

A STUDY ON USAGE OF ELECTRONIC PAYMENTS DURING ONLINE PURCHASING

Submitted in partial fulfillment of the requirements for the award of

Master of Business Administration

By

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SCHOOL OF MANAGEMENT STUDIES

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with Grade "A" by NAAC | 12B Status by UGC | Approved by AICTE

Jeppiaar Nagar, RAJIV GANDHI SALAI, CHENNAI - 600 119

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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of PURUSHOTHAMAN S (39410164) who have done the Project work entitled A Study on usage of Electronic Payments during online purchasing under my supervision from December 2020 to February 2021.

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DECLARATION

I PURUSHOTHAMAN S (39410164) hereby declare that the Project Report entitled A Study on usage of Electronic Payments during Online Purchasing done by me under the guidance of Dr. A. PALANI., MBA ., M.Phil., Ph. D is submitted in partial fulfillment of the requirements for the award of Master of Business Administration degree.

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ABSTRACT

Now-a-days we all notice that more and more consumers are moving towards E-payments during online shopping due to many reasons like convenience, various method, secured, etc. The e-commerce sector has boomed with the ease of purchasing and selling products or services, availability and connectivity of latest technologies over the Internet. As the trust level towards e-payments platforms are increasing; the consumers are becoming progressively comfortable in using different options like Credit card, Debit card, Smart card, E-wallet, etc.. It makes E payment at any time through the internet directly to the transfer settlement and form E-business environment. Studied have been carried out on E-Payment system .E-Payment system an integral part of electronic commerce. An efficient payments system reduces the cost of exchanging goods and services, and is indispensable to the functioning of the interbank, money, and capital markets. Although many consumers are getting tuned towards usage of various electronic devices and E-payment platforms by installing and using numerous applications in their smart devices but there are still many consumers who prefer Cash on Delivery. So it is important for the online businesses specifically to understand the payment usage of ever changing consumers for better sustainable growth. The study is conducted by selecting 122 sample respondents who are using E-payment for purchasing products online; on the basis of age, purpose of usage, frequency of usage, various problem faced by using it and E-payment effect on online purchasing. Then the major aspects and interpretation are discussed further in this paper providing a clear picture of findings and based on it the conclusion is drawn.

Keywords- Credit card, Debit card, Digital Wallet, E-Cheque, Smart Card.

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INTRODUCTION

1.1 INTRODUCTION

In today's digital era the usage of the internet has increased drastically. All counts of age are consuming and producing loads of data each second. Many organizations are analyzing and altering based on the study that they been able to capture from the consumer analysis. With the ease of smartphones and virtual accessibility of products, services and payments online have boosted the way people are shopping and making payments online. The ecommerce industry initially started with the Cash on Delivery basis for the people to get the feel of the new online industry and also to build up their trust. After the customers are well versed with the organizations, the company started introducing various platforms of the online payments. E-Payment has given access to various financial platforms like debit card, credit card, net banking, digital wallets, etc. Cash has become a less common mode of transaction as the appearance of e-payments has allowed consumers and buyers with greater convenience, but at the same time it has raised a doubt or a threat as there has always been increasing issues regarding the fraud and privacy concern that has been the top fear in the minds of internet users.

We all have witnessed that the traditional payment modes have been replaced by various types of e-payments that are quick and efficient. In e-payment process both buyer and seller uses digital modes to send or receive money, it is an automatic process where seller and the buyer can avoid visiting their bank. It eliminates the physical cash that is risky to handle at times. Today consumers can make payment through electronic modes by using cards and other platforms that are made available through all types of smart devices. The acceptance of particular payments by sellers and businesses has an important influence on the purchases made by their clients, as the availability of the various modes help the consumer to choose that is suitable or available to them as well.

Past few years' smartphones are having a tremendous growth due to accessibility and availability of the internet. The mobile wallet providers like PAYTM, PayPal, MOBIKWIK, etc. with the payback schemes also attracting many consumers to use e-payment modes aiding the organizations with significant growth. The digital wallets are further enabling economies to a cashless society. Electronic wallets and mobile wallets are moreover digital version of the hard cash in physical wallet with more features and functions. E-payments wallets reduce cost of cash holding and handling for the retailers. Retailers on online platform have introduced lucrative discounts and cashback offers to get payment orders for all the cashless payments. The online platform retailers have encouraged more customers to choose a payment mode other than Cash on Delivery, it also helps a business to retain their customer.

E-commerce sites use electronic payment, where electronic payment refers to paperless monetary transactions. Electronic payment has revolutionized the business processing by reducing the paperwork, transaction costs, and labor cost. Being user friendly and less time-consuming than manual processing, it helps business organization to expand its market reach/expansion. Listed below are some of the modes of electronic payments.

- Credit Card
- Debit Card
- Smart Card
- E-Money
- Electronic Fund Transfer (EFT)

Credit Card:

Payment using credit card is one of most common mode of electronic payment. Credit card is small plastic card with a unique number attached with an account. It has also a magnetic strip embedded in it which is used to read credit card via card readers. When a customer purchases a product via credit card, credit card issuer bank pays on behalf of the customer and customer has a certain time period after which he/she can pay the credit card bill. It is usually credit card monthly payment cycle. Following are the actors in the credit card system.

- **The card holder** – Customer
- **The merchant** – seller of product who can accept credit card payments.
- **The card issuer bank** – card holder's bank
- **The acquirer bank** – the merchant's bank
- **The card brand** – for example, visa or MasterCard.

CREDIT CARD PAYMENT PROCESS:

Step	Description
Step 1	Bank issues and activates a credit card to the customer on his/her request.
Step 2	The customer presents the credit card information to the merchant site or to the merchant from whom he/she wants to purchase a product/service.
Step 3	Merchant validates the customer's identity by asking for approval from the card brand company.
Step 4	Card brand company authenticates the credit card and pays the transaction by credit. Merchant keeps the sales slip.
Step 5	Merchant submits the sales slip to acquirer banks and gets the service charges paid to him/her.
Step 6	Acquirer bank requests the card brand company to clear the credit amount and gets the payment.
Step 7	Now the card brand company asks to clear the amount from the issuer bank and the amount gets transferred to the card brand company.

Debit Card:

Debit card, like credit card, is a small plastic card with a unique number mapped with the bank account number. It is required to have a bank account before getting a debit card from the bank. The major difference between a debit card and a credit card is that in case of payment through debit card, the amount gets deducted from the card's bank account immediately and there should be sufficient balance in the bank account for the transaction to get completed; whereas in case of a credit card transaction, there is no such compulsion.

Debit cards free the customer to carry cash and cheques. Even merchants accept a debit card readily. Having a restriction on the amount that can be withdrawn in a day using a debit card helps the customer to keep a check on his/her spending.

Smart Card:

Smart card is again similar to a credit card or a debit card in appearance, but it has a small microprocessor chip embedded in it. It has the capacity to store a customer's work-related and/or personal information. Smart cards are also used to store money and the amount gets deducted after every transaction.

Smart cards can only be accessed using a PIN that every customer is assigned with. Smart cards are secure, as they store information in encrypted format and are less expensive/provides faster processing. Mondex and Visa Cash cards are examples of smart cards.

E-Money:

E-Money transactions refer to situation where payment is done over the network and the amount gets transferred from one financial body to another financial body without

any involvement of a middleman. E-money transactions are faster, convenient, and saves a lot of time.

Online payments done via credit cards, debit cards, or smart cards are examples of e-money transactions. Another popular example is e-cash. In case of e-cash, both customer and merchant have to sign up with the bank or company issuing e-cash.

Electronic Fund Transfer:

It is a very popular electronic payment method to transfer money from one bank account to another bank account. Accounts can be in the same bank or different banks. Fund transfer can be done using ATM (Automated Teller Machine) or using a computer. Nowadays, internet-based EFT is getting popular. In this case, a customer uses the website provided by the bank, logs in to the bank's website and registers another bank account. He/she then places a request to transfer certain amount to that account. Customer's bank transfers the amount to other account if it is in the same bank, otherwise the transfer request is forwarded to an ACH (Automated Clearing House) to transfer the amount to other account and the amount is deducted from the customer's account. Once the amount is transferred to other account, the customer is notified of the fund transfer by the bank.

VARIOUS PAYMENT PLATFORMS:

Keeping money in electronic wallet can be used whenever required for making payments for various reasons or send money to anyone. E-payments empowers organizations, governments, businesses, individual to avoid hard cash and make cashless payments for various services Food and Beverages; Tickets for events, movies, rail, bus, air, etc.; Local Public Transport (Uber, Ola, Taxi, Rickshaw, etc.); Goods (Apparels, electronics). Various payment platforms like:

- ❖ **AMAZON:** Amazon was founded by Jeff Bezos in Bellevue, Washington, on July 5, 1994. The company started as an online marketplace for books but expanded to sell electronics, software, video games, apparel, furniture, food, toys, and jewelry. In

2015, Amazon surpassed Walmart as the most valuable retailer in the United States by market capitalization. In 2017, Amazon acquired Whole Foods Market for US\$13.4 billion, which substantially increased its footprint as a physical retailer. In 2018, Bezos announced that its two-day delivery service, Amazon Prime, had surpassed 100 million subscribers worldwide.

- ❖ **PAYTM:** India's largest payments platform is currently handling millions of transactions. This platform which makes instant payments was founded in 2010. It is a platform which provides a digital wallet to store money. PAYTM wallet can also be used to make bill payments, transfer money and avail services from travel, entertainment and retail industry. Payment links, reporting links, payment methods, are the rich solution feature of PAYTM. PAYTM has the largest saved cards repository.
- ❖ **PAYPAL:** An American company is operative in a global online payments system that supports online money handovers and serves as an electronic alternative to traditional payments methods. EBay is the parent company of PAYPAL. PayPal is the faster, safer way to send money, make an online payment, receive money or set up a merchant account. PAYPAL operates as a payment processor for online vendors, auction sites, etc.
- ❖ **BHIM: (Bharat Interface for Money)** it is a mobile app, developed by the National Payments Corporation of India. It is based on the Unified Payment Interface (UPI), where the bank details or even internet is not required to make payments. Simply using mobile number, AADHAAR card number, name or any banks UPI ID anyone can send or receive money in any preferred language.

- ❖ **MOBIKWIK:** It is an independent mobile payment network that supposedly connects 25 million users with 50,000 retailers and more. It was founded in 2009 in Gurugram. It provides a digital wallet and mobile based payment services. MOBIKWIK allows its users to use cards, net banking and even cash on delivery service for the purpose of paying bills, recharge and shop in the market. Recently MOBIKWIK has tied up with grocery, restaurants and other offline merchants which are large and small time. There are total 10,000,000+ numbers of installs of MOBIKWIK.

Essential requirements for safe e-payments/transactions:

Security is an essential part of any transaction that takes place over the internet. Customers will lose his/her faith in e-business if its security is compromised. Following are the essential requirements for safe e-payments/transactions –

- ❖ **Confidentiality** – Information should not be accessible to an unauthorized person. It should not be intercepted during the transmission.
- ❖ **Integrity** – Information should not be altered during its transmission over the network.
- ❖ **Availability** – Information should be available wherever and whenever required within a time limit specified.
- ❖ **Authenticity** – There should be mechanism to authenticate a user before giving him/her an access to the required information.
- ❖ **Non-Repudiability** – It is the protection against the denial of order or denial of payment. Once a sender sends a message, the sender should not be able to deny sending the message. Similarly, the recipient of message should not be able to deny the receipt.
- ❖ **Encryption** – Information should be encrypted and decrypted only by an authorized user.

- ❖ **Auditability** – Data should be recorded in such a way that it can be audited for integrity requirements.

PROBLEM FORMULATION:

The study involves a survey on the attitude of people for not using E-Payment system even though it is easy to access, quicker mode of transaction and so on the following points on have been taken into fray while carrying out the study

- Innovative
- Reliable technology
- Effective business practice
- smart marketing
- Promotion
- good usability
- Carefully integration designs.

E-Payments are growing at a highest rate ever. Having card has been become the need of every person. Nowadays everybody wants to use these services. The need of the study is to find out. Which type of e payment most suitable? Present study covers pursuing an interesting and daring task: user acceptance of e-payment that their acceptance by end users will be maximized, and the number of joined users will justify the system's rollout and its further development. Without ignoring the importance of marketing, business and technological factors, this research focuses on user acceptance e-payment system (EPSs). The study to know the factors which are supporting and which are opposing while implementing a particular e-payment in India. To analyze the emerging trends of e-payment. This study is also carried out the future outlook of e-payment on online shopping.

1.2. INDUSTRY PROFILE:

Online shopping through e payments is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web browser or a mobile app. Consumers find a product of interest by visiting the website of the retailer directly or by searching among alternative vendors using a shopping search engine, which displays the same product's availability and pricing at different e-retailers. As of 2020, customers can shop online using a range of different computers and devices, including desktop computers, laptops, tablet computers and smartphones.

An online shop evokes the physical analogy of buying products or services at a regular "bricks-and-mortar" retailer or shopping center; the process is called business-to-consumer (B2C) online shopping. When an online store is set up to enable businesses to buy from another businesses, the process is called business-to-business (B2B) online shopping. A typical online store enables the customer to browse the firm's range of products



FIGURE 1.1. E-PAYMENTS ON ONLINE SHOPPING

and services, view photos or images of the products, along with information about the product specifications, features and prices.

Online stores usually enable shoppers to use "search" features to find specific models, brands or items. Online customers must have access to the Internet and a valid method of payment in order to complete a transaction, such as a credit card, an enabled debit card, or a service such as PayPal. For physical products (e.g., paperback books or clothes), the e-retailer ships the products to the customer; for digital products, such as digital audio files of songs or software, the e-retailer usually sends the file to the customer over the Internet. The largest of these online retailing corporations are Alibaba, Amazon.com.

The global online payment market size was valued at USD 3,286.52 billion in 2019 and is projected to reach USD 17,643.35 billion by 2027, exhibiting a CAGR of 23.7% during the forecast period. The increasing digitalization is boosting the payment market. The rising adoption of smartphones and the high penetration of internet connectivity are raising the demand for mobile payments transactions. Similarly, the government initiatives are also encouraging customers to adopt the contactless payment platforms. Additionally, the integration of technologies such as artificial intelligence and machine learning are likely to improve the security system.

1.3. COMPANY PROFILE:

PAYTM:

PAYTM is India's leading financial services company that offers full-stack payments and financial solutions to consumers, offline merchants and online platforms. The company is on a mission to bring half a billion Indians into the mainstream economy through payments, commerce, banking, investments, and financial service.

The beginning:

PAYTM was founded in August 2010 with an initial investment of \$2 million by its founder **Vijay Shekhar Varma** in Noida, a region adjacent to India's capital New Delhi. It

started off as a prepaid mobile and DTH recharge platform, and later added data card, postpaid mobile and landline bill payments in 2013.

Profile of the Organization:

- PAYTM was founded in August 2010 with an initial investment of \$2 million by its founder **Vijay Shekhar Varma** in Noida, a region adjacent to India's capital New Delhi. It started off as a prepaid mobile and DTH recharge platform, and later added data card, postpaid mobile and landline bill payments in 2013.
- By January 2014, the company had launched the PAYTM Wallet, which the Indian Railways and Uber added as a payment option. It launched into **E-commerce** with online deals and bus ticketing. In 2015, it unveiled more use-cases like education fees, metro recharges, electricity, gas, and water bill payments. It also started powering the payment gateway for Indian Railways.
- In 2016, PAYTM launched movies, events and amusement parks ticketing as well as flight ticket bookings and **PAYTM QR**. Later that year, it launched rail bookings and gift cards.
- PAYTM registered user base grew from 11.8 million in August 2014 to 104 million in August 2015. Its travel business crossed \$500 million in annualized GMV run rate, with 2 million tickets booked per month.
- In 2017, PAYTM became India's first payment app to cross over 100 million app downloads. The same year, it launched **PAYTM gold** a product that allowed users to buy as little as ₹1 of pure gold online. It also launched **PAYTM Payments Bank** and 'Inbox', a messaging platform with in-chat payments among other products. By 2018, it started allowing merchants to accept PAYTM, UPI and card payments directly into their bank accounts at 0% charge. It also launched the '**PAYTM for Business**' app which is now called Business with PAYTM App, allowing merchants to track their payments and day-to-day settlements instantly. This led its merchant base to grow to more than 7 million by March 2018.
- The company launched two new wealth management products - **PAYTM Gold Savings Plan** and Gold Gifting to simplify long-term savings.
- In January 2018, PAYTM entered into a joint venture with Alibaba Group-owned gaming company AGTECH Holdings to launch **GAMEPIND** a mobile gaming platform. GAMEPIND was later rebranded as **PAYTM First Games** in June 2019.

- In March 2018, PAYTM Money was setup with an investment of ₹9 crore to bring investment and wealth management products for Indians.
- In March 2019, PAYTM launched a subscription based loyalty program called **PAYTM First**.
- In May 2019, PAYTM partnered with **Citibank** to launch PAYTM First credit card.
- In July 2020, **Tata Starbucks** partnered with PAYTM allowing its customers to order food online during a coronavirus (COVID-19) pandemic

1.4 NEED OF STUDY:

- This study also states that online e-payment provides greater reach to customers.
- Various strengths of e-payment systems such as quality customer service, greater reach, time saving customer loyalty, easy access to information, 24 hours access, reduce paper work, no need to carry cash easy online applications etc.

1.5 SCOPE OF STUDY:

- In this millennium there is a customer's choice. Customers are more aware than ever before and have many options to choose from. Thereby the study is to find out reason for customer's uses of various e-payments method during online purchase. The various factors which motivated the customer to prefer e-payments.
- The study is to find the extent to uses of e-payments during online shopping, with regards to feature, transaction cost and all other attributes, so as to improve the performance and security of e-payments. The study is also done for providing suitable suggestions (or) measure to the security threats to improve the existing e-payments system during online purchasing.

1.6 OBJECTIVES OF STUDY:

- To understand the frequency of usage and the problems faced while using e-payments.
- To examine the effect of e-payments contribution towards the online shopping.
- To transfer money over the Internet.
- To understand working of various Electronic Payment system based applications.
- To understand the concept of Electronic Payment system and it's security services.

