26% in 26-35 age group. It may be the youth that prefer payment and receipt through cashless transaction.

4.2 ANALYSIS BASED ON GENDER

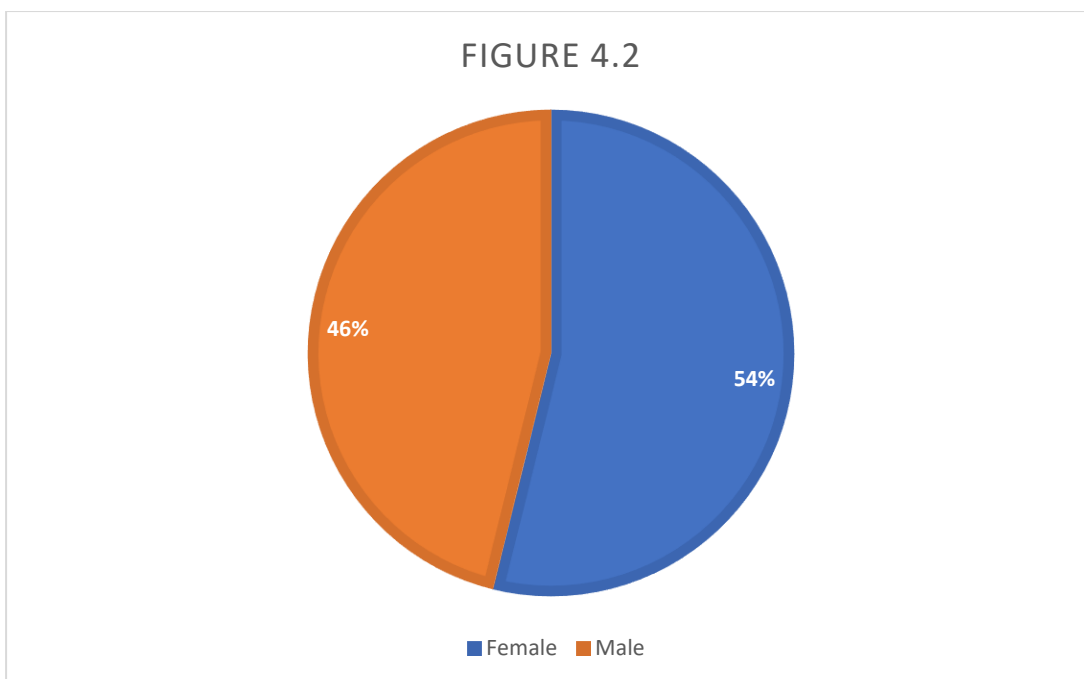
The following table shows the classification of respondents on basis of gender.

Table 4.2

Classification of respondent on basis of gender

GENDER	NO: OF RESPONDENTS	PERCENTAGE
Female	54	54
Male	46	46
Total	100	100

(Source: primary data)



Interpretation: The Table 4.2 and Figure 4.2 gives information regarding gender on cashless transaction. It is very much clear that female respondents are perform cashless transaction little more than male respondents.54% of respondents are female and 46% of respondents are male. Here the increase in female respondents are due to convenience. Even if there is little difference in participation almost female and male are performing cashless transaction equally.

4.3 ANALYSIS BASED ON EDUCATION

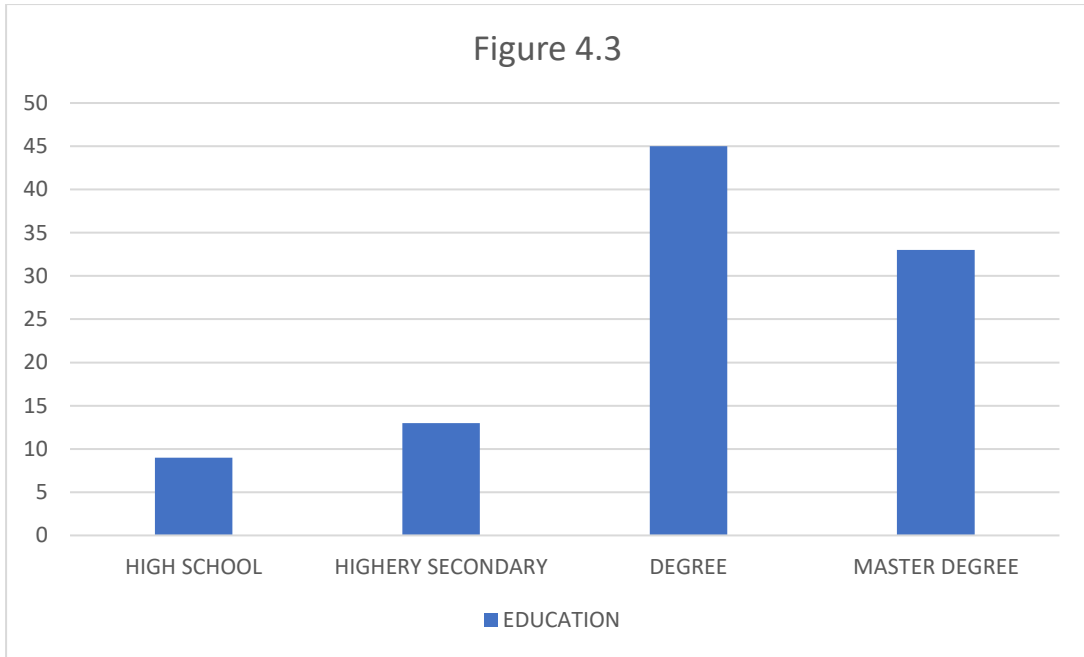
The following table shows the classification of respondents on the basis of education.

Table 4.3

Classification on the basis of education

EDUCATION	NO: OF RESPONDENTS	PERCENTAGE
HIGH SCHOOL	9	9
HIGHERY SECONDARY	13	13
DEGREE	45	45
MASTER DEGREE	33	33
Total	100	100

(Source: primary data)



Interpretation : The table 4.3 and Figure 4.3 shows respondents with degree qualification are performing cashless transaction more. Among 100 respondents,45% are degree qualified,33% are qualified master degree. High school qualified are 9% of respondents, they are the one who performed cashless transaction rarely or occasionally.

4.4 ANALYSIS BASED ON OCCUPATION

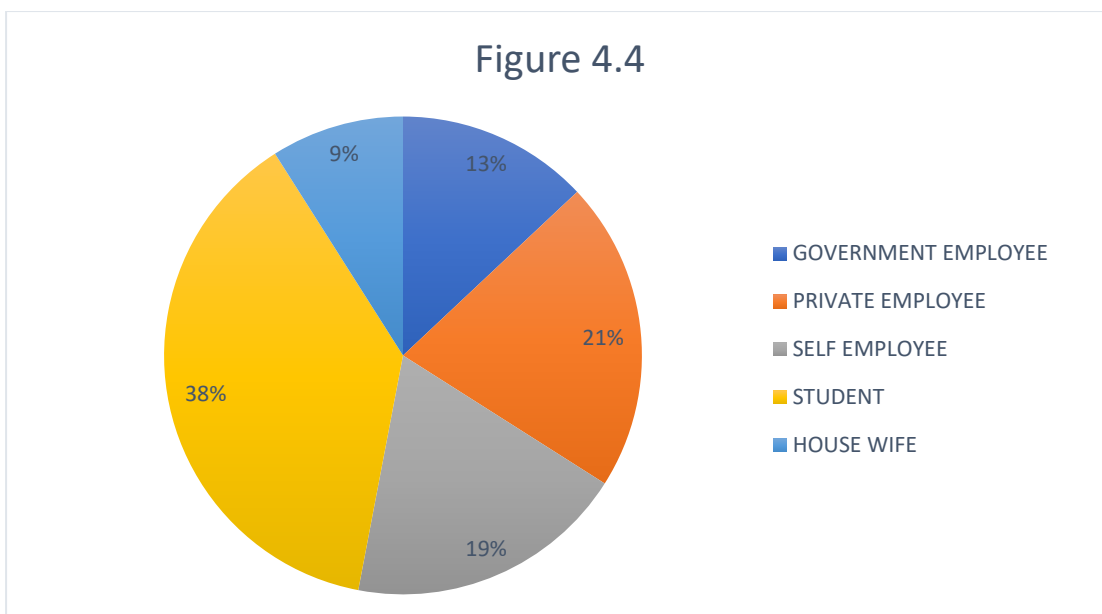
The following table shows classification of respondents on the basis of occupation.

Table 4.4

Classification on the basis of occupation

OCCUPATION	RESPONDENTS	PERCENTAGE
GOVERNMENT EMPLOYEE	13	13
PRIVATE EMPLOYEE	21	21
SELF EMPLOYEE	19	19
STUDENT	38	38
HOUSE WIFE	9	9
TOTAL	100	100

(Source: primary data)



Interpretation: From the Table 4.4 and Figure 4.4 it is clear that among the various occupation, it is students mainly youth are very much interested in performing cashless transaction. Thus 38% of respondents are student followed by private employee and self-employee with 21% and 19% respectively.

4.5 ANALYSIS BASED ON MONTHLY INCOME

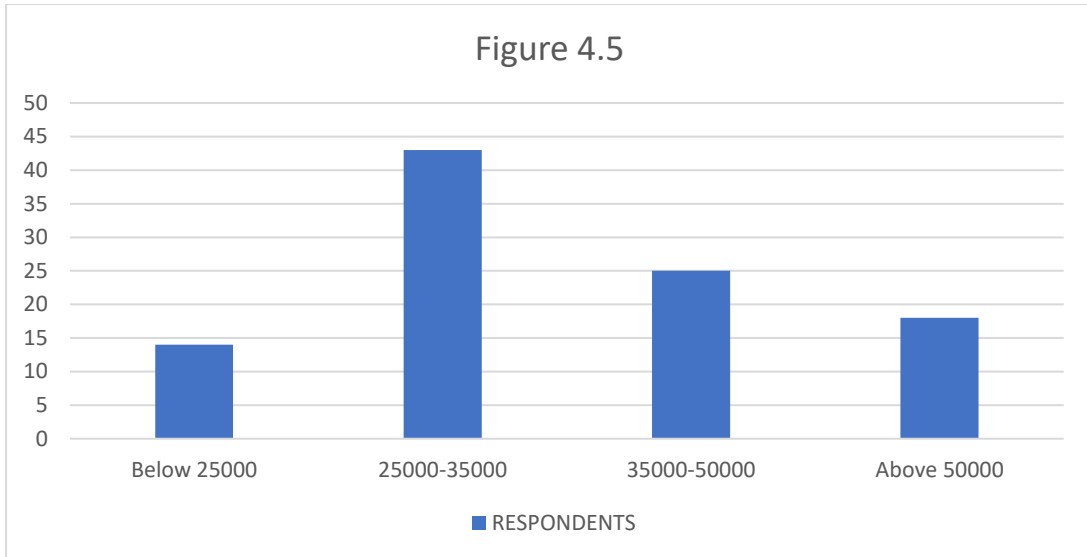
The following table shows classification of respondents regarding income.