1.7 LIMITATIONS OF THE STUDY:

- The study was conducted only in Tamil Nadu.
- The sample collected has been restricted to the 122 respondents only.
- The bias in sample could not be controlled because customers attitude differ from person to person.
- Even though the samples are collected personally, some of the schedules were rejected for want of complete information.
- As some of the beneficiaries were away from home and as some areas are not reachable.

2.1. REVIEW LITERATURE:

In this paper '**A Study on the Perception of Customers towards E-Commerce and E-Payments in Local Survey**' the authors **S. Kowsalya, Swetha Krishnan, Mirudhula. R, Sowmya. A. M.** mentioned that the trust in Ecommerce mainly depends upon the online payment system which allows a customer to make payment to the online merchant or service provider. Consumers are becoming more and more comfortable in making online transactions and are concerned about conducting electronic business transactions and the risks involved that have a vital impact on the transition of electronic business. Increasingly

more consumers are migrating to e-commerce to make electronic bill payments, to pay for information online, to purchase products, services. According to the authors E-Payments refers to the technological breakthrough that enables us to perform financial transactions online, thus avoiding hindrances and other hassles. E-Payments provides greater freedom to individuals in paying their taxes, licenses, fees, fines and purchases at unconventional locations and at whichever time of the day, and 365 days of the year. The authors found that credit and debit cards will become obsolete, because they saw the increasing development of mobile technology and the internet industry. (S. KOWSALYA, 2017).

In this paper '**A Study on Usage of PAYTM**', the authors **Abhijit M. Tadse and Harmeet Singh Nannade** mentions that Digital wallets are quickly becoming mainstream mode of online payment and mobile users can nowadays use their smartphones to make money transaction or payment by using applications installed in the phone. The Authors through their survey states that the PAYTM has to work upon the Payment gateway to improve the transaction efficiency as 70% people faced problem with payment gateway. Only 5% people claim to have got assistance every time they had a failure so the service could be improved to cater the needs of maximum customers. PAYTM is currently performing well in terms of privacy but it has to work upon discounts/offers, transaction time and bring about innovation to increase customer satisfaction. (**ABHIJIT M. TADSE, 2017**).

In this paper '**E-Payment System on E-Commerce in India**' the authors **Karamjeet Kaur, Dr. Ashuthoth Pathak** mentioned that the reliable and cashless payment system offers immunity against theft of paper and e-money, and adopting e-payment solutions or systems for different reasons. In addition to cost reduction, reference was made to a number of other benefits, including improved customer service, improved working capital, increased operational efficiencies and cycle times, processing efficiencies and enhanced compliance to organizational policies and procedures. This study also states that online e-payment provides greater reach to customers. Personal attention can be given by bank to customer also quality service can be served. Various strengths of e-payment systems such as quality customer service, greater reach, time saving customer loyalty, easy access to information,

24 hours access, reduce paper work, no need to carry cash easy online applications etc. (KARAMJEET KAUR, 2015).

From this paper '**The Future of the Mobile Payment as Electronic Payment System**' the author **Zlatko Bezhovski** states that with all the security and convenience provided by mobile electronic payment method, we can expect further growth of mobile payments worldwide even surpassing payments made by credit and debit cards. However, there are several barriers identified to the adoption of this payment method; so certain measures should be taken to grant this industry a promising future ahead. This study finds that customers are increasingly using mobile payment methods for their routine online purchases and for their on-site purchases as well. With growing advanced technology that supports mobile transactions and makes them transparent and more convenient, consumers have developed their trust and habits on using mobile payment systems. Enhancing the compatibility with a wide range of users, the use of latest technology and establishment of common standards for various service providers, and overcoming the security and privacy issues could help in facilitating faster adoption of electronic payment methods and advance the rising market of mobile payments. (BEZHOVSKI, 2016)

Donal O. Mahony, Michael Peirce, Hitesh Tewari (2001). The idea of paying for goods and services electronically *is not* a new one. All around us we see evidence of transactions taking place where at least part of the process is carried on electronically. Since the late 1970s and early 1980s, a variety of schemes have been proposed to allow payment to be effected across a computer network. The arrival of the Internet has removed this obstacle to progress. This network of networks has grown dramatically from its inception.

David B. Humphrey, Lawrence B. Pulley (November 1996): E-payments can be widely defined as payments that are initiated, processed and received electronically. The scope is on e-payment services that support e-commerce transactions (business to consumer, B2C) or electronic payments between consumers (person to person, P2P) and that

constitute new concepts, beyond the basic traditional payment instruments provided by the banking industry.

Odlyzko (2003): E payment is a subset of an e-commerce transaction to include Electronic payment for buying and selling goods or services offered through the Internet. Generally, we think of electronic payments as referring to online transactions on the internet, there are actually many forms of electronic payments. As technology is developing, the range of devices and processes to transact electronically continues to increase. A payment is the payer's transfer of a monetary claim on a party acceptable to the payee, a monetary claim that is accepted by the payee will be referred to as the means of payment, payment instruments are tools and procedures to initiate the transfer of the means of payment. For e-payments, the monetary claims (electronic means of payment) are held, processed and received in the form of digital information, and their transfer is initiated via electronic payment instruments.

Michelle Baddeley (2004): Electronic commerce is growing at an increasing pace and financial instruments are adapting to the increased volume of spending taking place over the Internet (Economides, 2001). Until now, most buyers have used credit arrangements or checking accounts as the principal means of paying for Internet purchases. There is however, a 'price umbrella' underneath credit-card transactions that makes them an excessively costly financial instrument for low-value purchases (Rivest,1998). Given the transactions costs involved with card transactions, the opportunity gap that remains in terms of e-money products lies in developing a popular alternative to conventional cash as a convenient way to make small payments ('micropayments'¹). For many Internet transactions, electronic cash (e-cash) could provide a potentially superior substitute for conventional monetary instruments. Most existing electronic small payments schemes are in essence account-based systems mediated by middle people, in practice in much the same way as a bank or credit institution acts as a financial intermediary.

In another perspective, **Peter and Babatunde (2012)** viewed e-payment system as any form of fund transfer via the internet. Similarly, according to Adeoti and Osotimehin (2012), electronic payment system refers to an electronic means of making payments for goods and services procured online or in supermarkets and shopping malls. Another definition suggests that e-payment systems are payments made in electronic commerce environment in the form of money exchange through electronic means (Kaur and Pathak, 2015).

Pardhasaradhi Madasu (2015) to assess and report the progress made by the RBI in moving towards the 'Cashless' economy. Data collected from RBI database related too cashless transactions from the year 2004-05 to 2014- 15. India did not have a place in the top 16 non-cash markets of the world but China had. In comparison with the credit cards, there had been an increase in the usage of debit cards at ATMs. Non-cash services like Immediate Payment Services or M-Wallet had not made any significant impact.

Bappaditya Mukhopadhyay Y (2016). To estimate the impact of demographic profile on usage of digital payment system. And to analyse the growth of various non cash methods. For getting the estimation of cashless transactions that are prevailing in India, the study used data from World Bank's Global Findex from the surveys that were conducted in year 2011. And it also used data from the household and enterprise surveys which were conducted in year 2009-2010. The study revealed that an extremely small correlation exists between cashless payments and education level as well as between cashless payments and income earned. It also revealed that a very high positive correlation exists between the people who collect the payments in their bank accounts and of those who are engaged in cashless payments. Prepaid cards and mobile payments showed maximum growth.

Dr. Shilpa Bhimrao Gaonkar (2018). To explore various payment instruments available to the people, and its benefits. Conceptual Study. It has used data from reports of RBI, GOI, NPCI, MEDIANAMA etc. Study revealed that various new instruments are emerging.

Benefits of going cashless increased transparency, efficiency and convenience, easier tracking, etc.

Dr. N. Rakesh, Dr. K. Suresh Kumar, Dr. S. Satheesh Kumar (2018). To examine the present scenario of electronic payments and to study the range of service facilities that UPIBHIM technologies offer. Analytical and critical method of research is used in the study. And data is collected from the secondary sources such as journals, government websites and news articles. Electronic transactions have increased. This could happen only with extensive recognition and acceptance of popular instruments such as credit and debit cards, net banking and e-wallets by the Indian population. But surprisingly, UPI came out to be the real distinct advantage.

Dinesh, T. M., Kiran Kumar Reddy, and Suhasini, K. (2018) To assess how demonetization impacted the digital payments in India. Exploratory data analysis was conducted and data for the study was collected from NPCI web portal for the period May-2016 to October-2017. The study revealed that there was a considerable effect of demonetization on digital payments which are more visible in RTGS and mobile transactions.

Lei-da Chen and Ravi Nath (2008). To identify factors that influence consumer e-Payment adoption in the United States. Data was collected from 299 respondents and analyzed using Confirmatory Factor Analysis and ANOVA. Perceived Transaction Convenience, Compatibility, Perceived Transaction Speed, Privacy Concerns, Security Concerns The results suggested that higher transaction speed, transaction convenience, and compatibility perceptions would lead to high propensity to adopt e-Payment while grater security and privacy concerns would lead to lower propensity to adopt e-Payment. Among all the constructs, Compatibility has the highest correlation with Intention to Adopt.

Sevgi Ozkan, Gayani Bindusara and Ray Hackney (2010).Through theoretical constructs and an empirical analysis, the study aims to inspect the various critical factors that may ensure consumer adoption of e- payment. Technology acceptance model and Theory of reasoned action were used. A questionnaire was framed and was sent to 200 people out of which 155 responded. Data was analyzed through Pearson's correlation analysis and multiple regression analysis using SPSS software. Perceived risk, security, Perceived advantage, trust, Web assurance seals, usability. The study revealed that three of the critical factors were necessary (security, advantage, web assurance seals) and three were relatively sufficient (perceived risk, trust and usability) through customer intentions to adopt an e-payment system.

IkramDaştan and CemGürler (2016).The study aims to examine the factors which affect the adoption of mobile payment systems by the consumer. Convenience sampling method was used to survey 225 respondents online. Developed a research model and tested the proposed relationships by SEM. Perceived Reputation, Environmental Risk, Mobility, Trust, Perceived Usefulness, Perceived Ease of Use A negative relationship was found between environmental risk and perceived trust whereas a positive relationship was found between firm reputation and perceived trust. Perceived usefulness and perceived ease of use are the factors which do not have any effect on Adoption of MPS. Perceived Trust, Perceived Mobility and Attitude have a positive effect on the adoption of MPS.

Maryam Barkhordari, Zahra Nourollah, Hoda Mashayekhi, Yoosof Mashayekhi, Mohammad S. Ahangar (2017).The study investigates factors influencing trust in e-payments systems in Iran. Reviewed the literature and decided on a set of factors influencing security and trust. Then they are tested by empirical work using SEM. Potentially determinant factors of trust are developed which are technical and transaction procedures, usability and access to security guidelines Findings revealed that technical and transaction procedures, and access to security guidelines are significant factors for improving consumers' perceived security, while the most important factors influencing trust are access to security guidelines and security. Finally, consumers' perceived trust also has a positive impact on EPS adoption

Dr. M Sumathy and Vipin KP (2017). The research aims to study the determinants of safety perception and the attitude, awareness level of people towards digital payments. The data was collected from 100 urban respondents in Malappuram District of Kerala using Convenient sampling survey. And the tools which were used for analysis were Percentage analysis, one way Anova, independent sample t-test, etc. Level of awareness, gender, education level and attitude towards digital payment There found to be no significant difference between level of awareness towards digital payment systems between male and female. Also no relationship existed between education of the respondents and their level of awareness towards digital payment systems.

Alaknanda Lonare, Anukriti Yadav, Samiksha Sindhu (2018). Paper aims to understand the factors affecting the increase in user proportion and its significance in adoption of e-wallet and also the disparity in user proportion in metro and tier-2 cities. Technology Acceptance Model (TAM) is used as the standard reference model. A total 285 valid responses was collected. Factor Analysis and Binomial Logistic Regression are used for analysis. Perceived usefulness and perceived ease of use The proportion of users in the metropolitan cities is more than tier-2 cities. 'Simplicity' or ease of use turned out to be the only significant variable foe e-wallet adoption. Looking at the vendor point of view, the e-wallet adoption is considerably less than what had been expected.

Subho Chattopadhyay, Payal Gulati and Indranil Bose (2018). The study aims at evaluating the awareness of the small retailers for the cashless transaction and its modes. And also to understand their difficulties and perceived convenience with it. Data was collected through questionnaires from 117 small retailers. Paired sample t test was used to perceived level of ease, convenience No significant difference was found in convenience for cash and cashless modes of transactions. Also the retailers believe that it is easier for them to deal with cash as compared to cashless instruments. Efforts ought to be engaged towards changing behavior and attitude towards cashless than to scarcely make awareness.

Electronic payments are a necessary part of e-commerce and are one of its most critical aspects (**Dennis Abrazhevich, 2004**). Technical and economical motivate great effort in electronic payment systems. The two important reasons are security aspects and commerce over communication. Security aspects are traditional payment show the different security problem such as counterfeit banknotes but the electronic payment systems achieve higher level of the security present by traditional systems. Commerce over communication networks are in case of commercial relationships where involved parties are connected over communication networks, traditional means for payment cannot be used anymore which assume physical contact. Thus, electronic business processes of geographically distant parties require that monetary values can be transferred over networks (**Ahmad-Reza Sadeghi and Markus Schneider,1990**).

Singh & Gupta (2016) They have conducted a study to identify various factors influence on the adoption of mobile wallet payment among customers They considered the various variables for the study are Convenience, Trust, Security, and Adaptability which have an impact on the satisfaction of mobile wallet usage. The study was conducted in the Kurali city, District of Punjab. Pearson's Correlation Analysis was to investigate the relationship between the different basic variables of the study. The study findings show that mobile wallets are considered as the futures of cash.

Sanghita Roy, Dr. Indrajit Sinha (2014) stated that E- payment system in India, has shown tremendous growth, but still there has lot to be done to increase its usage. Still 90% of the transactions are cash based. Technology Acceptance Model used for the purpose of study. They found Innovation, incentive, customer convenience and legal framework are the four factors which contribute to strengthen the E- payment system.

E-payment systems are important mechanisms used by individual and organizations as a secured and convenient way of making payments over the internet and at the same time a gateway to technological advancement in the field of world economy (**Slozko & Pello, 2015**)

3. RESEARCH METHODOLOGY

This studied have been carried out on uses of E-payment during online shopping. Data used in this study collected basically from the secondary sources. Primary data also collected through personal interview method conducting the person who is supposed to have knowledge about the topic. Secondary data have been collected from various sources including websites, newspapers, various published and unpublished article about pre-primary education etc.

Research methodology is a way to systematically solve the research problems. It may be understood as a science of studying how research is done scientifically. It includes the overall research design, the sampling procedure, data collection method and analysis procedure.

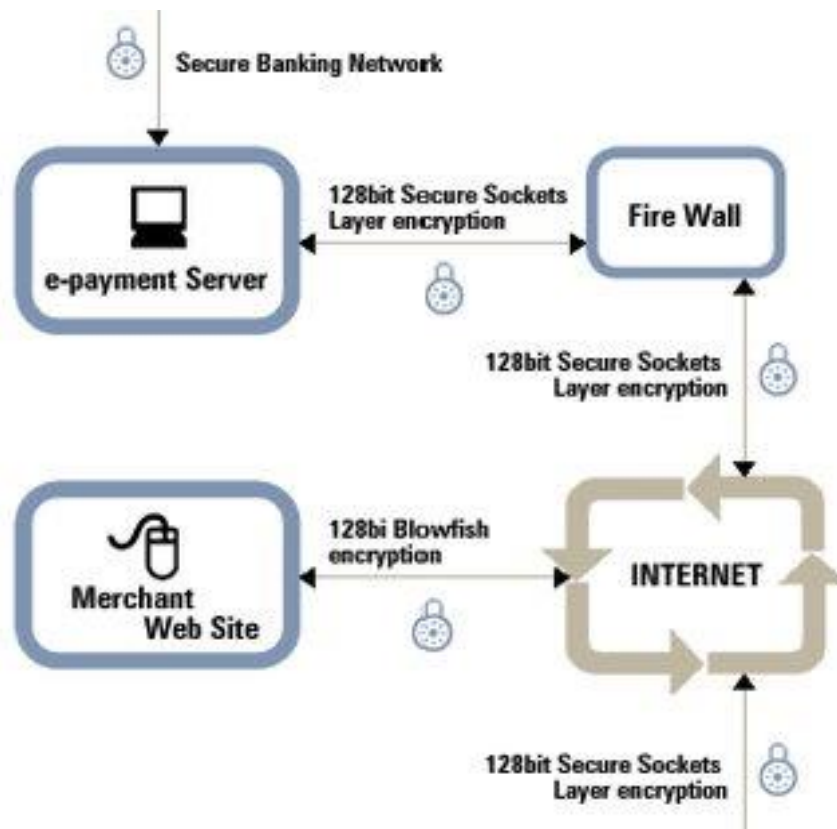


Figure 3.1 Research Methodology

3.1 RESEARCH DESIGN:

The research design stands for advance planning of the method to be adopted for collection the relevant data and the techniques to be used in adopted for collecting the relevant data and the techniques to be used in analysis, keeping the view the objectives of the research and availability time.

In general, research design is the conceptual structure within which research is conducted: it constitutes the blue print for the collection, measurement and analysis of data.

The Research Design undertaken for the study is Descriptive Research Design. A study, which wants to portray the characteristics of a group or individuals or situation, is known as Descriptive study. It is mostly qualitative in nature.

3.2 SAMPLING TECHNIQUE

SAMPLING:

Sampling is the process of selecting the sufficient number of elements from the population (the items selected technically are called as Sampling).

Here this study adopted the technique of random Sampling of Convenience sampling method.

Random sampling is a way of selecting a sample of observations from a population in order to make inferences about the population. For example, exit polls from voters that aim to predict the likely results of an election.