Table 4.5

Classification based on monthly income

MONTHLY INCOME	RESPONDENTS	PERCENTAGE
Below 25000	14	14
25000-35000	43	43
35000-50000	25	25
Above 50000	18	18
TOTAL	100	100

(Source: primary data)



Interpretation: From the Table 4.5 and Figure 4.5 it is clear that respondents with monthly income between 25000-35000 are using cashless transactions. 43% of respondents are belonging to income level of 25000-35000. Even the lowest category of income i.e. below 25000 are 14% of total respondents. Respondents with higher income level are performing at 25% and 18% of total respondent.

4.6 ANALYSIS ON HOW FREQUENTLY DIGITAL TRANSACTIONS ARE PERFORMED.

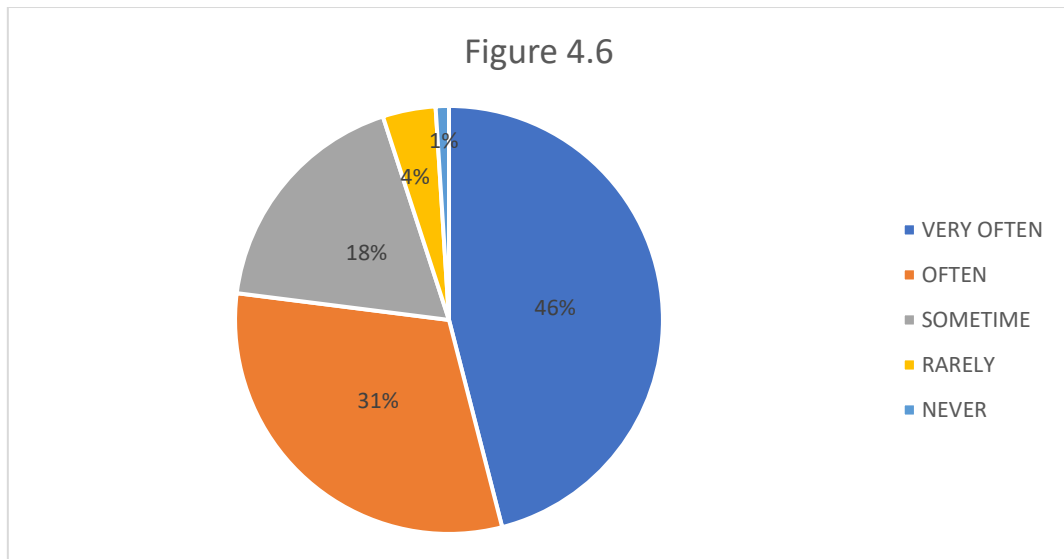
The following table shows classification of respondents on basis of how frequently cashless transactions are performed.

Table 4.6

Classification based on how frequently digital transaction are performed

PERFORMANCE	RESPONDENT	PERCENTAGE
VERY OFTEN	46	46
OFTEN	31	31
SOMETIME	18	18
RARELY	4	4
NEVER	1	1
TOTAL	100	100

(Source: primary data)



Interpretation: The Table 4.6 and Figure 4.6 shows that among 100 respondents 46% of respondents are performing cashless transaction very often and 31% of respondents performing often frequently. It shows that digitalisation is achieving i.e. more than 50% are using cashless transactions very well. Since the participation is higher, non performing part is negligible.

4.7 ANALYSIS ON BASED OF FACTORS INFLUENCING CASHLESS TRANSACTIONS

The following table shows various factors influencing cashless transaction.

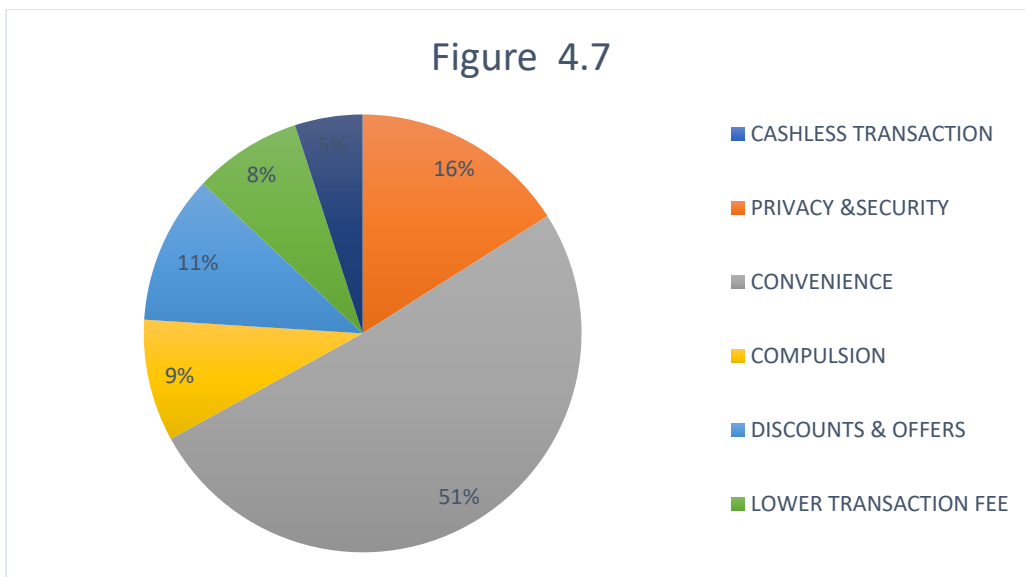
Table 4.7

Classification based on factors influencing cashless transactions

FACTORS INFLUENCING CASHLESS TRANSACTION	NO: OF RESPONDENTS	PERCENTAGE
PRIVACY & SECURITY	16	16
CONVENIENCE	51	51
COMPULSION	9	9
DISCOUNTS & OFFERS	11	11

LOWER TRANSACTION FEE	8	8
SHORTAGE OF CURRENCY NOTES	5	5
TOTAL	100	100

(Source: primary data)



Interpretation: From the Table 4.7 and Figure 4.7 it is clear that among the various factors, 51% of respondents says that convenience is the factor that boosts them to perform cashless transaction. Privacy and security (16% of respondents) and discount and offers (11% of respondents) are considered as next level boosting factors for cashless transaction.

4.8 ANALYSIS ON EFFECT/IMPACT OF CASHLESS TRANSACTIONS

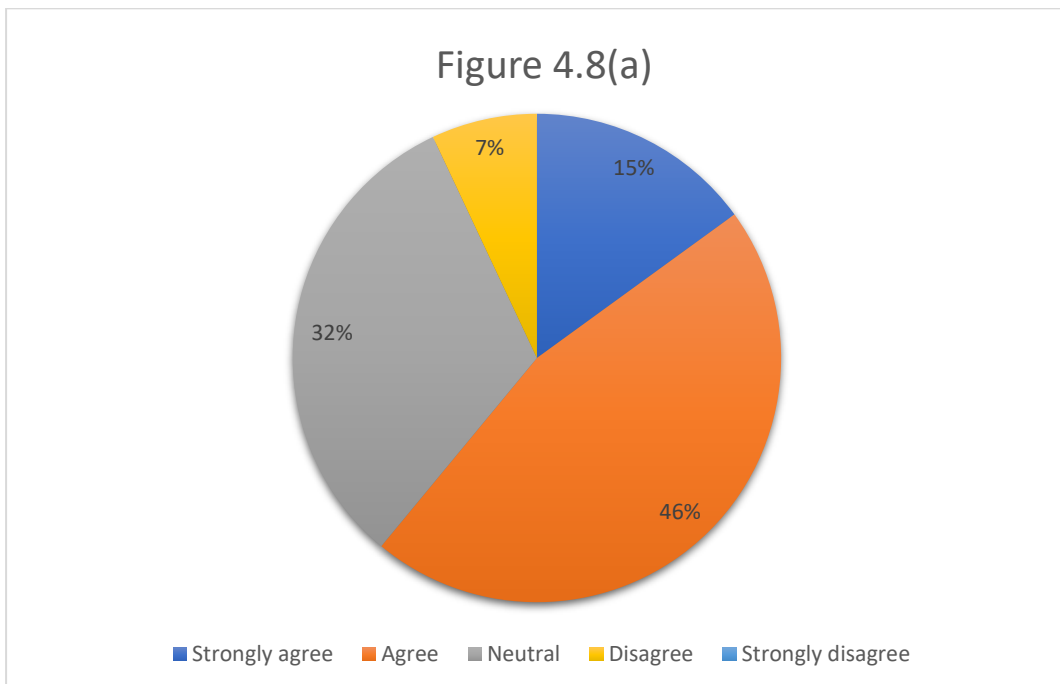
The following table shows classification of respondent on basis of opinion on the effect of cashless transaction

Table 4.8(a)

Classification related to the effect of Lower crime

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	15	15
Agree	46	46
Neutral	32	32
Disagree	7	7
Strongly disagree	0	0
Total	100	100

(Source: primary data)



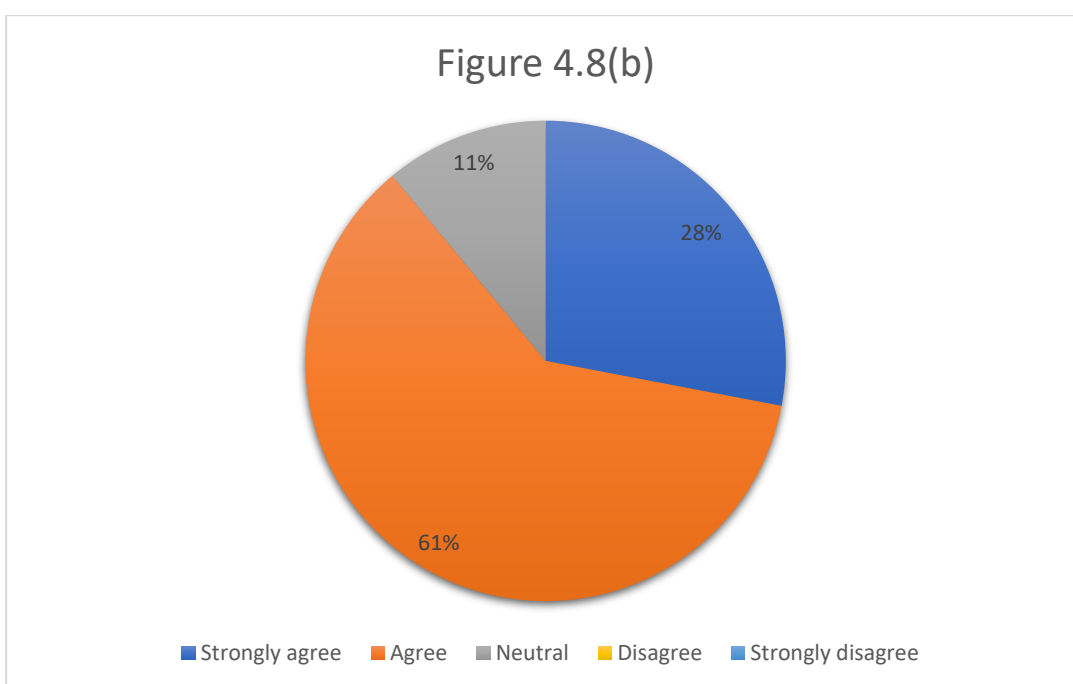
Interpretation: From table 4.8(a) and figure 4.8(a) it is clear that 46% of respondent argues that there is only lower crime because there is no tangible money to steal.

Table 4.8(b)

Classification related to the effect of less time and effort

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	28	28
Agree	61	61
Neutral	11	11
Disagree	0	0
Strongly disagree	0	0
Total	100	100

(Source: primary data)



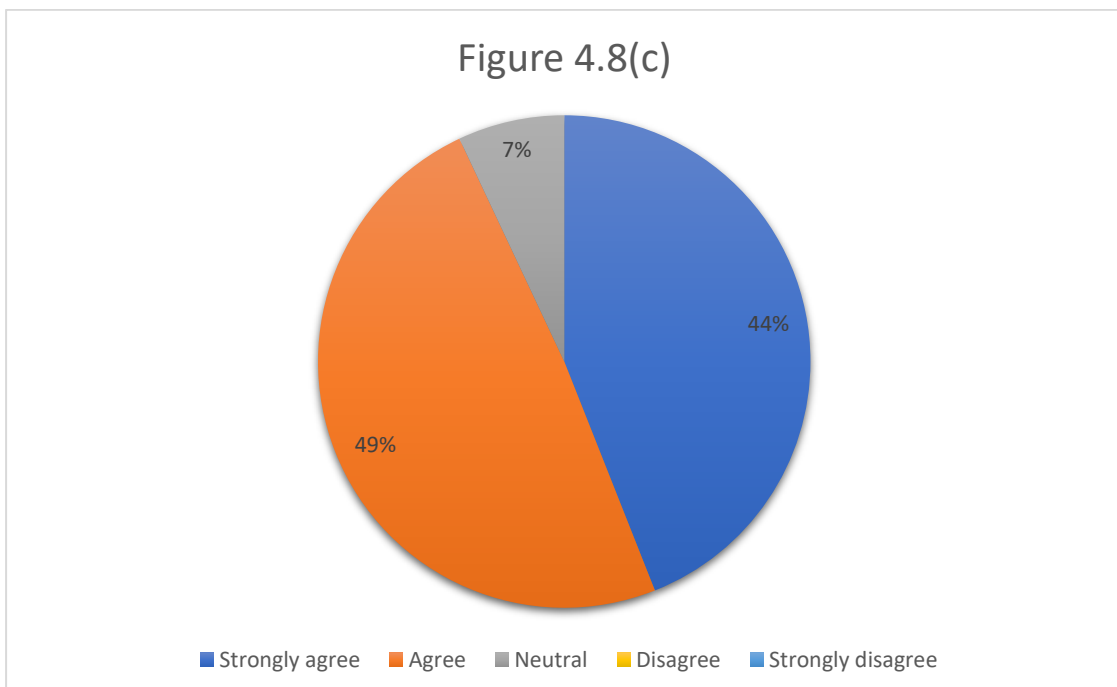
Interpretation: From table 4.8(b) and figure 4.8(b) we get the information that 61% of respondent says that it requires only less time and cost while doing cashless transactions.

Table 4.8(c)

Classification related to the effect of easier currency exchange

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	44	44
Agree	49	49
Neutral	7	7
Disagree	0	0
Strongly disagree	0	0
Total	100	100

(Source: primary data)



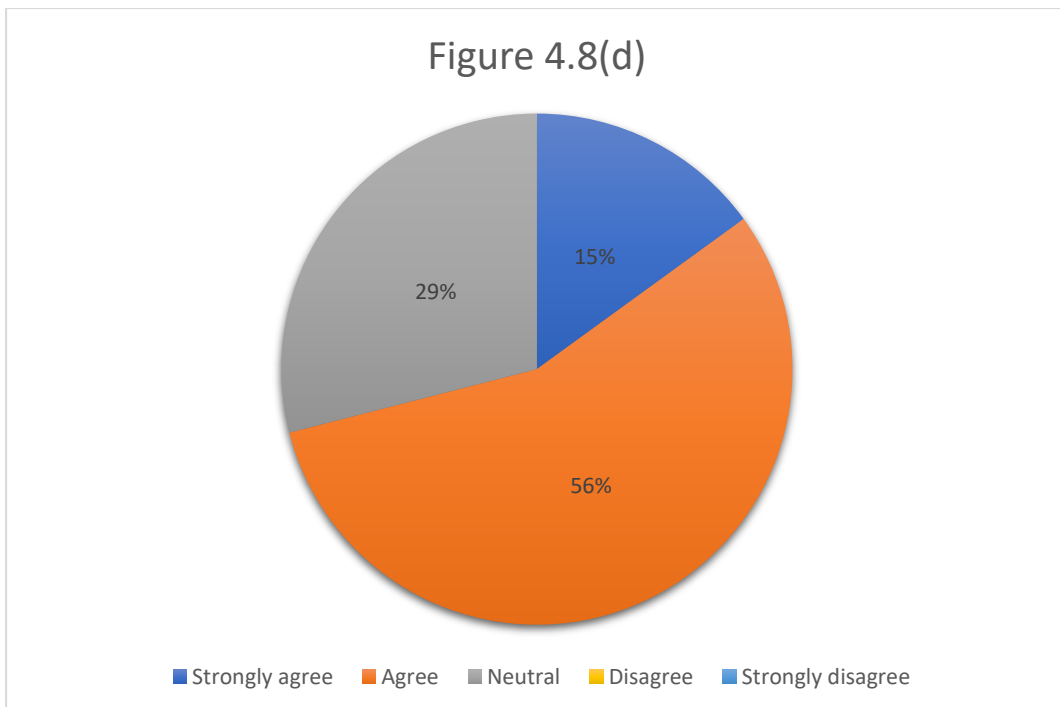
Interpretation: From table 4.8(c) and figure 4.8(c) it is clear that easier currency exchange while travelling internationally as it is supported by strongly by 49% and 44% of respondent are also agreed to that.

Table 4.8(d)

Classification related to the effect of financial inclusion

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	15	15
Agree	56	56
Neutral	29	29
Disagree	0	0
Strongly disagree	0	0
Total	100	100

(Source: primary data)



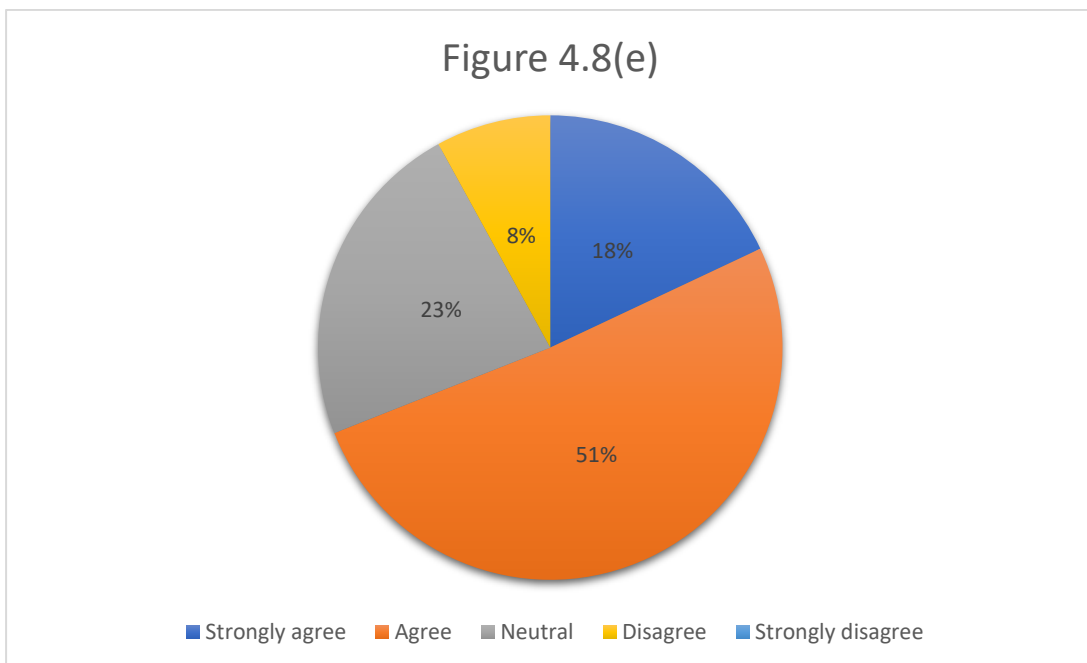
Interpretation: From table 4.8(d) and figure 4.8(d) it is clear that 15% of respondents are strongly supports that there is increase in financial inclusion. And also 56% are agrees to the same.