3.3 SOURCE OF DATA:

3.1. PRIMARY DATA:

Data which is collected for the first time is called Primary Data. Well Structured Questionnaires has been prepared for collection of primary data. Most of the questions are consist of multiple choices. The structured Questionnaire method was undertaken. Proper care was taken to frame the Questionnaire in such a manner it should be easily understood

in view of educational level of the employees. This is the descriptive research, the primary data was collected through a survey sent to diverse users of e-payments during online shopping; this is to understand their acceptance, usage level, problems and the impact on the organizations.

3.3.2. SECONDARY DATA:

The secondary data was also utilized such as research papers, white paper and various online data.

3.3.3. POPULATIONS:

The Population or Universe can be Finite or infinite. The population is said to be finite if it consist of a fixed number of elements so that it is possible to enumerate it in its totality. So In this projects consist of finite population.

3.4 STRUCTURE OF QUESTIONNAIRE:

- The structure of questionnaire consists of two parts.
- Part A consists of profile of the respondents and part B consists of questions related to objectives.

3.5 SAMPLE SIZE:

Sample size means the number of sampling units selected from the population for investigation. It helps to achieve the objective of research. The sample size taken for the study is 122.

3.6 PERIOD OF STUDY:

The study period is from January 2020 – March 2021.

3.7 ANALYTICAL TOOLS:

- Google forms
- Percentage method.
- Chi-square test.
- Correlation co-efficient.

3.7.1 Google Forms:

Forms are among the internet's most versatile tools. Whether you need a contact form or a checkout page, a survey or a student directory, a form is all you need to easily gather that information. With Google Forms, it only takes a few minutes to make one for free. Google Forms along with Docs, Sheets, and Slides is part of Google's online apps suite of tools to help you get more done in your browser for free. It's easy to use and one of the simplest ways to save data directly to a spreadsheet, and it's the best sidekick to Google Sheets' spreadsheets. When you need to gather data for your spreadsheets, a form is your best friend. In this chapter, let's take an in-depth look at Google Forms' features, hidden tools, and add-ons to help you make the forms you need in minutes.

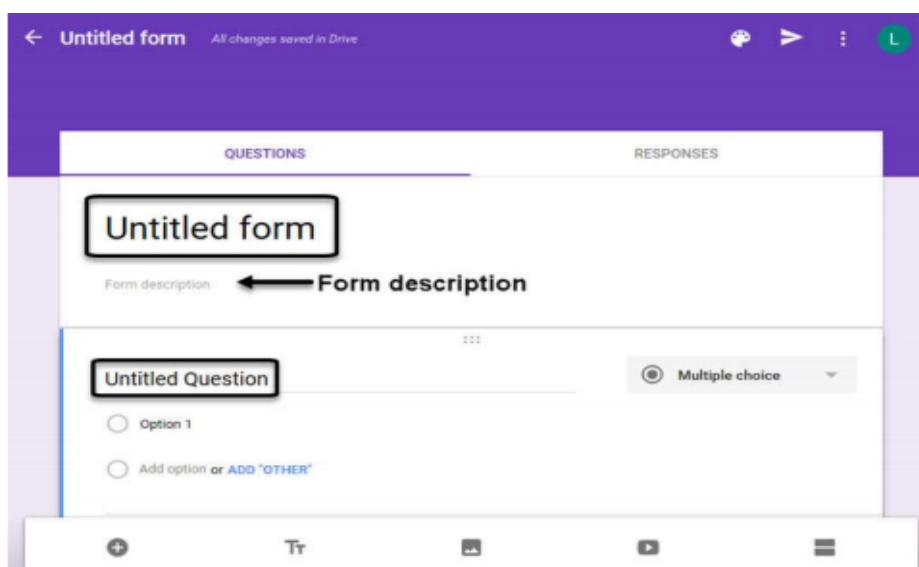


Figure 3.2 Google forms

3.7.2 Percentage analysis:

Percentage refers to a special kind of ratio in making comparison between two or more data and to describe relationships. Percentage can also be used to compare the relation terms the distribution of two or more sources of data.



FIGURE 3.3 PERCENTAGE ANALYSIS

3.7.3 CHI Square test:

Chi square test is a non – parametric test that establishes the independence between variables. It is measured by comparing the observed with those of expected frequencies based on the hypothesis.

$$\text{Chi square} = \sum (O-E)^2/E$$

3.7.4 Correlation CO-efficient:

The word co-efficient means the study of relationship that exists between two or more variable. If the change in one variable affects the change in the other variable then the variables are said to be perfectly correlated. If there is increase in one variable this will increase the other variable this is said to be a positive correlation. If the increase in one variable decreases the other variable then correlation is said to be in negative correlation. If the two variable change proportionally then the correlation is said to be perfect.

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

DATA ANALYSIS AND INTERPRETATION

4.1. PERCENTAGE ANALYSIS:

TABLE-4.1.1 GENDER OF THE RESPONDENTS

Gender	No. of. Respondent	Percentage
Male	74	69
Female	48	31
Total	122	100

Interpretation:

The table shows that, 69 percentage of the respondents are Male, 31 percentage of the respondents are Female, Therefore majority of the respondents are Male.

CHART-4.1.1 GENDER OF THE RESPONDENT

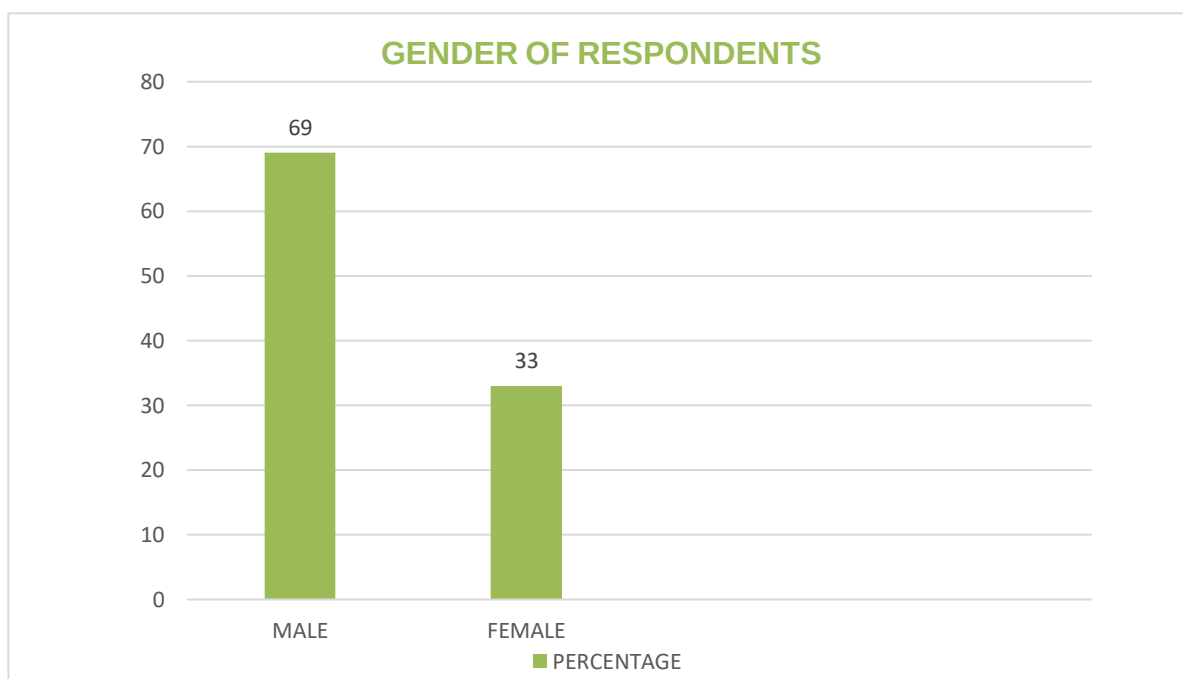


TABLE-4.1.2 AGE WISE CLASSIFICATION OF RESPONDENTS:

Age	No. of. Respondents	Percentage
Less than 18	15	12
18-28	84	69
29-40	21	18
40+	2	01
Total	122	100

Interpretation:

The table shows that, 12% of respondents are below 18 years, 69 % of respondents are 18-28 years, 18% percentage of respondents are 29-40, 1 percentage of respondents are more than 40 years. Majority of respondents have age group between 18 to 28 years.

CHART-4.1.2 AGE WISE CLASSIFICATION OF RESPONDENTS:

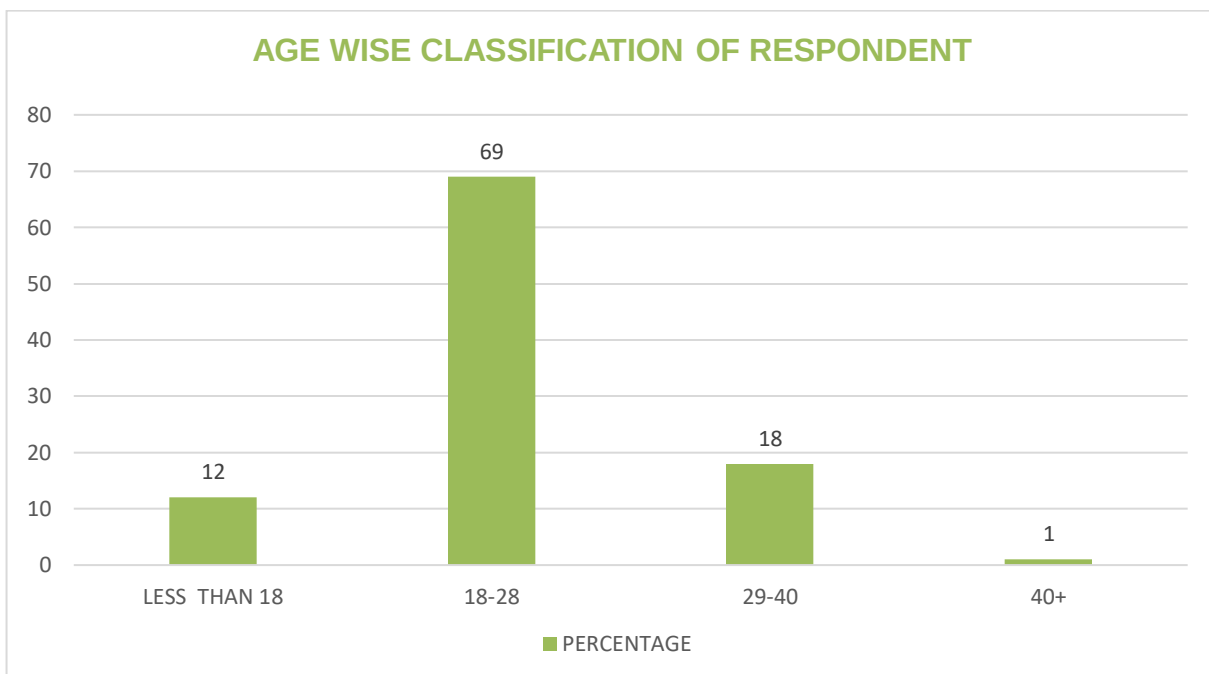


TABLE-4.1.3 EDUCATIONAL QUALIFICATION OF THE RESPONDENTS:

Educational Qualification	No. of. Respondents	Percentage
High School	21	17
Diploma	18	15
Bachelor's degree	48	39
Master's degree	35	29
Total	122	100

Interpretation:

The table shows that, 17% of the respondents are high schooler, 15% of the respondents are Diploma holder, 39% of the respondents are Bachelor's degree holder, 29% of the respondents are Master's degree holder. Majority of the respondents are Bachelor's degree holder.

CHART-4.1.3 EDUCATIONAL QUALIFICATION OF THE RESPONDENTS

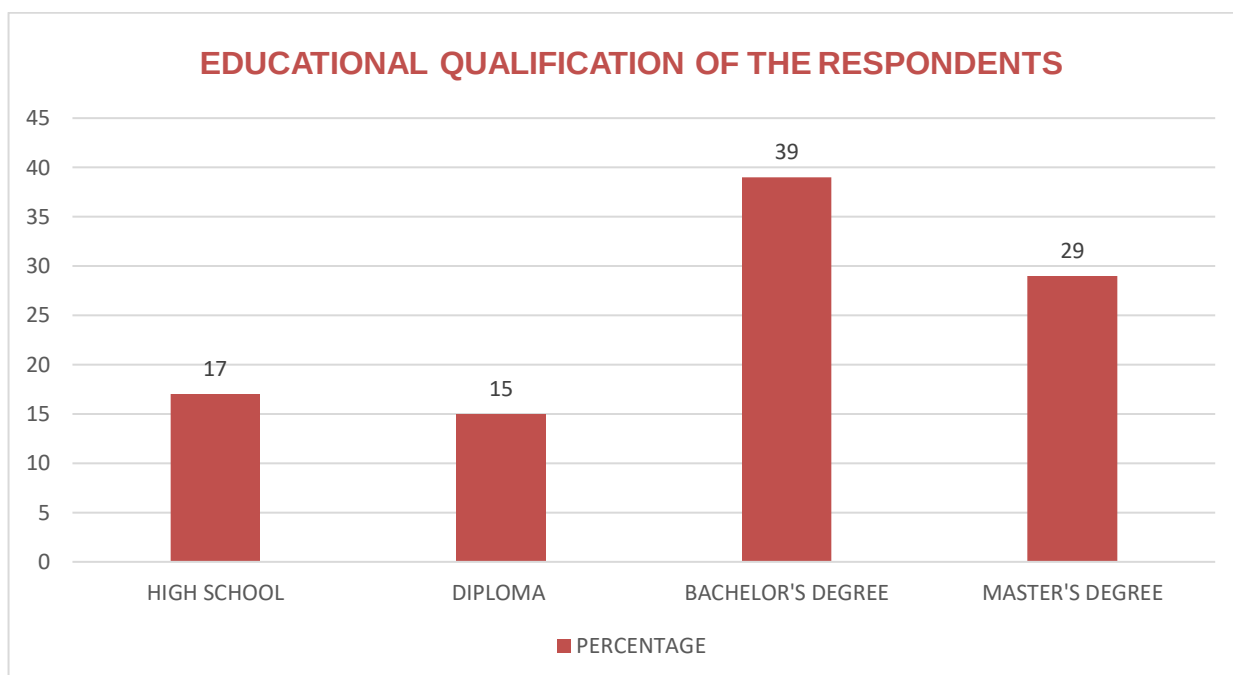


TABLE-4.1.4 EMPLOYMENT STATUS OF THE RESPONDENTS

Employment status	No. of. Respondent	Percentage
Employed	37	30
Self employed	27	22
Student	58	48
Total	122	100

Interpretation:

The table shows that, 30% of the respondents are Employers, 22% of the respondents are Self-employers, 48% of the respondents are Student. Majority of the respondents are Students.

CHART-4.1.4 EMPLOYMENT STATUS OF THE RESPONDENTS:

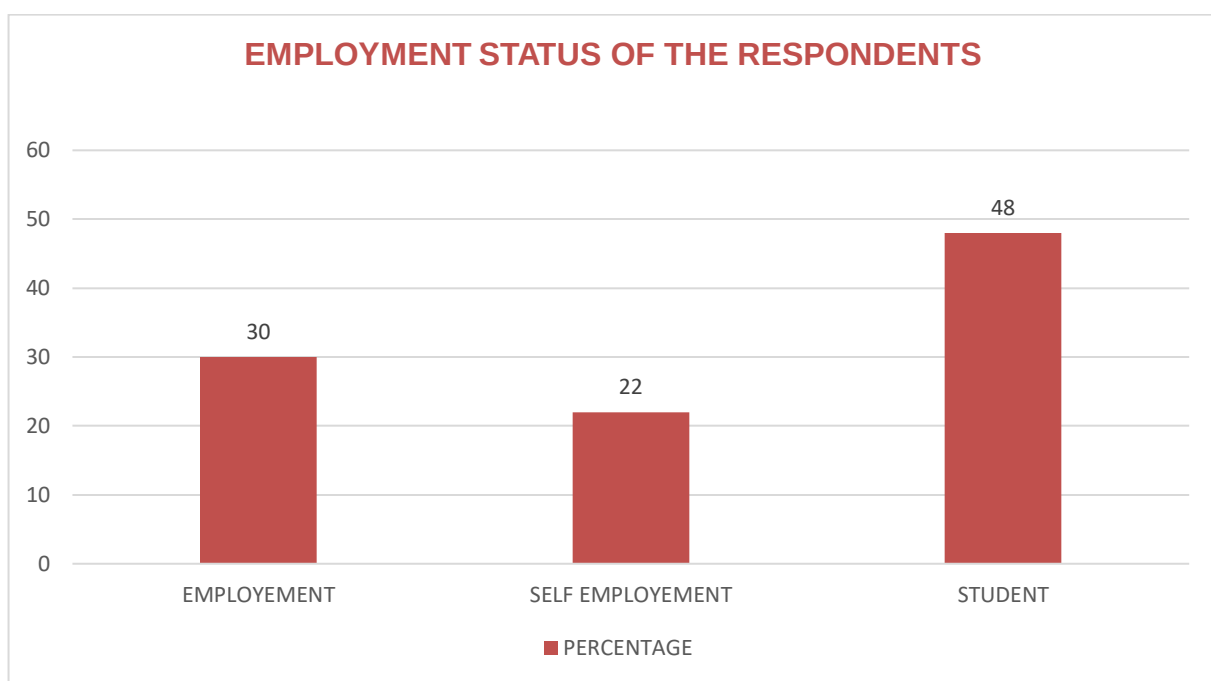


TABLE-4.1.5 AWARENESS ABOUT E-PAYMENTS

Awareness	No. of. Respondents	Percentage
Yes	101	83
No	21	17
Total	122	100

Interpretation:

The above table shows that, 83% of the respondents are awareness about e-payments, 17% of the respondents are non-awareness about e-payments. Majority of the respondents are aware with e-payment.

CHART-4.1.5 AWARENESS ABOUT E-PAYMENTS

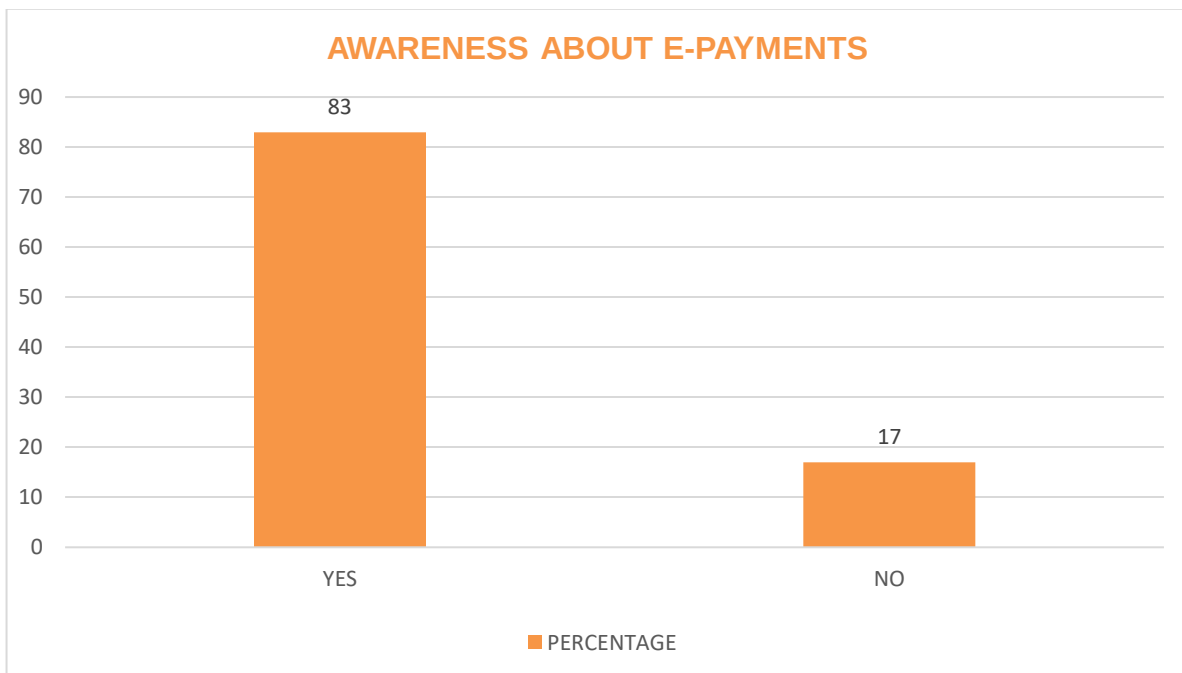


TABLE-4.1.6 MOST USABLE PAYMENTS MODE:

Payment mode	No. of. Respondents	Percentage
Cash	70	58
Check	6	5
E-Payments(credit/debit card)	43	35
Wire Transfer	3	2
Total	122	100

Interpretation:

The above table shows that, 58% of the respondents are using cash mode, 5% of the respondents are using check payments, 35% of the respondents are using E-payments mode, only 2% of the respondent are using wire transfer mode. Majority of the respondents are using cash payment mode.

CHART-4.1. 6 MOST USABLE PAYMENTS MODE:

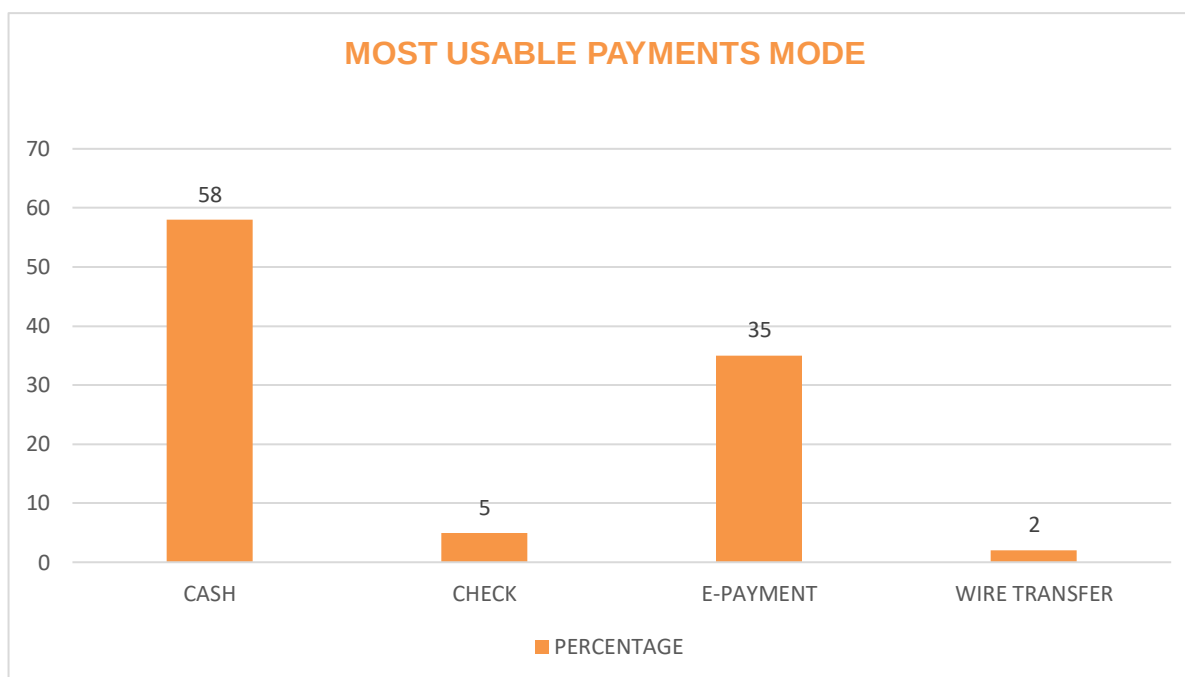


TABLE-4.1.7 SAFEST MODE OF E-PAYMENTS:

E-Payment	No. of. Respondents	Percentage
Credit/Debit Card	74	61
E-Wallet	22	18
Smart Cards	15	12
Digital cash	11	09
Total	122	100

Interpretation:

The above table shows that, 61% of the respondents are satisfied with credit/debit card, 18% of the respondents are satisfied with e-wallet, 12% of the respondents are satisfied with Smart card, 9% of the respondents are satisfied with digital cash. Majority of the respondents are satisfied with Credit/debit card payment.

CHART-4.1.7 SAFEST MODE OF E-PAYMENTS:

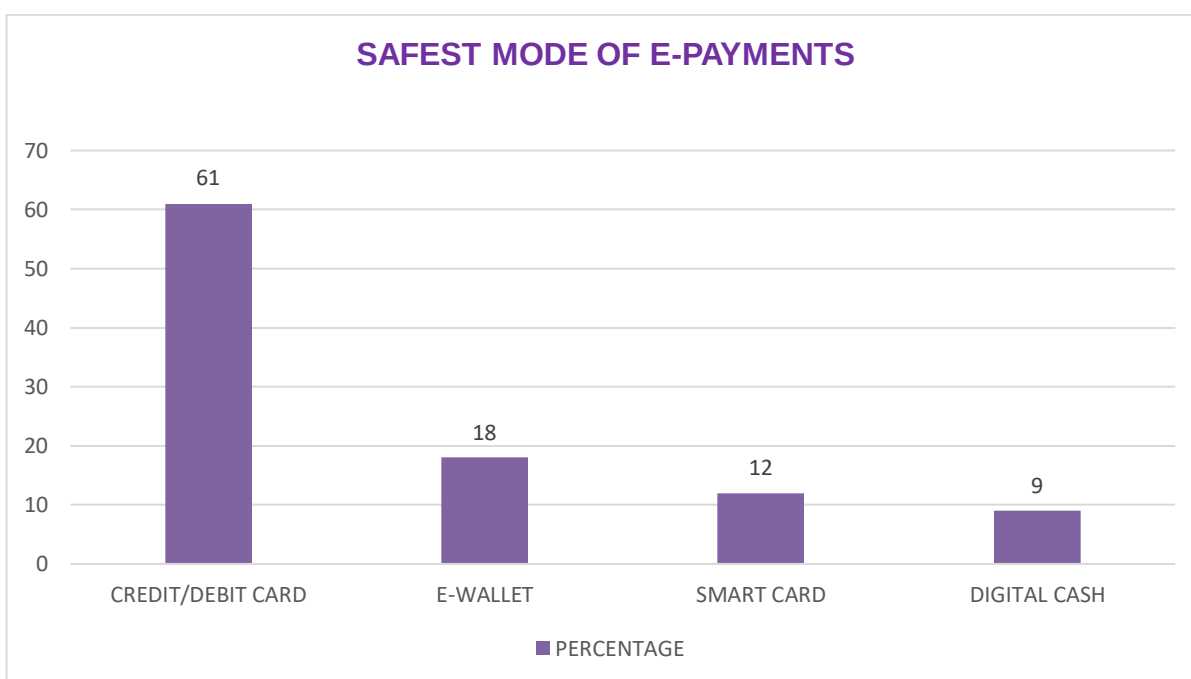


TABLE-4.1.8 HOW LONG YEARS USING E-PAYMENT:

Years	No. of. Respondent	Percentage
Less than 1 year	35	29
1-5 years	55	45
More than 5 years	32	26
Total	122	100

Interpretation:

The above table shows that, 29% of the respondents are using e-payments less than 1 year, 45% of the respondents are using e-payments 1-5 years, 26% of the respondents are using e-payments. Majority of the respondents are using e-payments 1-5 years.

CHART-4.1.8 HOW LONG YEARS USING E-PAYMENT:

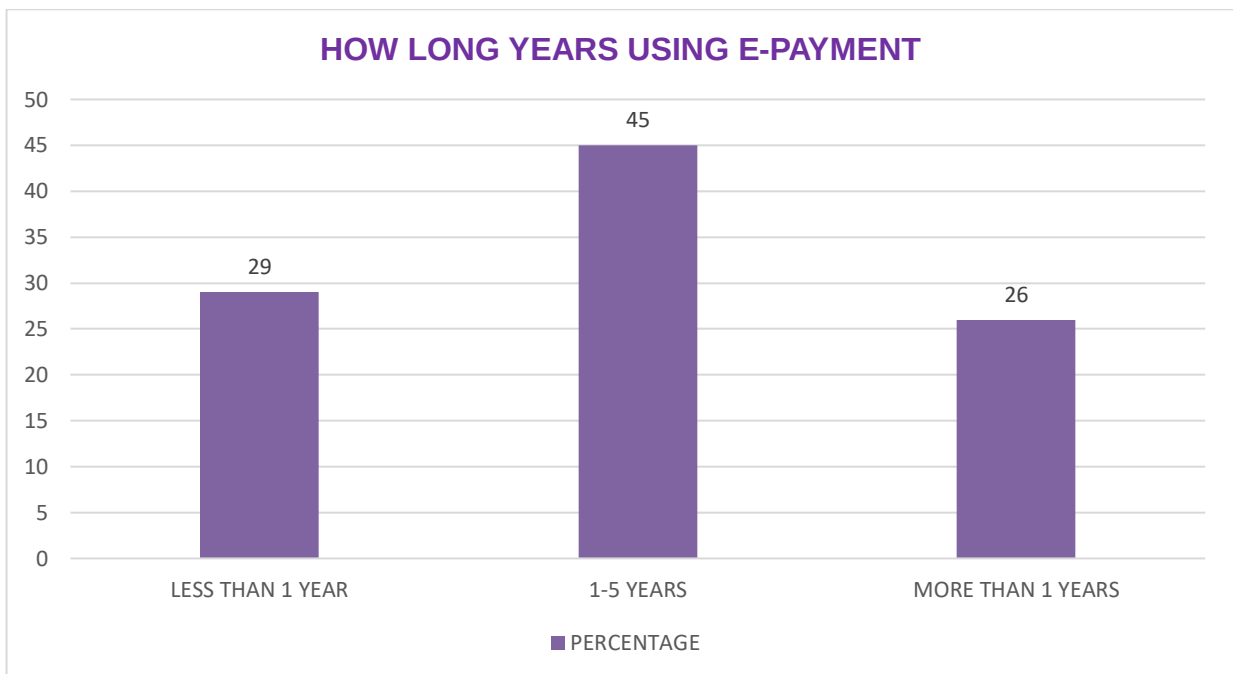


TABLE-4.1.9 PROBLEMS WERE FACING DURING E-PAYMENT:

Problems	No. of. Respondent	Percentage
Server problem	70	57
Payment Stuck	28	23
Transaction Issue	25	20
Total	122	100

Interpretation:

The above table shows that, 57% of the respondent are facing server problem during e-payment, 23% of the respondent are facing Payment issue problems, 20% of the respondent facing transaction issue problem. Majority of the respondents were facing server problem during e-payment.

CHART-4.1.9 PROBLEMS WERE FACING DURING E-PAYMENT

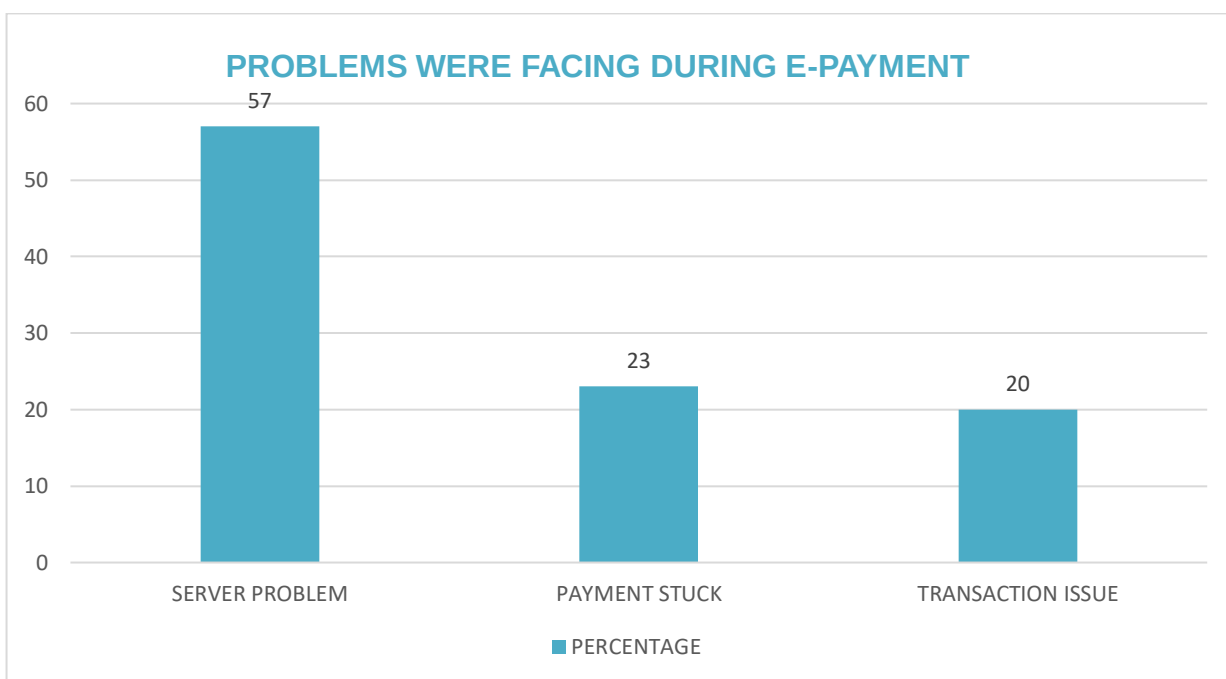


TABLE-4.1.10 MOST USABLE PAYMENT METHOD DURING E-COMMERCE:

Payment method	No. of. Respondent	Percentage
Credit/Debit Card	43	35
Cash on Delivery	45	37
Bank Transfers	22	18
Wallets	12	10
Total	122	100

Interpretation:

The above table shows that, 35% of the respondents were use Credit/debit card method during e-commerce, 37% of the respondents are using COD payment method, 18% of the respondents are using Bank transfer method, 10% of the respondent were using wallets. Majority of the respondents are using COD method on E-commerce.

CHART-4.1.10 MOST USABLE PAYMENT METHOD DURING E-COMMERCE:

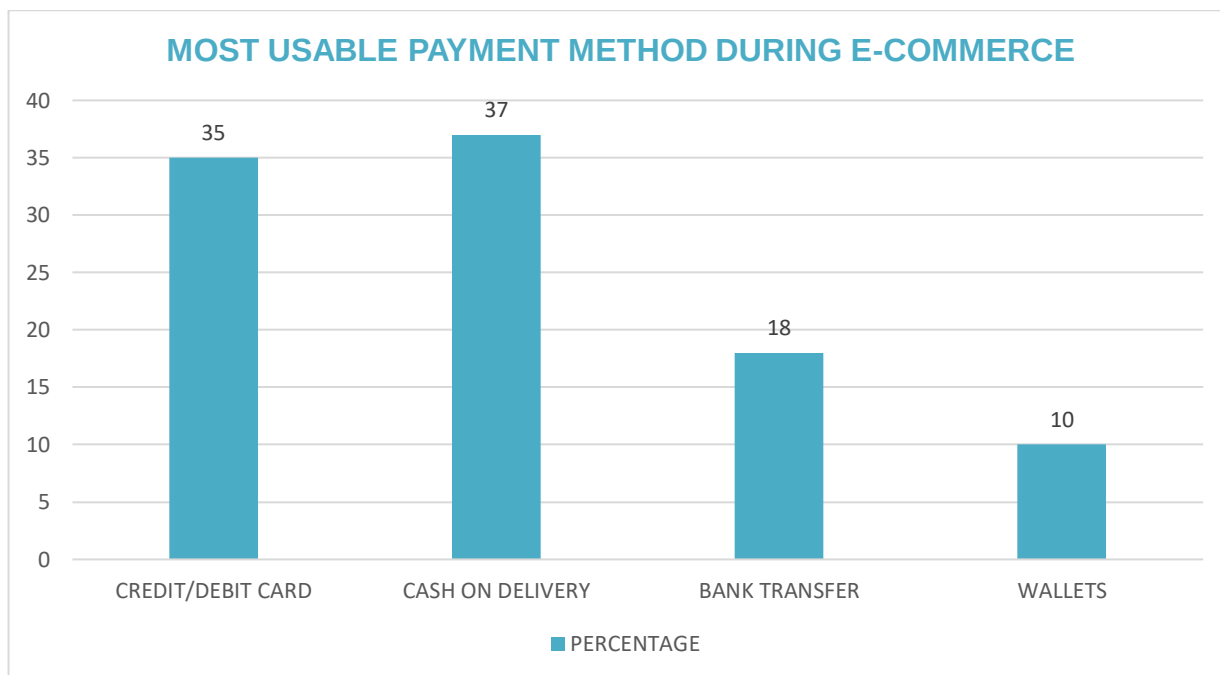


TABLE-4.1.11 MOST USED E-COMMERCE WEBSITES:

Websites	No. of. Respondent	Percentage
Amazon	44	36
Flipkart	55	46
MYNTRA	15	12
SNAPDEAL	08	06
Total	122	100

Interpretation:

The above table shows that, 36% of the respondent are use Amazon Websites, 46% of the respondents are use Flipkart, 12% of the respondents are use MYNTRA Websites, only 6% of the respondents are use SNAPDEAL website. Majority of the respondents are mostly use Flipkart websites.