Table 4.8(e)

Classification related to the effect of interaction with banking system

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	18	18
Agree	51	51
Neutral	23	23
Disagree	8	8
Strongly disagree	0	0
Total	100	100

(Source: primary data)



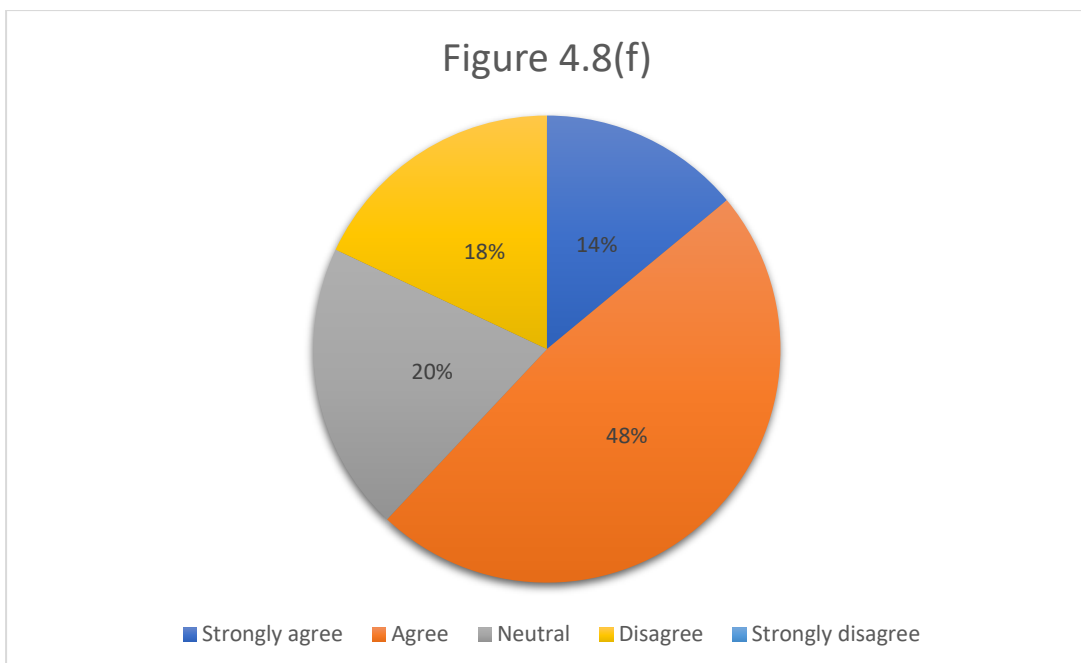
Interpretation: From table 4.8(e) and figure 4.8(e) it is clear that 51% of respondents agrees that through cashless transaction there involves interaction with banking system.

Table 4.8(f)

Classification related to the effect of expose personal information

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	14	14
Agree	48	48
Neutral	20	20
Disagree	18	18
Strongly disagree	0	0
Total	100	100

(Source: primary data)



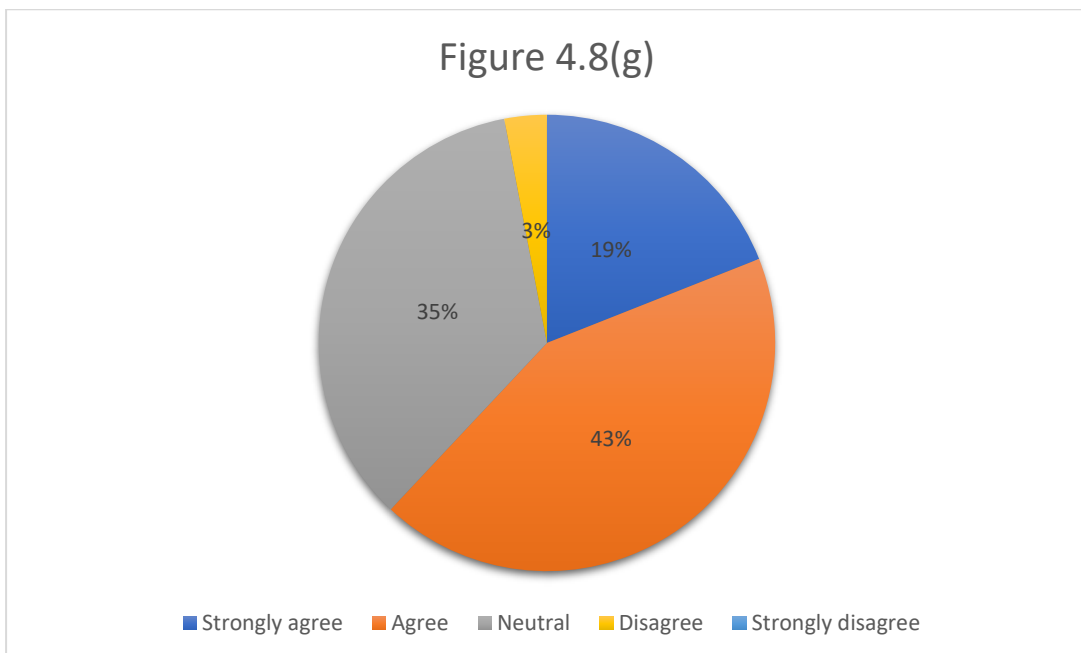
Interpretation: From table 4.8(f) and figure 4.8(f) it is clear that 14% are strongly agree that there is expose of personal information to data breach. It is also agreed by 48%.

Table 4.8(g)

Classification related to the effect of technology problem

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	19	19
Agree	43	43
Neutral	35	35
Disagree	3	3
Strongly disagree	0	0
Total	100	100

(Source: primary data)



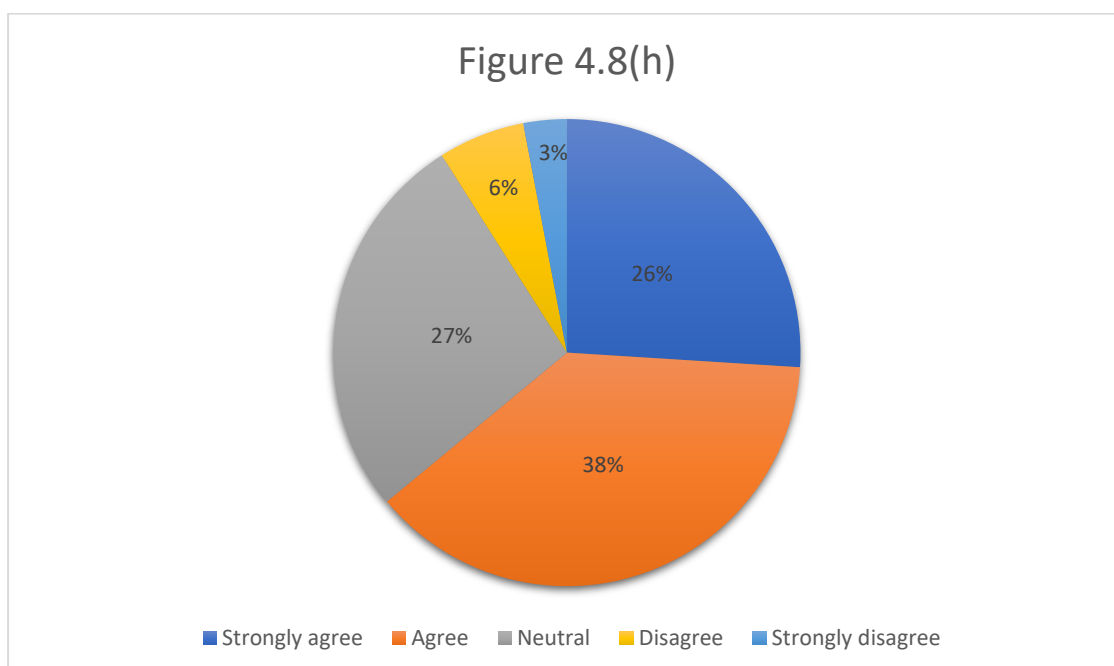
Interpretation: From table 4.8(g) and figure 4.8(g) it is clear that 43% of respondent are agreeing that there is technological problem while dealing with.

Table 4.8(h)

Classification related to the effect of overspending

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	26	26
Agree	38	38
Neutral	27	27
Disagree	6	6
Strongly disagree	3	3
Total	100	100

(Source: primary data)



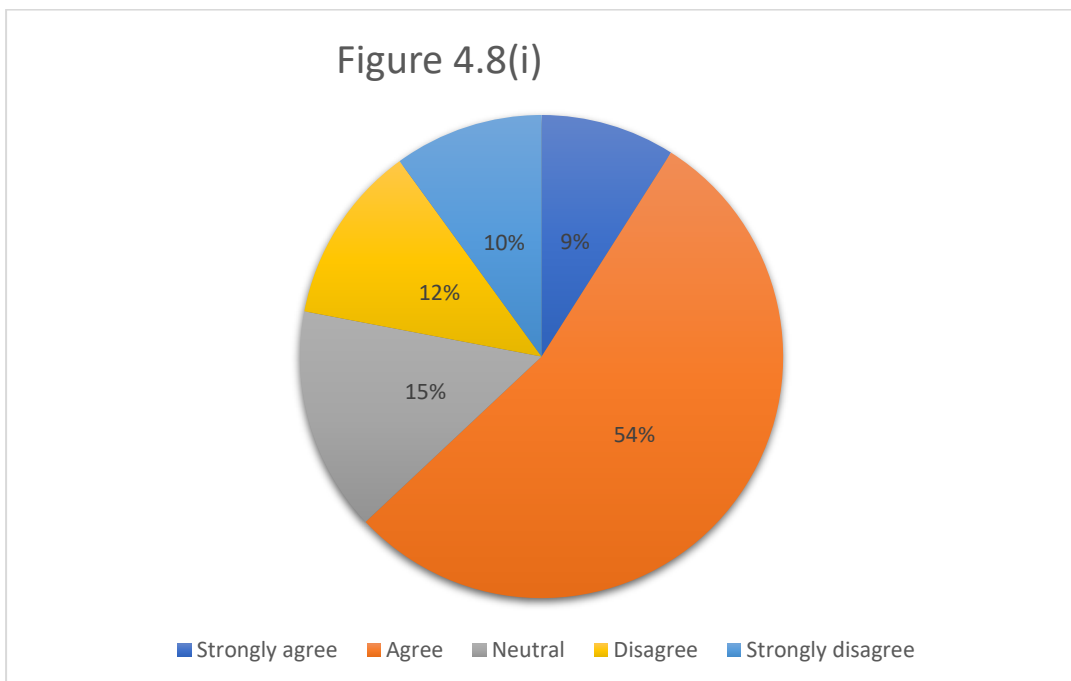
Interpretation: From table 4.8(h) and figure 4.8(h) it is clear that 26% of respondents are strongly agrees that there is chance of over spending.