CHART-4.1.11 MOST USED E-COMMERCE WEBSITES:

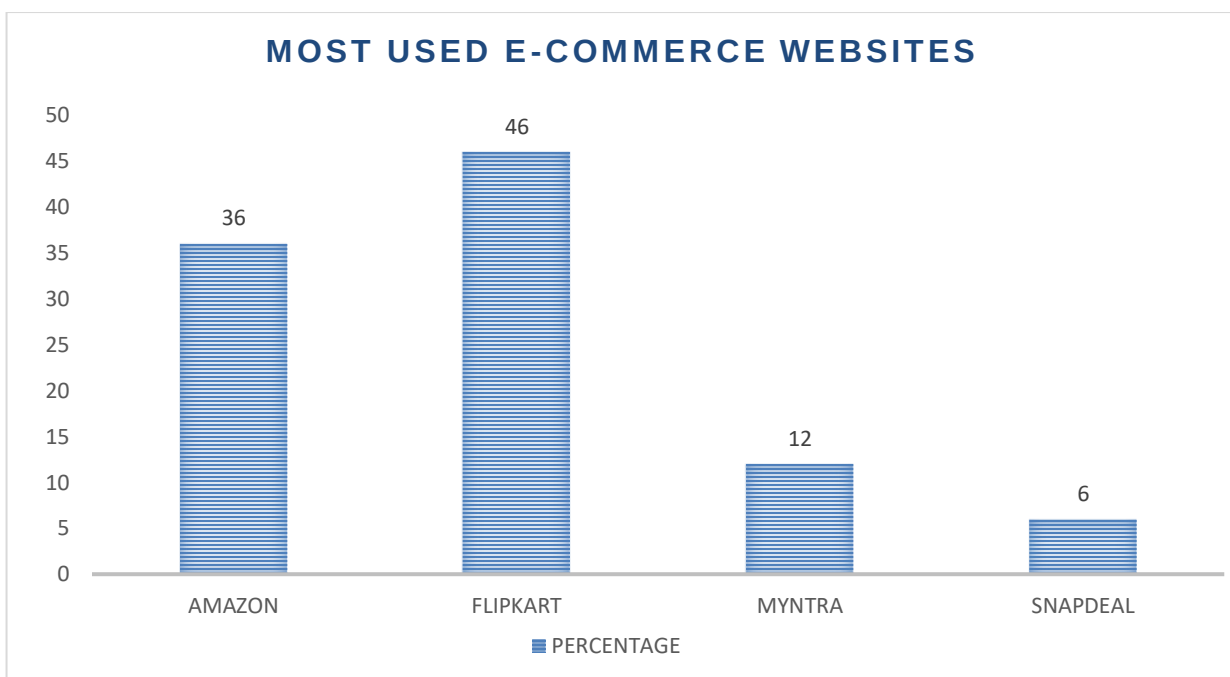


TABLE-4.1.12 MOST DESIRABLE E-PAYMENT METHOD DURING ONLINE PURCHASE

E-payment Method	No. of. Respondents	Percentage
Credit card	31	25
Debit card	24	20
E-Wallet	13	11
Bank transfer	27	22
UPI method	27	22
Total	122	100

Interpretation:

The above table shows that, 25% of the respondent are like Credit Card method, 20% of the respondents are like Debit card method, 11% of the respondents are like E-wallet , 22 % of the respondents are like both bank transfers and UPI method. Majority of the respondents are like Credit card e-payments method.

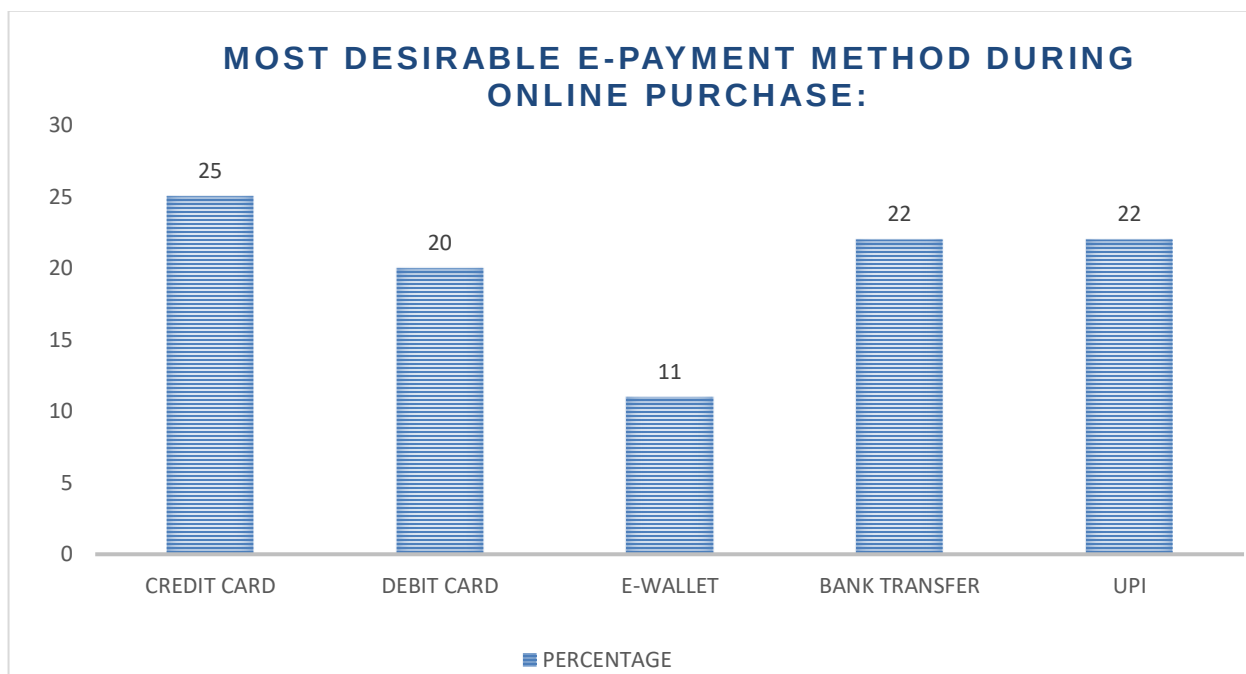
CHART-4.1.12 MOST DESIRABLE E-PAYMENT METHOD DURING ONLINE PURCHASE:

TABLE-4.1.13 SECURITY MEASURES THAT COULD SECURE AGAINST VARIOUS KINDS OF E-PAYMENT ATTACKS:

Security measures	No. of. Respondent	Percentage
Self-awareness in security	39	32
Limiting online Activities	46	37
User Education	11	10
Increasing/Updating level of security	20	21
Total	122	100

Interpretation:

The above table shows that, 32% of the respondents are secured self-awareness in security measures, 37% of the respondents are secured Limiting online activity measures, 10% of the respondents are secured User education measures, and 21% of the respondents are secured updating level of security measures. Majority of the respondents are secured the e-payments attacks with limiting online activities measures.

CHART-4.1.13 SECURITY MEASURES THAT COULD SECURE AGAINST VARIOUS KINDS OF E-PAYMENT ATTACKS:

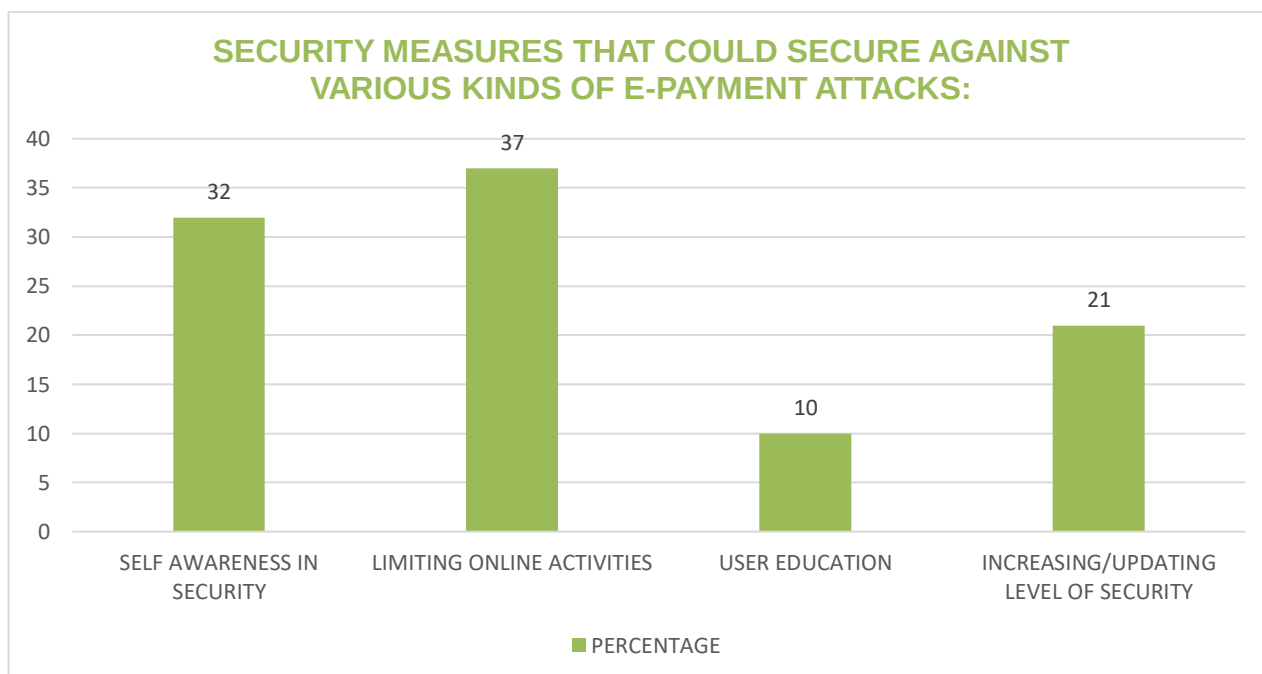


TABLE-4.1.14 TRUST ABOUT SECURITY OF E-PAYMENT:

Opinion	No. of. Respondent	Percentage
Not at all	37	31
A lot	40	32
A little	45	37
Total	122	100

Interpretation:

The above table shows that, 31% of the respondents are don't trust the security, 32% of the respondents are more trust about security of e-payment, 37% of the respondents are little trust about security of e-payments. Majority of the respondents are a little trust about security of e-payments.

CHART-4.1.14 TRUST ABOUT SECURITY OF E-PAYMENT:

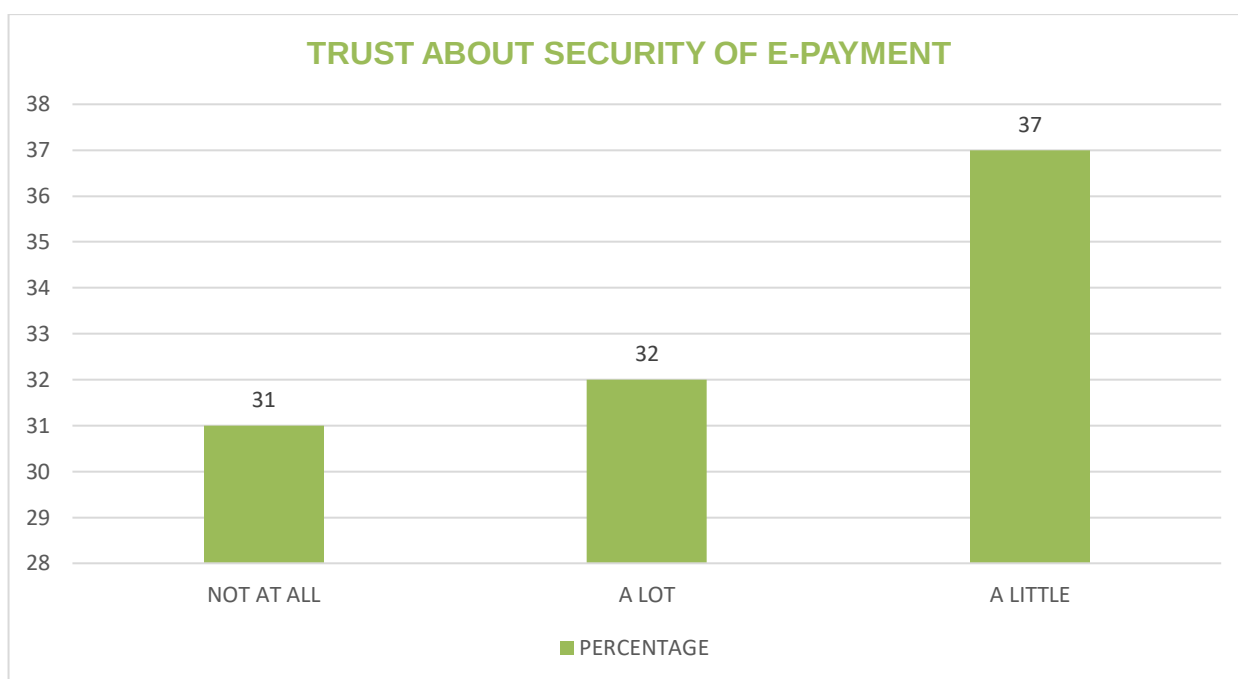


TABLE-4.1.15 MAIN REASON FOR CHOOSING E-PAYMENT SERVICES:

Reason	No. of. Respondent	Percentage
Safe and Secure	42	35
Low Service Charges	26	21
Privacy	30	24
Convenience	24	20
Total	122	100

Interpretation:

The above table shows that, 35% of the respondents are choosing safe and secure reason for e-payment services, 21% of the respondents are choosing low services charges reason, 24% of the respondents are choosing privacy reason, 20% of the respondents are choosing convenience reason. Majority of the respondents are choosing the reason safe and secure.

TABLE-4.1.15 MAIN REASON FOR CHOOSING E-PAYMENT SERVICES:

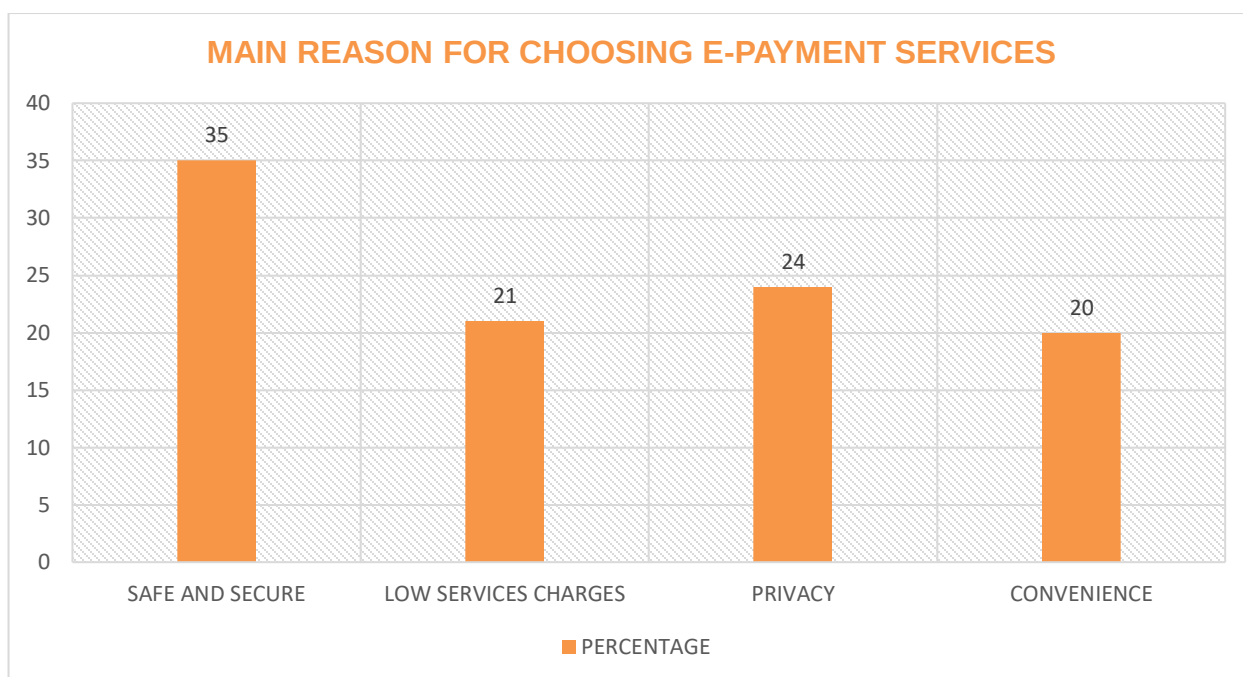


TABLE-4.1.16 REASON ABOUT NEVER USED E-PAYMENTS ON ONLINE SHOPPING:

Reason	No. of. Respondent	Percentage
Concerned about security	57	47
Don't get on with technology	25	17
Don't trust e-payment	21	20
Theft issue	19	16
Total	122	100

Interpretation:

The above table shows that, 47% of the respondent says the reason for concerned about security, 17% of the respondent says don't get on with technology, 20% of the respondent to say don't trust e-payment, 16% of the respondent to say the reason for Theft issue. Majority of the respondent to say the major reason for never used e-Payment on online shopping is concerned about security.

CHART-4.1.16 REASON ABOUT NEVER USED E-PAYMENTS ON ONLINE SHOPPING

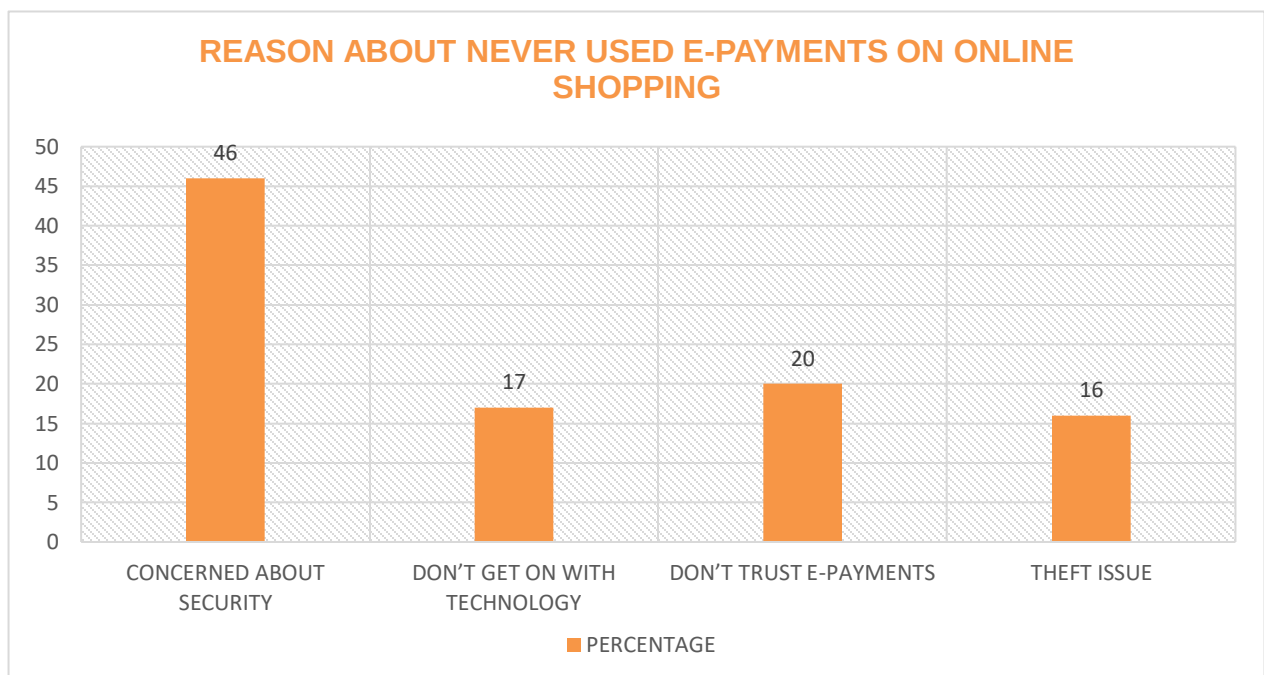


TABLE-4.1.17 LOST MONEY DUE TO DIGITAL FRAUD ON ONLINE PURCHASING

Opinion	No. of. Respondent	Percentage
Yes	40	33
No	82	67
Total	122	100

Interpretation:

The above table shows that, 33% of the respondents are lost money due to digital fraud on online purchasing, 67% of the respondents are don't lose money on online purchasing. Majority of the respondent are don't lost money on online purchasing.

CHART-4.1.17 LOST MONEY DUE TO DIGITAL FRAUD ON ONLINE PURCHASING:

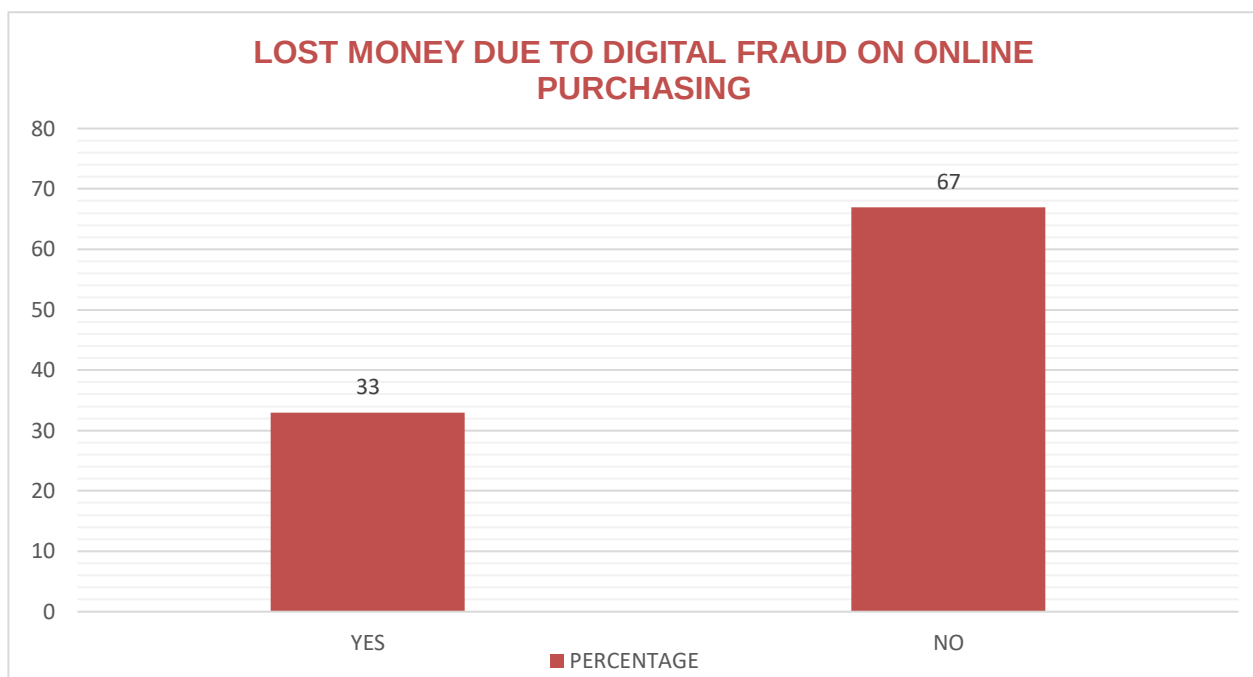


TABLE-4.1.18 REASONS FOR BUYING ONLINE:

REASONS	NO.OF.RESPONDENTS	PERCENTAGE
Comparison of prices and products	19	15
Convenience	34	28
Different payment option	21	17
Discounts	23	19
Lots of variety found	21	26
Total	122	100

Interpretation:

The above table shows that, 15% of respondents are satisfied with comparison of prices and products, 28% of respondents are said convenience reason, 38% are satisfied with discounts option, 26% of respondents are choosing lots of variety found option. Majority of the respondents are satisfied with convenience reasons.

CHART-4.1.18 REASONS FOR BUYING ONLINE:

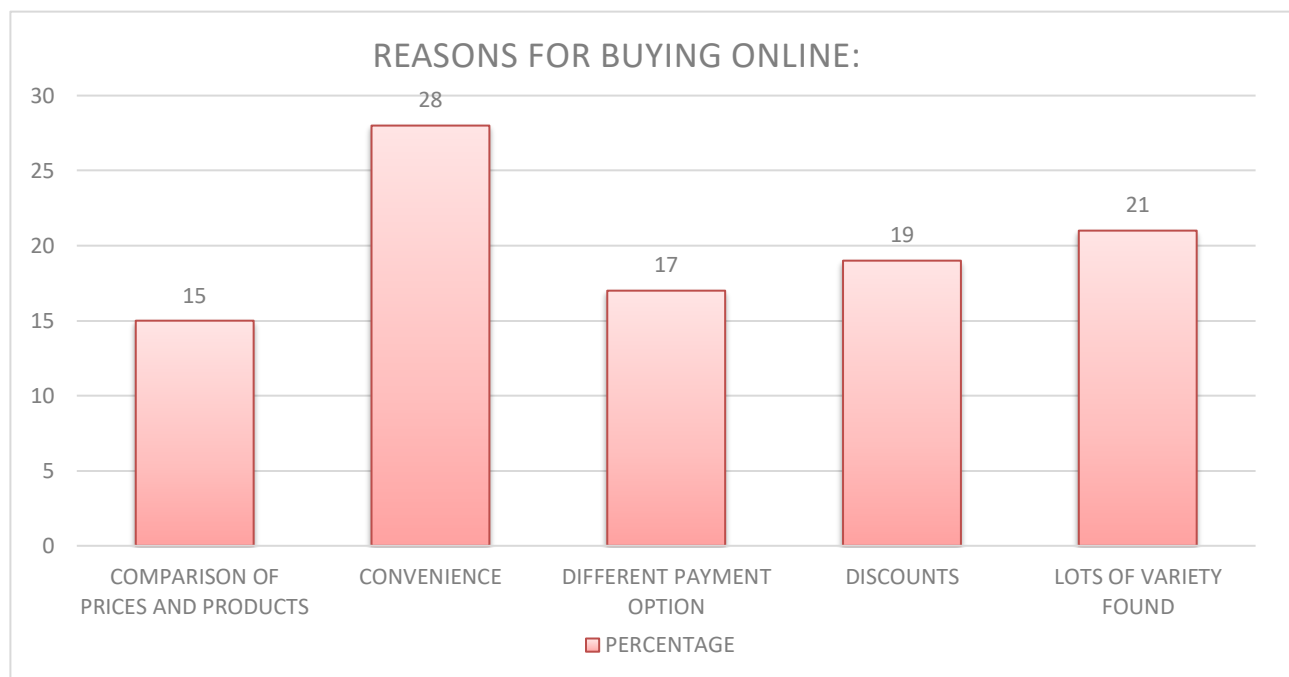


TABLE-4.1.19 GOODS OR SERVICES THAT ARE PURCHASED ONLINE:

Options	No. Of. Respondents	Percentage
Utility bills	30	24
Foods and Beverages	28	23
GOODS(Electronic, Apparels)	34	28
Local Public Transport	13	11
Tickets for Events, Movies	17	14
TOTAL	122	100

Interpretation:

The above table shows that, 24% of the respondents are using online services mostly to pay utility bills, 23% of respondents are purchased foods on online, 28% of the respondents are purchased GOODS like apparels and Electronic on online, 11% of the respondents are purchased local transport tickets on online, 14% of the respondents are purchased movies, events tickets on online. Majority of the respondents are purchased GOODS (Electronics, Apparels, etc.,).

TABLE-4.1.19 GOODS OR SERVICES THAT ARE PURCHASED ONLINE:

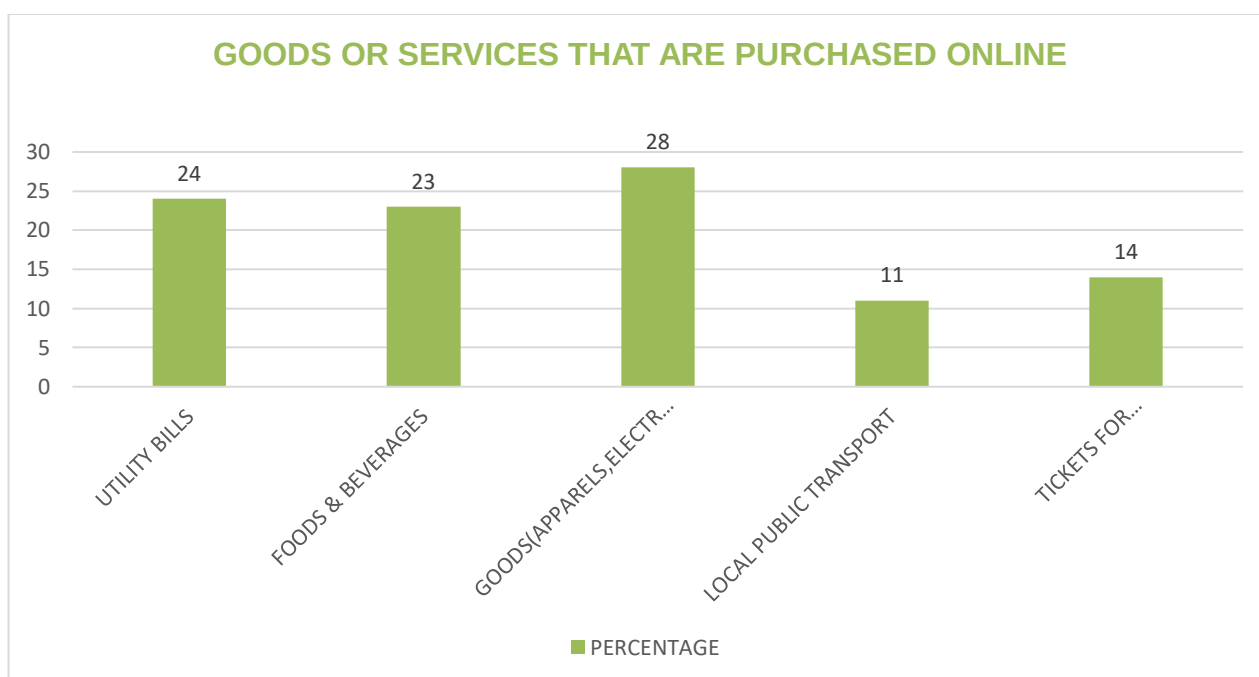


TABLE-4.1.20 PAYMENTS GATEWAY USED WHILE MAKING ONLINE PAYMENTS:

Payment	No. of. Respondents	Percentage
COD(Cash on Delivery)	48	40
Credit Card	21	17
Debit Card	10	08
Net Banking	26	21
Mobile Banking	17	14
Total	122	100

Interpretation:

The above table shows that, 40% of the respondents are using COD mode, 17% of respondents are using Credit card, 8% of respondents are using Debit cards, 21% of respondents are using Net banking mode, 14% of respondents are using Mobile banking mode. Majority of respondents are using COD (40%) mode.

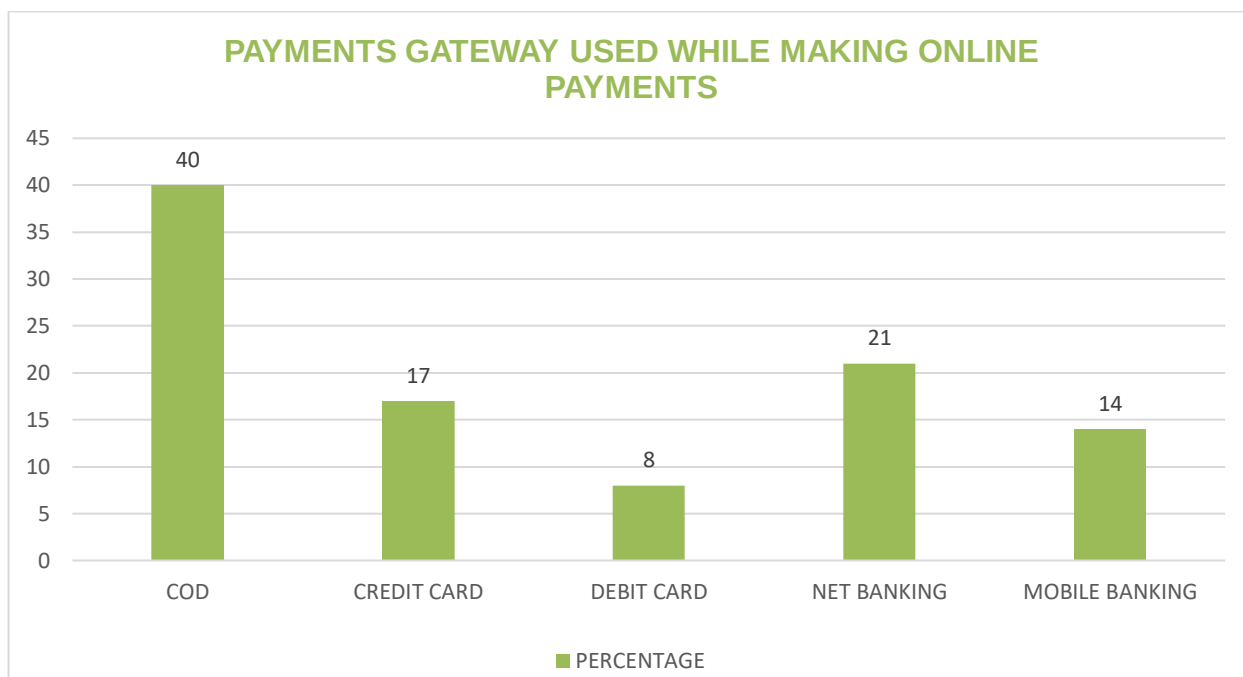
CHART-4.1.20 PAYMENTS GATEWAY USED WHILE MAKING ONLINE PAYMENTS

TABLE-4.1.21 ADOPT AN ONLINE PAYMENT PLATFORM OVER PHYSICAL PAYMENT:

Reason	No. of .Respondents	Percentage
Convenience	28	23
Cashback	16	13
Time saving	25	20
Discounts	23	19
Coupons/Deals	12	10
Easy to track	07	6
Different payment option	11	9
Total	122	100

Interpretation:

The above table shows that, 23% of the respondents are choosing convenience option, 13% of respondents are choosing cashback options, 20% of respondents are choosing time saving option, 19% of respondents are choosing discounts option, 10% of respondents are choosing coupons/deals option, only 6% of the respondents are choosing easy to track option, 9% of respondents are choosing different payment option. Majority of the respondents are satisfied online payment is convenience than physical payment.