Table 4.8(i)

Classification related to the effect of cyber attack

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	9	9
Agree	54	54
Neutral	15	15
Disagree	12	12
Strongly disagree	10	10
Total	100	100

(Source: primary data)



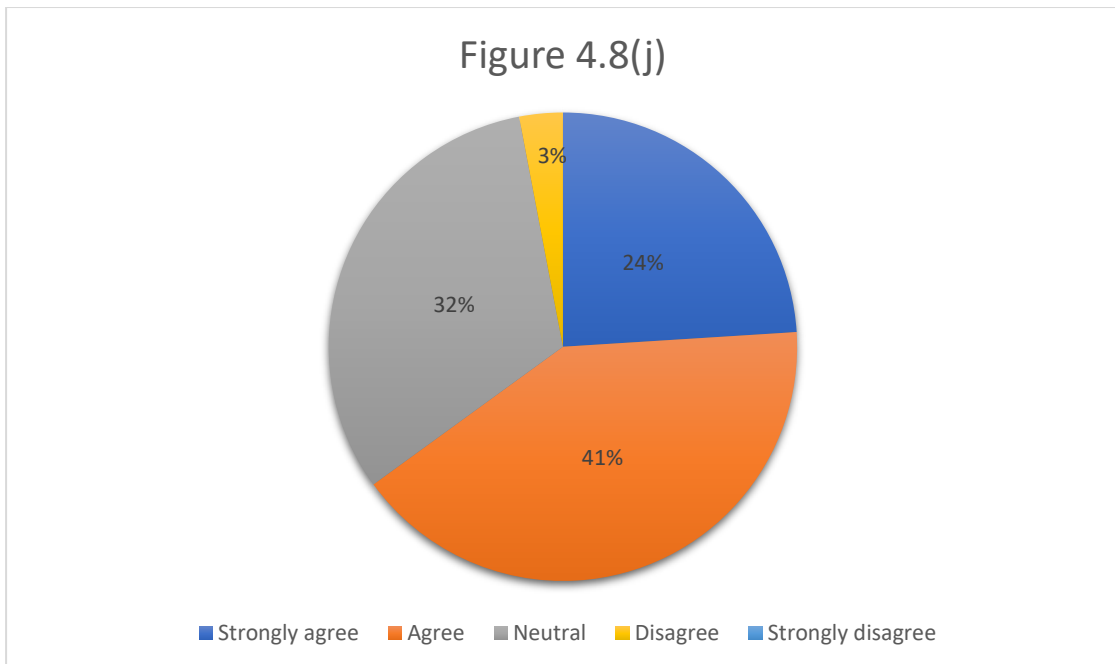
Interpretation: From table 4.8(i) and figure 4.8(i) it is clear that 9% of respondents are strongly agree that there is chance of cyber-attack.54% are supporting the same.

Table 4.8(j)

Classification related to the effect of less liquidity

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	24	24
Agree	41	41
Neutral	32	32
Disagree	3	3
Strongly disagree	0	0
Total	100	100

(Source: primary data)



Interpretation: From table 4.8(j) and figure 4.8(j) it is clear that 41% agrees that there is only less liquidity as dealing with plastic money. The following table shows mean and standard deviation of various impact of cashless transactions.

Table 4.8(k)

Mean and standard deviation of various impact /effect of cashless transactions

	N	MIN	MAX	SAMPLE MEAN	SAMPLE STANDARD DEVIATION
Lower crime	100	1	5	3.80	0.74
Less time & cost	100	1	5	4.19	0.51
Easier currency exchange	100	1	5	4.20	0.64
Increase financial inclusion	100	1	5	3.73	0.52
More interaction with banks	100	1	5	4.03	0.67
Expose personal information	100	1	5	3.5	0.80
Technology problem	100	1	5	3.73	0.74
Chance of overspending	100	1	5	3.61	1.00
Chance of cyber attack	100	1	5	3.75	0.92
Create less liquidity	100	1	5	3.68	0.78

(Source: primary data)

Interpretation: From the Table 4.8(k) it is clear that among the following effect of cashless transaction easier currency exchange while travelling internationally with mean 4.20 and less time and cost with mean 4.19 are considered as reliable effects.

While considering standard deviation, it is less time and cost with standard deviation 0.51 and increase financial inclusion with 0.52 are less deviated from mean thus these two are also reliable. Thus, easier currency exchange while travelling internationally, less time and cost and increase financial inclusion are considered as most reliable effects of cashless transaction.

4.9 ANALYSIS BASED ON CHALLENGES OF CASHLESS TRANSACTION

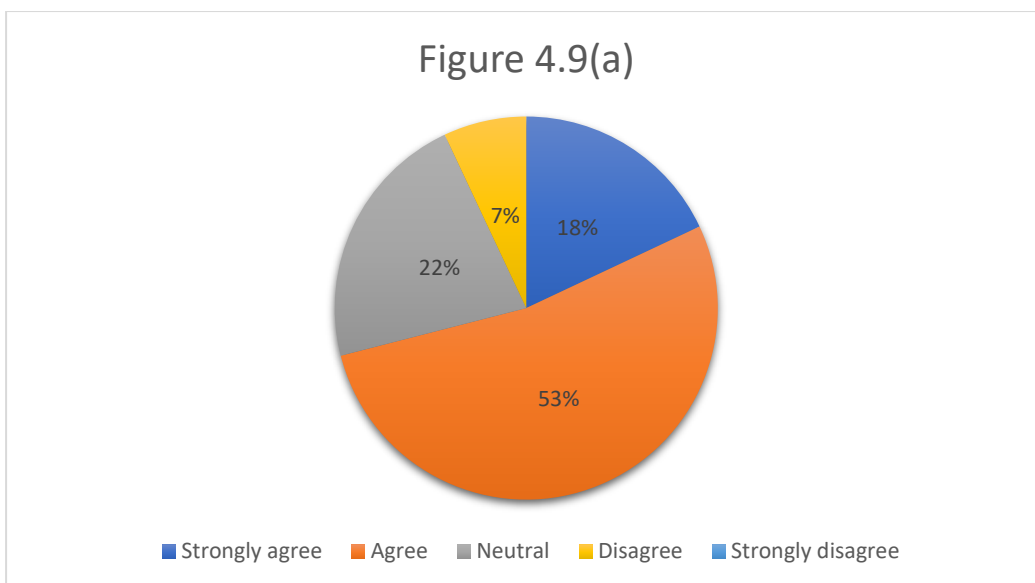
The following table shows classification of respondent on basis of opinion on the effect of cashless transaction

Table 4.9(a)

Classification related to the challenge of lack of digital literacy

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	18	18
Agree	53	53
Neutral	22	22
Disagree	7	7
Strongly disagree	0	0
Total	100	100

(Source: primary data)



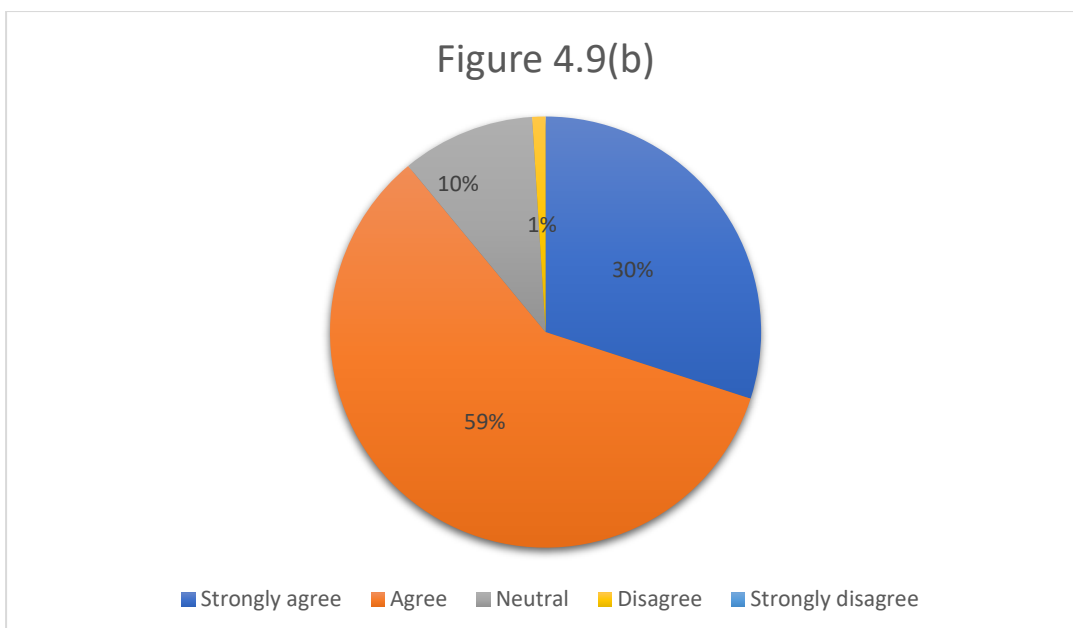
Interpretation: From table 4.9(a) and figure 4.9(a) it is clear that 53% are agrees that lack of digital literacy is a challenge during the handing of e-payment softwares.