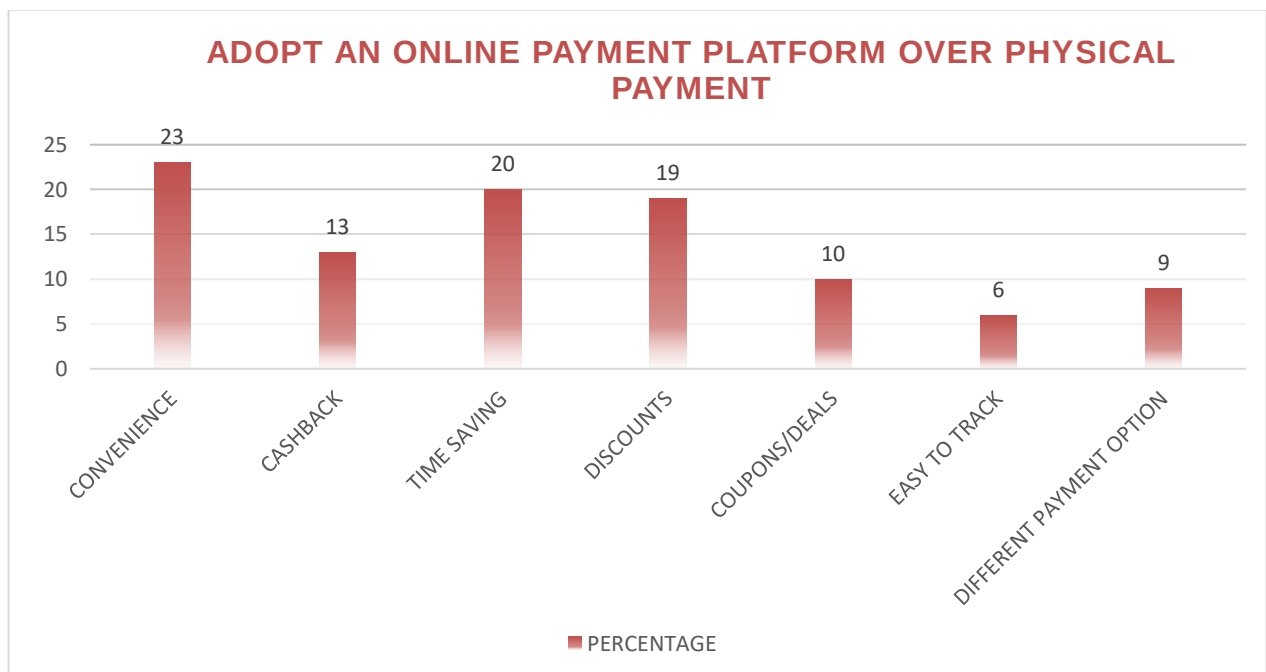
CHART-4.1.21 ADOPT AN ONLINE PAYMENT PLATFORM OVER PHYSICAL PAYMENT:

TABLE-4.1.22 MOST USABLE DIGITAL PAYMENT PLATFORM:

Digital Payment	No. of. Respondents	Percentage
PAYTM	33	27
MOBIKWIK	1	1
GOOGLE PAY	43	35
PHONEPE	45	37
Total	122	100

Interpretation:

The above table shows that, 27% of respondents are using PAYTM platforms, 1% of respondents are using MOBIKWIK platforms, 35% of the respondents are using Google pay platforms, 37% of the respondents are using PHONEPE platforms. Majority of the respondents are using PHONEPE platforms than others.

CHART-4.1.22 MOST USABLE DIGITAL PAYMENT PLATFORM

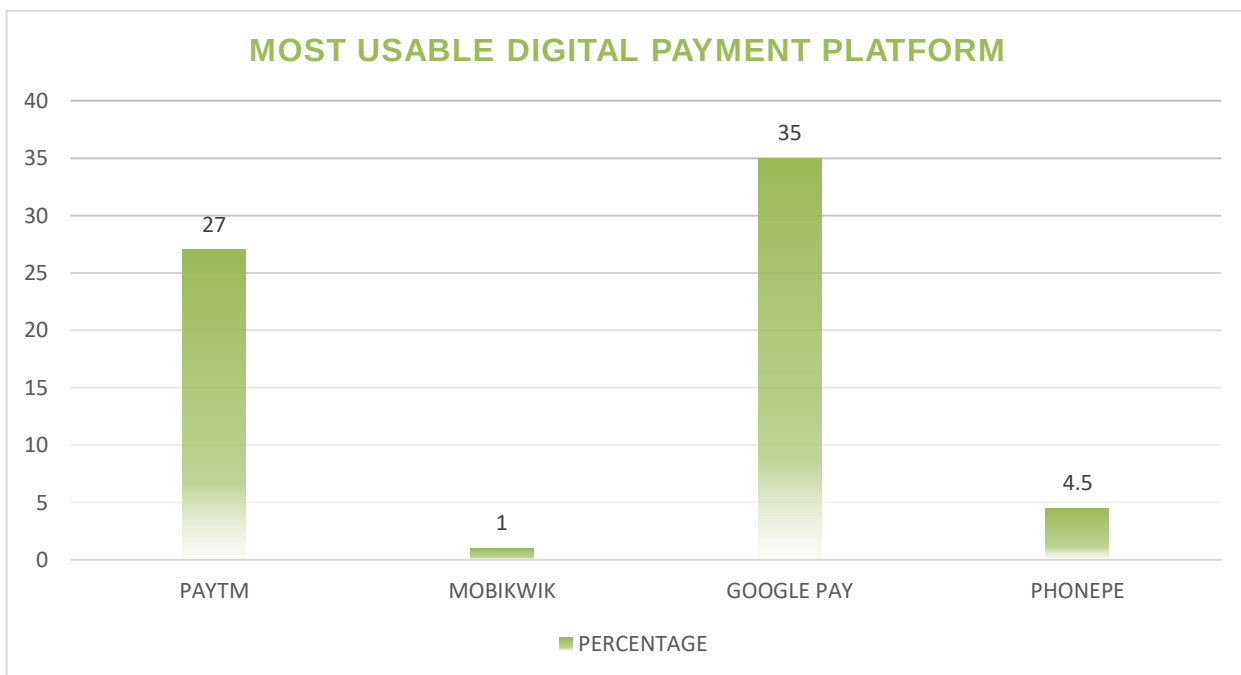


TABLE-4.1.23 FUTURE OF E-PAYMENT DURING ONLINE SHOPPING:

Future of E-payment	No .of. Respondents	Percentage
Increases	116	95
Decreases	6	5
Total	122	100

Interpretation:

The above table shows that, 95% of the respondents are accept the future of e-payment during online shopping is increases, 5% of respondents are not accept it and also said that the future of e-payment during online shopping is decreases. Majority of the respondents are satisfied the future of e-payments are increases.

CHART-4.1.23 FUTURE OF E-PAYMENT DURING ONLINE SHOPPING:

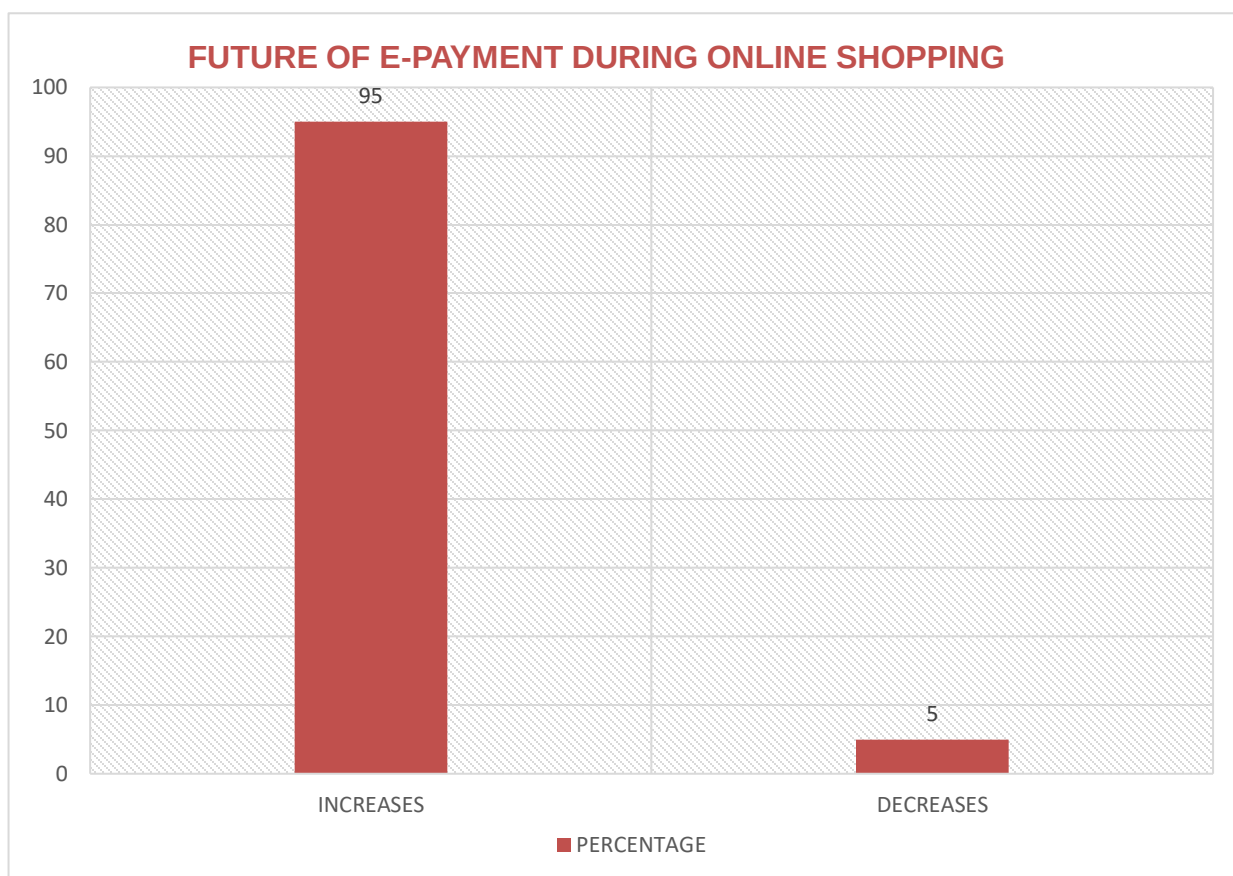


TABLE-4.1.24 MOBILE APPS WILL INCREASE ONLINE PURCHASES IN FUTURE:

Opinion	No. of. Respondents	Percentage
Strongly Agree	71	60
Agree	43	37
Strongly Disagree	5	2
Disagree	3	1
Total	122	100

Interpretation:

The above table shows that, 60% of the respondents are strongly agree with mobile apps will increases online purchases in future, 37% of respondents are agree with mobile apps will increases online purchases in future, 2% of respondents are strongly disagree with mobile apps will increases online purchases in future, 1% of the respondents are disagree with mobile apps will increases online purchases in future. Majority of the respondents are strongly agree with mobile apps will increases online purchases in future.

CHART-4.1.24 MOBILE APPS WILL INCREASE ONLINE PURCHASES IN FUTURE:

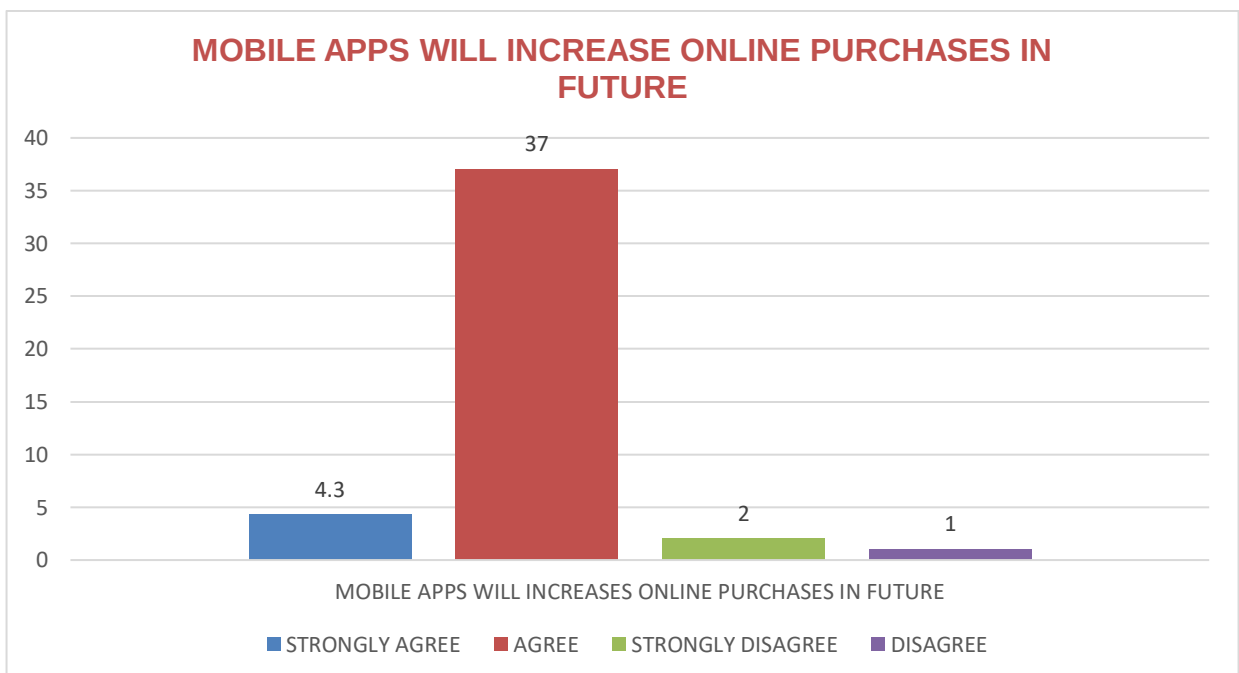


TABLE-4.1.25 INFLUENCED TO USE E-PAYMENTS:

Influences	No. of. Respondents	Percentage
Friends	75	61
Family	34	28
Demonetization	13	11
Total	122	100

Interpretation:

The above table shows that, 61% of the respondents are influenced from friends to use e-payment, 28% of the respondents are influenced from family to use e-payment, 11% of the respondents are influenced for demonetization. Majority of the respondents are influenced from friends to use e-payments.

CHART-4.1.25 INFLUENCED TO USE E-PAYMENTS:

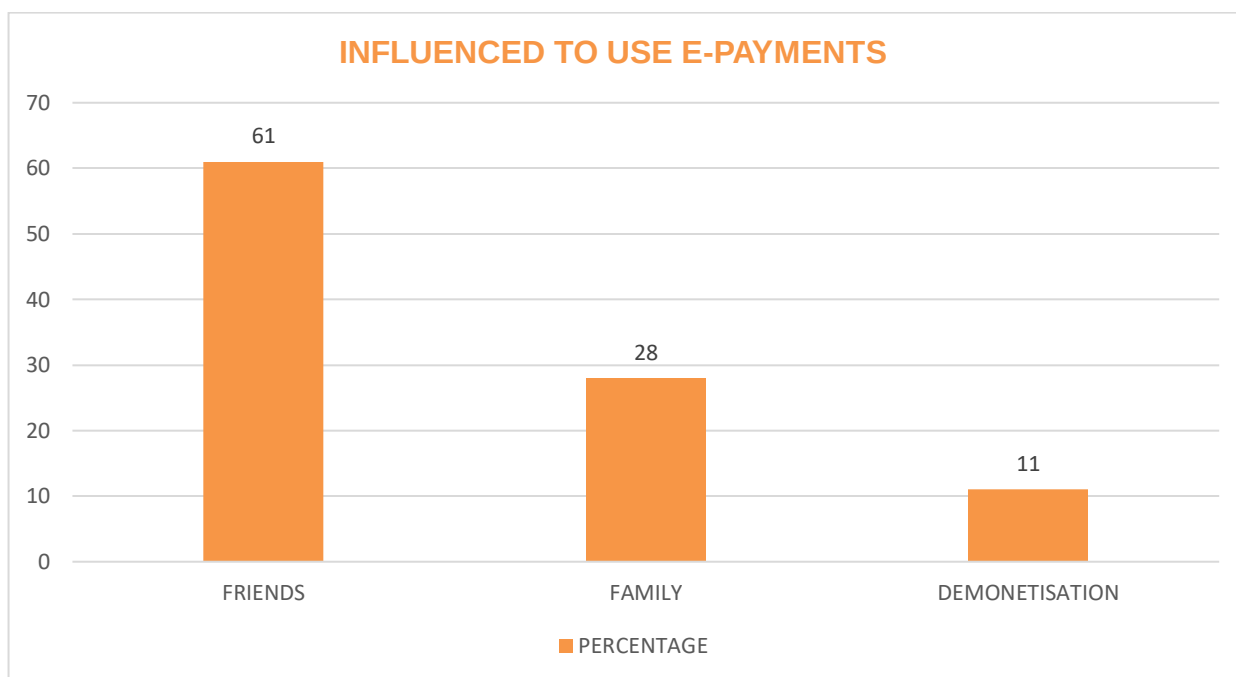


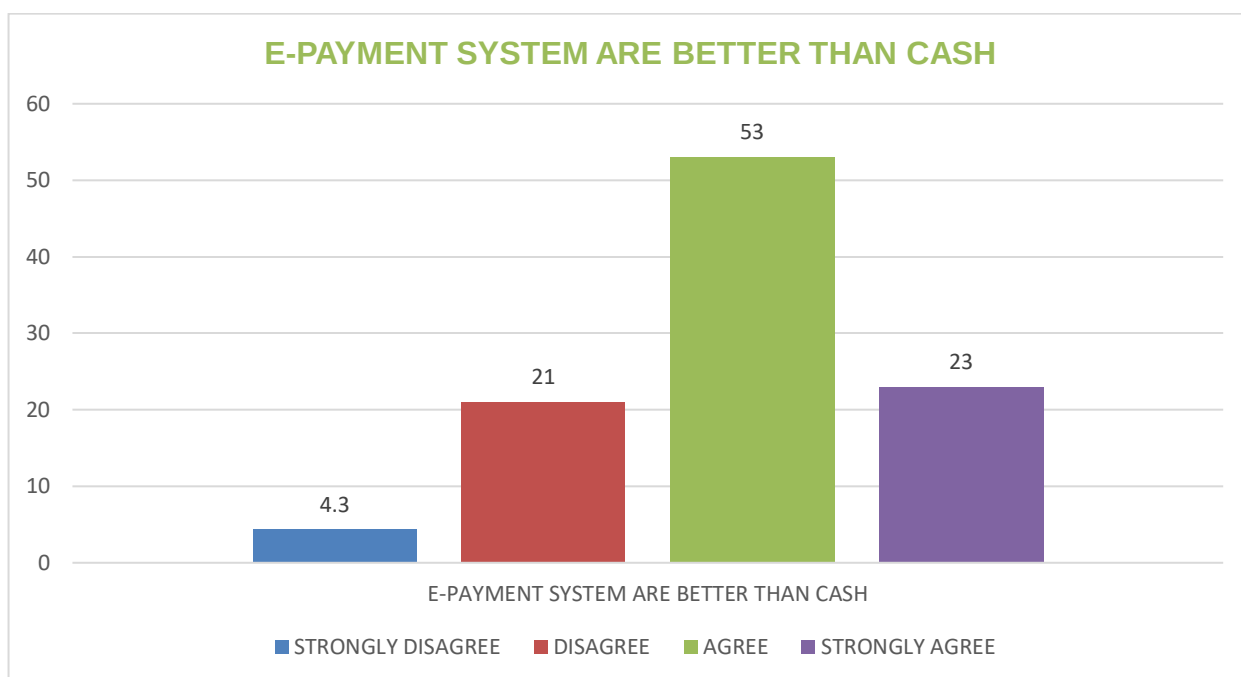
TABLE-4.1.26 E-PAYMENT SYSTEM ARE BETTER THAN CASH:

Opinion	No. of. Respondent	Percentage
Strongly Disagree	8	3
Disagree	23	21
Agree	65	53
Strongly Agree	26	23
Total	122	100

Interpretation:

The above table shows that, 3% of the respondents are strongly disagree with e-payment system are better than cash, 21% of the respondents are disagree with e-payment system are better than cash, 53% of the respondents are agree with e-payment system are better than cash, 23% of the respondents are strongly agree with e-payment system are better than cash. Majority of the respondents are agree with e-payment system are better than cash.