Table 4.9(b)

Classification related to the challenge of lack of internet connectivity

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	30	30
Agree	59	59
Neutral	10	10
Disagree	1	1
Strongly disagree	0	0
Total	100	100

(Source: primary data)



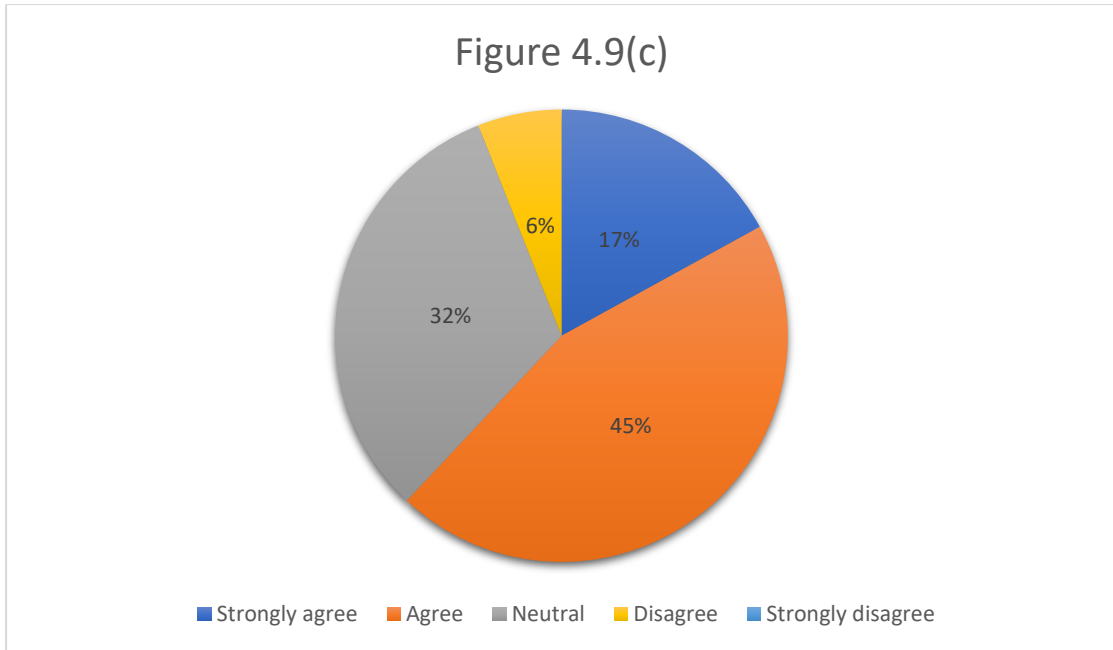
Interpretation: From table 4.9(b) and figure 4.9(b) it is clear that 30% of respondent strongly agree that lack of internet connectivity reduce access to digital platform.

Table 4.9(c)

Classification related to the challenge of online fraud

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	17	17
Agree	45	45
Neutral	32	32
Disagree	6	6
Strongly disagree	0	0
Total	100	100

(Source: primary data)



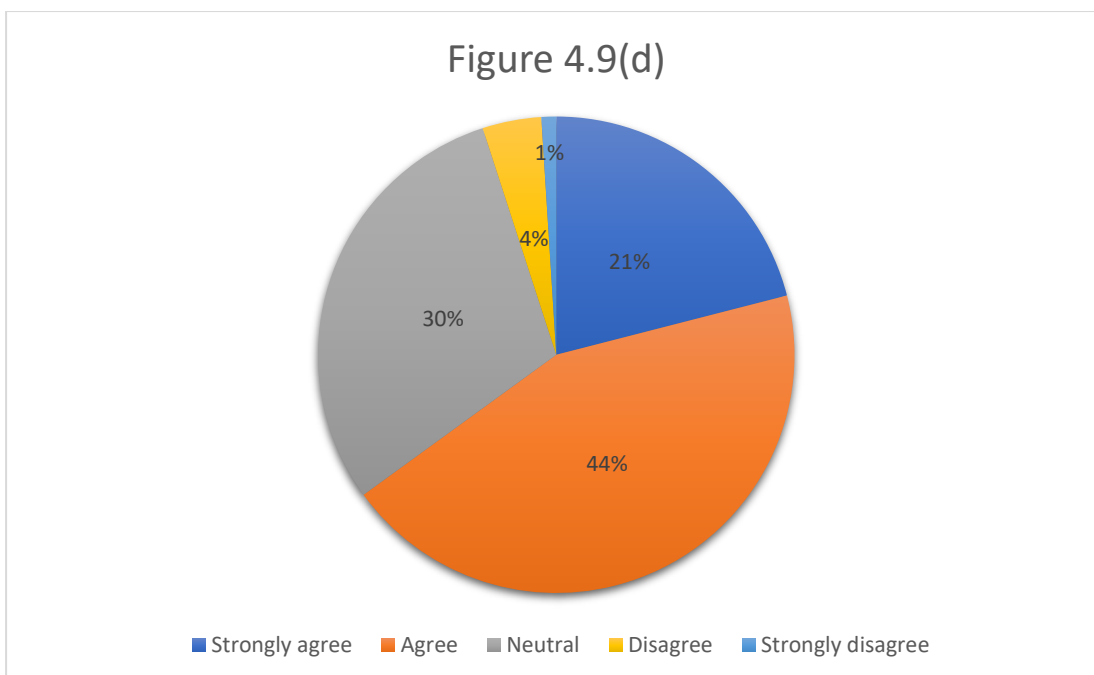
Interpretation: From table 4.9(c) and figure 4.9(c) it is clear that 45% of respondent agree there is online fraud and risk of hacking.

Table 4.9(d)

Classification related to the challenge of limited cost-effective way

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	21	21
Agree	44	44
Neutral	30	30
Disagree	4	4
Strongly disagree	1	1
Total	100	100

(Source: primary data)



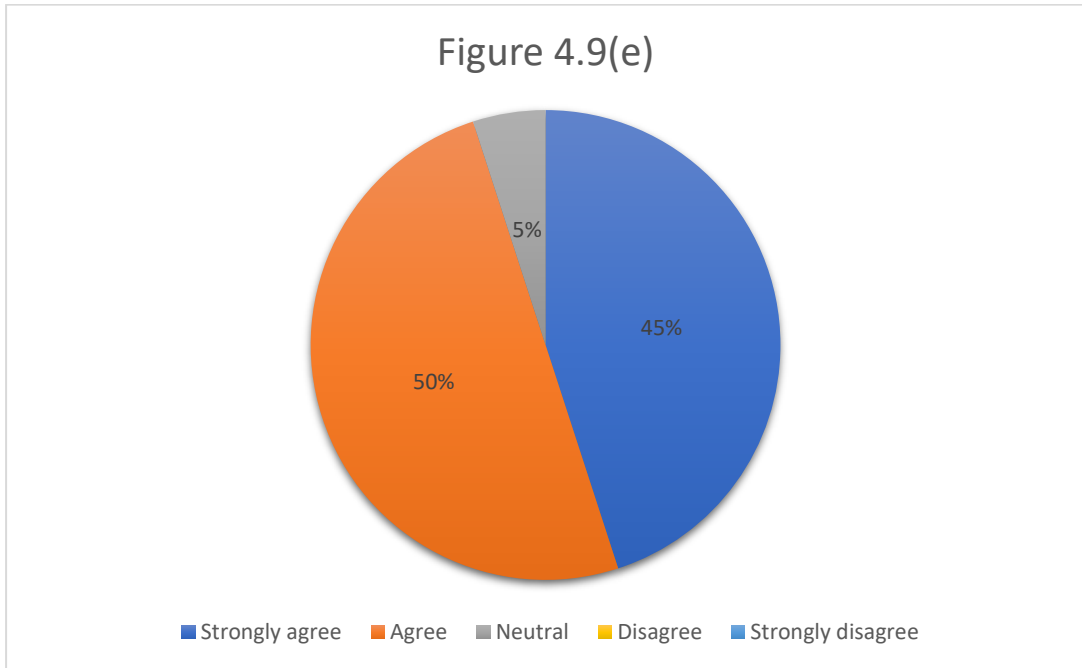
Interpretation: From table 4.9(d) and figure 4.9(d) it is clear that 44% of respondent says that there is only limited cost-effective way to use e-payment.

Table 4.9(e)

Classification related to the challenge of poor or those without bank a/c cannot access

OPINION	NO: OF RESPONDENT	PERCENTAGE
Strongly agree	45	45
Agree	50	50
Neutral	5	5
Disagree	0	0
Strongly disagree	0	0
Total	100	100

(Source: primary data)



Interpretation: From table 4.9(e) and figure 4.9(e) it is clear that 45% of respondent are strongly agrees that poor or those without bank account cannot perform cashless transactions. It is also agreeing by 50% of respondent.

The following table shows mean and standard deviation of various challenges of cashless transaction

Table 4.9(f)

Mean and standard deviation of various challenges of cashless transaction

	N	MIN	MAX	SAMPLE MEAN	SAMPLE STANDARD DEVIATION
Lack of digital literacy	100	1	5	4	0.77
Lack of internet connectivity	100	1	5	4.08	0.68
Online fraud and risk of hacking	100	1	5	3.90	0.88

Limited availability of cost-effective way	100	1	5	3.80	0.83
Poor or those without bank account cannot make cashless transaction	100	1	5	4.32	0.68

(Source: primary data)

Interpretation: Table 4.9(f) shows various challenges of cashless transaction. Among these, poor or those without bank account cannot make cashless transaction and lack of internet connectivity are considered reliable as their mean are 4.43 and 4.08 respectively which is higher. While considering standard deviation also these two challenges are less deviate from mean such as 0.68 each. Lack of digital literacy can also be considered as its mean is 4 and deviates only 0.77 from mean.

4.10 ANALYSIS ON BASIS OF GOVERNMENT ROLE

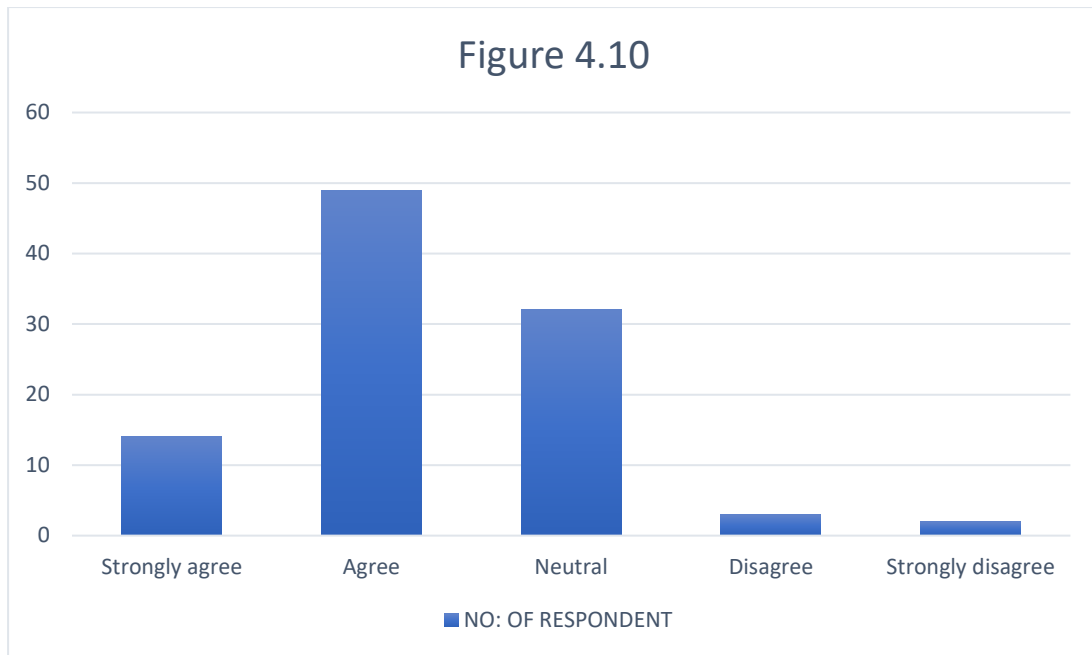
The following table shows the classification of respondent regarding effective role of government in reinforcing/achieving cashless economy.

Table 4.10

Classification of respondents regarding government role

	RESPONDENT	PERCENTAGE
Strongly agree	14	14
Agree	49	49
Neutral	32	32
Disagree	3	3
Strongly disagree	2	2
TOTAL	100	100

(Source: primary data)



Interpretation: Table 4.10 and Figure 4.10 it is clear that 49% of respondents agrees that government perform effective role in reinforcing/achieving cashless economy.14% of respondents are strongly agreeing to the same. Thus, it is very much clear that the aim of becoming digital India is achieving effectively through government measures. More than half of respondents are with opinion that government had taken necessary measures for achieving cashless economy.

4.11 ANALYSIS ON EFFECT OF AGE ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

To test hypothesis chi square applied (Appendix- II) and the result is given in the table 4.11 below

HYPOTHESIS

H_0 = Age and customer performance in cashless transaction are independent.

H_1 = Age and customer performance in cashless transaction are not independent.

Table 4.11

Chi square test

PARTICULARS	FIGURES
Table value	21.026
Calculated value	64.86
Level of significance	0.05
Degree of freedom	12

(Source: primary data)

Interpretation: Here chi square value is greater than critical value i.e. $64.86 > 21.026$. Therefore H_0 is rejected and H_1 is accepted. So, age and customer performance in cashless transaction are not independent. That means age of respondent have an effect on performing cashless transaction by customers. According to the various age groups there is change in performing cashless transactions.

4.12 ANALYSIS ON EFFECT OF GENDER ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

To test hypothesis chi square applied (Appendix- II) and the result is given in the table 4.12 below

HYPOTHESIS

H_0 = Gender and customer performance in cashless transaction are independent.

H_1 = Gender and customer performance in cashless transaction are not independent.

Table 4.12

Chi square test

PARTICULARS	FIGURES
Table value	9.488
Calculated value	6.023
Level of significance	0.05
Degree of freedom	4

(Source: primary data)

Interpretation: : Here chi square value is lesser than critical value i.e.

$6.023 < 9.488$. Therefore H_0 is accepted and H_1 is rejected. So, gender and customer performance in cashless transaction are independent. It means that gender of respondent does not have any effect or impact in usage of cashless transactions. Whether respondent is male or female, it does not matter in being digitalised.

4.13 ANALYSIS ON EFFECT OF EDUCATION ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

To test hypothesis chi square applied (Appendix- II) and the result is given in the table 4.13 below

HYPOTHESIS

H_0 = Education and customer performance in cashless transaction are independent.

H_1 = Education and customer performance in cashless transaction are not independent.

Table 4.13

Chi square test

PARTICULARS	FIGURES
Table value	21.026
Calculated value	75.85
Level of significance	0.05
Degree of freedom	12

(Source: primary data)

Interpretation: Here chi square value is greater than critical value i.e.

$75.85 > 21.026$. Therefore H_0 is rejected and H_1 is accepted. So, education and customer performance in cashless transaction are not independent. Education of respondent have an effect on performing cashless transactions by customers. Digital literacy has an important role in digital transactions. Thus, there is need of education for better performing cashless transactions.

4.14 ANALYSIS ON EFFECT OF OCCUPATION ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

To test hypothesis chi square applied (Appendix- II) and the result is given in the table 4.14 below

HYPOTHESIS

H_0 = Occupation and customer performance in cashless transaction are independent.

H_1 = Occupation and customer performance in cashless transaction are not independent.

Table 4.14

Chi square test

PARTICULARS	FIGURES
Table value	26.296
Calculated value	29.4
Level of significance	0.05
Degree of freedom	16

(Source: primary data)

Interpretation: : Here chi square value is greater than critical value i.e.

$29.4 > 26.296$. Therefore H_0 is rejected and H_1 is accepted. So, occupation and customer performance in cashless transaction are not independent. Thus, occupation of respondent has an effect on performance of customer in cashless transactions.

According to the occupation their level of income also changes. The one with some balance in account only can have cashless transactions. Thus, customer performance varies with occupation of respondents.

4.15 ANALYSIS ON EFFECT OF MONTHLY INCOME ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

To test hypothesis chi square applied (Appendix- II) and the result is given in the table 4.15 below

HYPOTHESIS

H_0 = Monthly income and customer performance in cashless transaction are independent.

H_1 = Monthly income and customer performance in cashless transaction are not independent.

Table 4.15

Chi square test

PARTICULARS	FIGURES
Table value	21.026
Calculated value	34.19
Level of significance	0.05
Degree of freedom	12

(Source: primary data)

Interpretation: : Here chi square value is greater than critical value i.e.

$34.19 > 21.026$. Therefore H_0 is rejected and H_1 is accepted. So monthly income and customer performance in cashless transaction are not independent. According to the income of the respondent there is change in usage of cashless transactions.

CHAPTER V
FINDINGS, CONCLUSION AND SUGGESTIONS

FINDINGS

1. 48% of respondent belongs to the age group of 20-25. And they are the one who prefer payment and receipt through cashless transaction more.
2. Among the respondent 54% are female and rest of them belong to male category.
3. Majority of the respondent are degree qualified and qualified master degree. Others are performing cashless transactions rarely and occasionally.
4. Around 38% of respondent are students followed by private employee and self-employee with 21% and 19% respectively.
5. 43% of respondent are belonging to income level of 25000-35000.
6. Among the 100 respondents, 46% of the respondent are performing the cashless transaction very often. Even 31% are performing often frequently.
7. Majority of the respondent are of opinion that convenience is the factor that boost them to perform cashless transaction. Privacy and security and discount and offer are next level boosting factor.
8. Majority opinioned that there involves lower crime in cashless transaction as it involves plastic money.
9. Majority says that it requires less time and effort in using digital transaction.
10. 49% of respondent strongly agree that cashless transaction make possible easier currency exchange while travelling internationally
11. Majority of the opinion that financial inclusion is possible through cashless transaction.
12. Through cashless transaction there involves interaction with banking system.
13. There is expose of personal information to data breach through paying or transacting cashless.
14. Technological problem while using the internet or accessories may affect the performance in cashless transaction.
15. There is chance of overspending as cashless transaction are mainly done through debit cards and credit cards.
16. Majority are of opinion that there is chance of cyber-attack.
17. Since cashless transaction dealing with plastic money it provides less liquidity.
18. Among the various effect of cashless transaction, majority of the respondent are of opinion that, easier currency exchange while travelling internationally and less time and effort in using are considered as reliable effect.

19. 53% of respondent are of the opinion that lack of digital literacy effects the usage of cashless transaction.
20. Difficulty in accessing to internet connectivity is considered as a challenge in cashless transaction.
21. There involve online fraud and risk of hacking while using cashless transaction.
22. Nowadays customer prefer cashless transaction frequently but even there is limited cost-effective way are available.
23. The one who are poor and those without bank account cannot perform cashless transaction.
24. Among the various challenges of cashless transaction, poor and those without bank account cannot access to cashless transaction and lack of internet connectivity are considered as reliable.
25. Majority of respondent are of the opinion that government had perform effective role in reinforcing/achieving cashless economy.
26. Age and customer performance have an effect on performing cashless transaction.
27. Gender of respondent have no effect on online transaction .Whether respondent is male or female, it does not matter in being digitalised.
28. Education of respondent have an effect on performing cashless transaction. Thus, there is need of education for better performance.
29. Occupation of respondent have an effect on being digitalised. Therefore, customer performance varies with occupation.
30. Monthly income of respondent and customer performance in cashless transaction are related. Based on the income level there is change in usage also.

CONCLUSION

The usage of digital payment apps day by day getting more familiarity in our country with 440 percentages increased after demonetization in 2016. As per Reserve Bank of India (RBI) and National Payments Corporation of India (NPCI), the cashless transactions had been more intensive in familiar channels such as NEFT, Mobile Wallets, Mobile Banking, BHIM, Banking Cards and Internet Banking etc... internet, Mobile, Android and IOS is most required for each digital payment apps to do any transactions. In recent days' the number of users has been increasing day by day with more number of young and adults, particularly the usage of digital payment apps by student and employees who is working under government and private sector. in overall all the digital payment apps is most benefit to the users in terms of quick payment, avoiding to carry physical cash, save time, high secured payment, getting discounts and offer, easy recharge and green payment system etc...Hence the posture of Indian citizens is shift which is preference an excellent begin-up for cashless or less coin based economy. This will induce India towards more digital and developed economy in India.

Present study has made an attempt to understand customer perception regarding digital payment. It was found that demographic factor except gender have much impact on the adoption of the digital payment. Chi square computation supported this finding as there was signification difference is perceived by the respondents on the basis of age,education,occupation and monthly income. It was only gender of the respondents where no signification difference is perceived by the respondents. It indicates that adoption of digital payment is influenced by education of the customer most. If a person has studied beyond matriculation and internet knowledge, he or she will be inclined to use the digital payment mode. The growth of users of Smartphone and internet penetration in such area also facilitated the adoption of digital payment.

The findings reveal that while people are getting comfortable with cashless payments, some kind of negative perceptions are holding back many from adopting the new system. The negative perceptions are like security problems, poor network coverage,

technological problem, lack of users' knowledge on technology, poor or those without bank account cannot access to cashless transaction. Convenience in use of cashless transactions and incentive system are the positive signs for the progress of cashless Payments. Finally, the study concludes may not become a cashless economy unless the perception of the people will be rightly addressed by the government and the banking institutions. They should pave the way for the safe and secure mean to cashless transactions.

SUGGESTIONS

- Creating and Improving the financial literacy of the people by organising campaigns, street shows, class room teaching and individual financial counselling.
- The government should make available the necessary infrastructure like appropriate internet connectivity.
- Government should make emphasis on reducing the cost of internet connectivity and cost of other necessary equipment.
- There should be adequate legislation on all aspects of the operation of the cashless system so that both operators of the system and public can be adequately protected.
- Government should make concerned efforts to design an internet security framework to check online fraud so that public can be assured and protected against cyber-attack and fraud.
- Motivate shopkeepers in rural areas to accept cashless payment instead of cash so that even people in rural areas also prefer cashless transactions.

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APPENDIX

APPENDIX-I

QUESTIONNAIRE

Evaluation of effectiveness of cashless transaction in the perspective of customers

This questionnaire is a part of the project titled '**Evaluation of effectiveness of cashless transaction in the perspective of customers**'. Kindly provide your sincere and genuine responses. I hereby declare that the information collected through this will be used only for academic purposes.

1. Name :

2. Age :

20-25 26-35 36-45 Above 45

3. Gender :

Female Male

4. Education :

High school Higher secondary
 Degree Master degree

5. Occupation :

Government employee Private employee Self employee
 Student House wife Other

6. Monthly income:

Below 25000 25000-35000 35000-50000 Above 50000

7. How frequently you perform digital transactions?

Very often Often Sometime Rarely Never

8. Which among these boost you to perform cashless transaction?

- | | |
|--|---|
| <input type="checkbox"/> Privacy and security | <input type="checkbox"/> Convenience |
| <input type="checkbox"/> Compulsion | <input type="checkbox"/> Discount and offers |
| <input type="checkbox"/> Lower transaction fee | <input type="checkbox"/> Shortage of currency notes |
| <input type="checkbox"/> Other | |

9. How would you describe impact or effect of cashless transaction?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Lower crime because there is no tangible money to steal					
Less time and cost in handling paper money					
Easier currency exchange while travelling internationally					
Increase financial inclusion					
More interaction with banking system					
Expose your personal information to possible data breach					
Technology problem can leave you with no access to money					
Chance of overspending					
Chance of cyber attacks					
Dealing with plastic money create less liquidity					

10. How would you describe challenges of cashless transaction methods?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Lack of digital literacy effect handling e-payment software					
Lack of internet connectivity reduce access to digital platform					
Online fraud and risk of hacking reduce customer protection					
Limited availability of cost effective way to use e-payment					
The poor or those without bank account will have difficulty in paying and receiving payment					

11. Government had made an effective role in reinforcing/achieving cashless economy?

Strongly agree Agree Neutral Disagree Strongly disagree

APPENDIX-II

Chi-square test

1. EFFECT OF AGE ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

PERFORMANCE	20-25	26-35	36-45	Above 45	Total
Very often	29	13	4	0	46
Often	17	9	5	0	31
Sometime	2	4	8	4	18
Rarely	0	0	1	3	4
Never	0	0	0	0	1
Total	48	26	18	8	100

(Source: primary data)

H_0 = Age and customer performance in cashless transaction are independent.

H_1 = Age and customer performance in cashless transaction are not independent.

OBSERVED FREQUENCY(O)	EXPECTED FREQUENCY(E)	(O-E) ² /E
29	22.08	2.17
13	11.96	0.09
4	8.28	2.21
0	3.68	3.68
17	14.88	0.30
9	8.06	0.11
5	5.58	0.06
0	2.48	2.48

2	8.64	5.10
4	4.68	0.10
8	3.24	6.99
4	1.44	4.55
0	1.92	1.92
0	1.04	1.04
1	0.72	0.11
3	0.32	22.45
0	0.48	0.48
0	0.26	0.26
0	0.18	0.18
1	0.08	10.58
		$\sum(O-E)^2/E=64.86$

Degree of freedom=(r-1)(c-1)

$$= (5-1)(4-1) = 4*3 = 12$$

Level of significance = $\alpha = 0.05$

Critical value=21.026

Interpretation: Here chi square value is greater than critical value i.e $64.86 > 21.026$. Therefore H_0 is rejected and H_1 is accepted. So, age and customer performance in cashless transaction are not independent.

2. EFFECT OF GENDER ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

PERFORMANCE	FEMALE	MALE	Total
Very often	20	26	46
Often	17	14	31
Sometime	13	5	18
Rarely	3	1	4
Never	1	0	1

Total	54	46	100
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(Source: primary data)

H_0 = Gender and customer performance in cashless transaction are independent.

H_1 = Gender and customer performance in cashless transaction are not independent.

OBSERVED FREQUENCY(O)	EXPECTED FREQUENCY(E)	(O-E)²/E
20	24.84	0.94
26	21.16	1.107
17	16.74	0.004
14	14.26	0.005
13	9.72	1.107
5	8.28	1.30
3	2.16	0.33
1	1.84	0.38
1	0.54	0.39
0	0.46	0.46
		$\Sigma(O-E)^2/E=6.023$

Degree of freedom= $(r-1)(c-1)$

$$=(5-1)(2-1) = 4*1 = 4$$

Level of significance = $\alpha = 0.05$

Critical value= 9.488

Interpretation: Here chi square value is lesser than critical value i.e. $6.023 < 9.488$. Therefore H_0 is accepted and H_1 is rejected. So, gender and customer performance in cashless transaction are independent.

3. EFFECT OF EDUCATION ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

PERFORMANCE	HIGH SCHOOL	HIGHER SECONDARY	DEGREE	MASTER DEGREE	Total
Very often	0	2	28	16	46
Often	0	5	14	12	31
Sometime	4	6	3	5	18
Rarely	4	0	0	0	4
Never	1	0	0	0	1
Total	9	13	45	33	100

(Source: primary data)

H_0 = Education and customer performance in cashless transaction are independent.

H_1 = Education and customer performance in cashless transaction are not independent.

OBSERVED FREQUENCY(O)	EXPECTED FREQUENCY(E)	(O-E)²/E
0	4.14	4.14
2	5.98	2.65
28	20.7	2.57
16	15.18	0.04
0	2.79	2.79
5	4.03	0.23
14	13.95	0
12	10.23	0.31
4	1.62	3.50
6	2.34	5.72
3	8.1	3.20
5	5.94	0.15

4	0.36	36.80
0	0.52	0.52
0	1.8	1.8
0	1.32	1.32
1	0.09	9.2
0	0.13	0.13
0	0.45	0.45
0	0.33	0.33
		$\sum(O-E)^2/E=75.85$

Degree of freedom=(r-1)(c-1)

$$=(5-1)(4-1) = 4*3 = 12$$

Level of significance = $\alpha = 0.05$

Critical value= 21.026

Interpretation : Here chi square value is greater than critical value i.e.

75.85>21.026. Therefore H_0 is rejected and H_1 is accepted. So, education and customer performance in cashless transaction are not independent.

4. EFFECT OF OCCUPATION ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

Performance	Government employee	Private employee	Self - employee	Student	House wife	Total
Very often	3	9	9	23	2	46
Often	5	8	7	9	2	31
Sometime	2	4	3	6	3	18
Rarely	2	0	0	0	2	4

Never	1	0	0	0	0	1
Total	13	21	19	38	9	100

(Source: primary data)

H_0 = Occupation and customer performance in cashless transaction are independent.

H_1 = Occupation and customer performance in cashless transaction are not independent.

OBSERVED FREQUENCY(O)	EXPECTED FREQUENCY(E)	(O-E)²/E
3	5.98	1.49
9	9.66	0.05
9	8.74	0.01
23	17.48	1.74
2	4.14	1.11
5	4.03	0.23
8	6.51	0.34
7	5.89	0.21
9	11.78	0.66
2	2.75	0.21
2	2.34	0.49
4	3.78	0.01
3	3.42	0.05
6	6.84	0.10
3	1.62	1.18
2	0.52	4.21
0	0.84	0.84

0	0.76	0.76
0	1.52	1.52
2	0.36	7.5
1	0.13	5.82
0	0.21	0.21
0	0.19	0.19
0	0.38	0.38
0	0.09	0.09
		$\sum(O-E)^2/E=29.4$

Degree of freedom=(r-1)(c-1)

$$=(5-1)(5-1) = 4*4 = 16$$

Level of significance = $\alpha = 0.05$

Critical value= 26.296

Interpretation: : Here chi square value is greater than critical value i.e.

29.4>26.296. Therefore H_0 is rejected and H_1 is accepted. So, occupation and customer performance in cashless transaction are not independent.

5. EFFECT OF OCCUPATION ON CUSTOMER PERFORMANCE IN CASHLESS TRANSACTIONS

PERFORMANCE	BELOW 25000	25000- 35000	35000- 50000	ABOVE 50000	TOTAL
VERY OFTEN	10	18	11	7	46
OFTEN	2	23	2	4	31
SOMETIME	2	2	8	6	18
RARELY	0	0	3	1	4

NEVER	0	0	1	0	1
Total	14	43	25	18	100

(Source: primary data)

H_0 = Monthly income and customer performance in cashless transaction are independent.

H_1 = Monthly income and customer performance in cashless transaction are not independent.

OBSERVED FREQUENCY(O)	EXPECTED FREQUENCY(E)	(O-E)²/E
10	6.44	1.97
18	19.78	0.16
11	11.5	0.02
7	8.28	0.19
2	4.34	1.26
23	13.33	7.02
2	7.75	4.27
4	5.58	0.45
2	2.52	0.12
2	7.74	4.26
8	4.5	2.72
6	3.24	2.35
0	0.56	0.56
0	1.72	1.72
3	1	4
1	0.72	0.12
0	0.14	0.14

0	0.43	0.43
1	0.25	2.25
0	0.18	0.18
		$\sum(O-E)^2/E=34.19$

Degree of freedom= $(r-1)(c-1)$

$$= (5-1)(4-1) = 4*3 = 12$$

Level of significance = $\alpha = 0.05$

Critical value= 21.026

Interpretation: : Here chi square value is greater than critical value i.e.

$34.19 > 21.026$. Therefore H_0 is rejected and H_1 is accepted. So monthly income and customer performance in cashless transaction are not independent.