CHART-4.1.26 E-PAYMENT SYSTEM ARE BETTER THAN CASH:



4.2 CHI-SQUARE ANALYSIS

HYPOTHESIS:

HO: There is no significant difference between the Educational Qualification and Awareness of E-Payment.

Educational Qualification						
Awareness of E-payment	Particular	HIGH SCHOOL	DIPLOMA	BACHELOR'S DEGREE	MASTER'S DEGREE	Total
	Yes	15	10	43	33	101
	No	6	8	5	2	21
	Total	21	18	48	35	122

Chi square analysis= $\sum (O-E)^2/E$

O	E	(O-E) ²	(O-E) ² /E
15	17.3	5.29	0.30
10	14.9	24.01	1.61
43	39.7	10.89	0.27
33	28.9	16.81	0.58
6	3.6	5.76	1.6
8	3	25	8.33
5	8.2	10.24	1.24
2	6	16	2.66
$\sum (O-E)^2/E$			16.59

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

(4-1)(2-1)

$$3*1 = 3$$

Level of significant= 5% level

Calculated value: 16.59

Table value: 7.81

Calculated value > Table value

Result:

From this analysis it reveal that the calculated value is greater than the table value at 5% significant level.

Null Hypothesis:

There is no significant relation between the Educational Qualification and awareness of E-payment. We reject Null hypothesis, and accept Alternative hypothesis.

Alternative Hypothesis:

There is significant relation between the Educational Qualification and Awareness of E-payment.

4.2 CHI-SQUARE ANALYSIS

HYPOTHESIS:

H0: there is no significant difference between the E-payment method and E-commerce websites.

E-payment method							
E-commerce websites	Particular	Credit card	Debit card	E-wallet	Bank transfers	UPI	Total
	AMAZON	11	9	4	8	12	44
	FLIPKART	14	12	7	13	9	55
	MYNTRA	4	2	1	4	4	15
	SNAPDEAL	2	1	1	2	2	8
	Total	31	24	13	27	27	122

Chi square= $\sum (O-E)^2/E$

O	E	(O-E)²	(O-E)²/E
11	11.1	0.01	0.0009
9	8.6	0.16	0.01
4	4.6	0.36	0.07
8	9.7	2.89	0.29
12	9.7	5.29	0.54
14	13.9	0.01	0.0007
12	10.8	1.44	0.13
7	5.8	1.44	0.24
13	12.1	0.81	0.06
9	12.1	9.61	0.79
4	3.8	0.04	0.01
2	2.9	0.81	0.27
1	1.5	0.25	0.16
4	3.3	0.49	0.14
4	3.3	0.49	0.14
2	2	0	0
1	1.5	0.25	0.16
1	0.8	0.004	0.05
2	1.7	0.09	0.05
O	E	(O-E)²	(O-E)²/E

2	1.7	0.09	0.05
$\Sigma(O-E)^2/E$			3.1616

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

(4-1)(5-1)

$$3 \times 4 = 12$$

Level of significant= 5% level

Calculated value: 3.1616

Table value: 21.0

Calculated value < Table value

Result:

From this analysis it reveal that the calculated value is lesser than the table value at 5% significant level.

Null Hypothesis:

There is no significant relation between the E-payment method and E-commerce websites. The Null hypothesis is accepted.

4.3 CORRELATION CO-EFFICIENT:

Table- 4.3.1 Showing the analysis a services of E-payments during online purchasing:

Opinion of the respondents	Yes	No	Total
Excellent	10	14	24
Very Good	28	12	40
Good	20	8	28
Satisfactory	8	10	18
Poor	6	6	12
Total	72	50	122

X	Y	XY	X ²	Y ²
10	14	140	100	196
28	12	336	784	144
20	8	160	400	64
8	10	80	64	100
6	6	36	36	36
ΣX=72	ΣY=50	ΣXY=752	ΣX²=1384	ΣY²=540

Correlation co-efficient formula:

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

$$r = \frac{5(752) - (72)(50)}{\sqrt{[5(1384) - (72)^2]} \sqrt{[5(540) - (50)^2]}}$$

$$r = \frac{3760 - 3600}{\sqrt{6920 - 5184} \sqrt{2700 - 2500}}$$

$$r = \frac{160}{\sqrt{1736} \sqrt{200}}$$

$$r = \frac{160}{\sqrt{347200}}$$

$$r = 0.2715$$

INFERENCE:

It is clear from the above calculation that the variables are positively correlated. The respondents are satisfied with the services during e-payments on online purchasing. It can be anticipated that the e-payments credibility will be good among its customers and it will soon become prominent among its customers.

5. FINDINGS, SUGGESTIONS, CONCLUSIONS

5.1. FINDINGS:

- Majority of the respondents (69%) are Male.
- Majority of the respondents (69%) age between 18-28 years.
- Majority of the respondents (39%) are Bachelor's Degree holders.
- Majority of the respondents (48%) are students.
- Majority of the respondents (83%) are aware with e-payments.
- Majority of the respondents (58%) are using cash payment mode.
- Majority of the respondents (61%) are satisfied with credit/debit card mode.
- Majority of the respondents (45%) are using e-payments on 1-5 years.
- Majority of the respondents (57%) are facing server problem on using e-payments
- Majority of the respondents (37%) are using cash on delivery method on e-commerce.
- Majority of the respondents (46%) are mostly use Flipkart websites.
- Majority of the respondents (25%) are like credit card method during online purchase.
- Majority of the respondents (37%) are secured e-payments attacks with limiting online activities measures.
- Majority of the respondents (37%) are little bit trust about security of e-payments.
- Majority of the respondents (35%) are satisfied for e-payments is safe and secure.
- Majority of the respondents (47%) are never used e-payments on online shopping because of concerned about security.
- Majority of the respondents (67%) are never lose any money on online purchasing.
- Majority of the respondents (28%) are mostly buying goods like electronics, cloths.
- Majority of the respondents (40%) are mostly desirable COD method.
- Majority of the respondents (23%) are satisfied for online payment platform is convenience.
- Majority of the respondents (37%) are mostly using PHONEPE digital payment platform.
- Majority of the respondents (95%) are agree with future of e-payments is increases.
- Majority of the respondents (60%) are strongly agree with mobile apps will increases online purchase in future.

- Majority of the respondents (61%) are influenced from friends to use e-payments.
- Majority of the respondents (53%) are agree with e-payment system are better than cash.

5.2. SUGGESTIONS:

- Some of the respondents are suggested for provide flexible Payment Options.
- To build a more trust in respect of security and privacy concerns rather than only focusing on discounts or cashback offers.
- To provide assurance security signals.
- The customers need lots of variety products and also low service charges.
- The users suggest to capturing cash will be refundable immediately.
- To provide risk-free payment transactions.
- The customers require Essential Information Only.
- Avoid redirects during the payment process.
- To make customers feel safe and secure.
- The users need complete solutions for security problems and also transaction issues.

5.3. CONCLUSION:

Technology has arguably made our lives easier. One of the technological innovations in banking finance and commerce is the Electronic Payments. Electronic Payments (e-payments) refers to the technological breakthrough that enables us to perform financial transactions electronically, thus avoiding long lines and other hassles. Electronic Payments provides greater freedom to individuals in paying their taxes, licenses, fees, fines and purchases at unconventional locations and at whichever time of the day, 365 days of the year. After analysis and comparison of various modes of electronic payment systems, it is revealed that it is quite difficult, if not impossible, to suggest that which payment system is best. Some systems are quite similar, and differ only in some minor details. Thus there are number of factors which affect the usage of e-commerce payment systems. Among all these user base is most important. Added to this, success of e-commerce payment systems also depends on consumer preferences, ease of use, cost, industry agreement,

authorization, security, authentication, non-refutability, accessibility and reliability and anonymity and public policy. Reliable and Cashless payment system offers immunity against theft of paper and e-money, and adopting e-payment solutions or systems for different reasons. In addition to cost reduction, reference was made to a number of other benefits, including improved customer service, improved working capital, increased operational efficiencies and cycle times, processing efficiencies and enhanced compliance to organizational policies and procedures. This opportunities e-payment operation increases different levels of risks for marketing. More than ten Years of Internet marketing research have yielded a set of important findings. Based on our review of these findings, it is clear that the Internet is playing a more and more important role in the field of e-payment. Peoples are becoming aware of the need to measure the collaborative effects of e-payment. The study reveals that the peoples were not aware and educated. They have not any knowledge of e-payment. The study is based on survey. The respondent have to answer the questions on their own. Some people satisfy with our views. But some peoples are not satisfies with us. This study states that e-payment provides greater reach to customers. Feedback can be obtained easily as internet is virtual in nature. Customer loyalty can be gain. Personal attention can be given by bank to customer also quality service can be served. We came to know various strengths of e-payment System such as quality customer service, greater reach, time saving customer loyalty, easy access to information, 24 hours access, reduce paper work no need to carry cash easy online applications etc.

REFERENCES:

- ✓ Mukul, P. (2018, February). **E-payment:** To tap into India's \$200-billion market, WhatsApp bets on improvement. Social. Retrieved from <http://indianexpress.com/article/technology/social/e-payment-to-tap-into-indias-200-billion-market-whatsapp-bets-onimprovement/>
- ✓ S. Kowsalya, S. K. (2017, March). **A Study on the Perception of Customers towards E-Commerce and E-Payments in Local Survey.** International Journal of Innovative Research in Science, Engineering and Technology, 6(3). Retrieved from https://www.ijirset.com/upload/2017/march/105_A%20%20STUDY.pdf

- ✓ Singh, V. (2018). Retrieved from Inc42: <https://inc42.com/resources/blockchain-digital-finance/amp/>
- ✓ TIWARI, M. (2018, March). **'WhatsApp to disrupt digital payments market in India'**. Technology. Retrieved from <http://www.financialexpress.com/industry/technology/whatsapp-to-disrupt-digital-payments-market-in-india/1091805/>
- ✓ Denis Abrazhevich , **“Electronic Payment Systems: a User-Centered Perspective and Interaction Design”**, ISBN 90-386-1948-0NUR 788, 2004
- ✓ Ailya Izhar, Aihab khan, Malik Sikandar Hayat Khiyal, 4Wajeeh Javed and Shiraz Baig“, **Designing and implementation of Electronic Payment gateway for developing countries”**, journal of Theoretical and applied information technology, vol. 26 No. 230 April 2011.
- ✓ Hossein Bidgoli (2002).**Electronic commerce**. Academic press. Ed. California: USA.
- ✓ Joseph P.T, S.J (2008) **An Indian perspective, 3rd edition, E-Commerce**, by PHI learning private limited.
- ✓ Delali Kumaga Dec 2010, **A challenges of implementing Electronic Payment Systems** – The Case of Ghana's E-Payment System.
- ✓ Yang Jing,” **“On-line Payment and Security of E-commerce”**. Proceedings of the 2009 International Symposium on Web Information Systems and Applications (WISA'09)Nanchang, P. R. China, May 22-24, 2009, pp. 046-050.

Books:

- ✓ E-payment system – Dr. V .N. Joshi.
- ✓ E-payment system for E-commerce – Donal O' Mahony.
- ✓ Payment technologies for E-commerce – Weidong Kou.
- ✓ Essentials of online payment security and fraud prevention – David Montague.

BIBLIOGRAPHY:

- ✓ 2016, September). Retrieved from Fin extra:
<https://www.finextra.com/blogposting/13181/biometrics-the-future-of-paymentauthentication>.
- ✓ Abhijit M. Tadse. H. S. (2017, Apr-May). **A Study on usage of PAYTM**. Pune Research Scholar: An International Multidisciplinary Journal, 3(2).
- ✓ Bezhovski. Z. (2016). **The Future of the Mobile Payment as Electronic Payment System**. European Journal of Business and Management. Retrieved <http://eprints.ugd.edu.mk/15691/1/The%20Future%20of%20the%20Mobile%20Payment%20as%20Electronic%20Payment%20System.pdf>
- ✓ Karamjeet Kaur, D. A. (2015, February). E-Payment System on E-Commerce in India. Int. Journal of Engineering Research and Applications. Retrieved from http://www.ijera.com/papers/Vol5_issue2/Part%20-%201/M502017987.pdf
- ✓ Mukul, P. (2018, February). **E-payment: To tap into India's \$200-billion market, WhatsApp bets on improvement**. Social. Retrieved from <http://indianexpress.com/article/technology/social/e-payment-to-tap-into-indias-200-billion-market-whatsapp-bets-onimprovement/>
- ✓ S. Kowsalya, S. K. (2017, March). **A Study on the Perception of Customers towards E-Commerce and E-Payments in Local Survey**. International Journal of Innovative Research in Science, Engineering and Technology, 6(3). Retrieved from https://www.ijirset.com/upload/2017/march/105_A%20%20STUDY.pdf
- ✓ Singh, V. (2018). Retrieved from Inc42: <https://inc42.com/resources/blockchain-digital-finance/amp/>

APPENDIX – I QUESTIONNAIRES

1. Are you male or female?

- ☐ Male
- ☐ Female

2. What is your age?

- ☐ Under 18
- ☐ 18-29
- ☐ 30-44
- ☐ 45-69
- ☐ 60+

3. Do you use e-payments?

- ☐ Yes
- ☐ No

4. Do you purchasing a product on online?

- ☐ Yes
- ☐ No

5. In which e-payments method you use most?

- ☐ Credit /debit card
- ☐ Digital currency
- ☐ E- wallets
- ☐ Smart card

6. In which e-commerce websites you use most?

- ☐ Amazon
- ☐ SHOPCLUES
- ☐ Flipkart
- ☐ PAYTM

7. Which is the best payment method for e-commerce?

- ☐ Credit/debit card
- ☐ Prepaid card
- ☐ Bank transfers
- ☐ Cash
- ☐ Mobile payments

8. For how long years you are using e-payments?

- Less than 1 year
- 1-5 years
- More than 5 years

9. For how long years you are using e-commerce?

- Less than 1 years
- 1-5 years
- More than 5 years

10. What are the main reasons to use e-payments?

- Convenient
- Save time
- Securable
- Risk-free

11. In which security threats you facing on e-commerce?

- DDoS attacks
- Credit card fraud
- Malware
- E-skimming
- Bad bots

12. In which problems you will facing during e-payment?

- Server problems
- Payments stuck
- Frauds
- Transactions issue

13. In which problems you will facing during e-commerce?

- Fake products
- Price issue
- Fake websites
- Technical issue

14. Which is the safest mode of e-payments?

- Credit/debit card
- Digital cash
- E-wallets
- Smart card

15. What are the security measures that could secure you against various kinds of e-payment attacks?

- ☐ Self-awareness in security
- ☐ Limiting online activities
- ☐ User education

16. If you have never used e-payments on online shopping, what are the main reasons?

- ☐ Concerned about security
- ☐ Don't get on with the technology
- ☐ Don't trust the e-payments
- ☐ Theft issue

17. Do you think that using E-payments makes your life easier?

- ☐ Yes
- ☐ No

18. Have you ever lost money due to digital fraud on online purchasing?

- ☐ Yes
- ☐ No

19. Reason for buying products on online using e-payments?

- ☐ Different payment option
- ☐ Discounts
- ☐ Cashback offers
- ☐ Convenience
- ☐ Risk free

20. In which mode of payments do you like to buy a product on online?

- ☐ E-payment
- ☐ Cash on delivery
- ☐ Others

21. Which digital payment platform do you use most?

- ☐ PAYTM
- ☐ Google pay
- ☐ PHONEPE
- ☐ MOBIKWIK

22. Future of e-payment to buy a product on online?

- ☐ Increases
- ☐ Decreases
- ☐ Neutral

23. What are the solution to solve the problems while face during e-payments?

- ☐ Updating security level
- ☐ Keep Privacy
- ☐ Good network connection
- ☐ Identity the receivers

24. Goods or services that are purchased online

- ☐ Utility bills
- ☐ Food and beverages
- ☐ Goods(Apparels, Electronic)
- ☐ Local public transport
- ☐ Tickets for events, movie

25. Biggest concern while using e-payments

	Strongly agree	Agree	Disagree	Strongly Disagree
Fraud	☐	☐	☐	☐
Security	☐	☐	☐	☐
Privacy	☐	☐	☐	☐
Tax	☐	☐	☐	☐

26. Do you trust the security of e-payments?

- ☐ Not at all
- ☐ A lot
- ☐ A little

27. Perception towards Mobile Apps:

- ❖ **Mobile apps will increases online purchases in future**
 - ☐ Agree
 - ☐ Disagree
- ❖ **Mobile apps will increases e-payments transactions in future**

- Agree
- Disagree

28. Overall analysis of e-payment systems:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
E-payments systems saves you time and money on purchasing online	○	○	○	○	○
E-payment systems are better than cash	○	○	○	○	○
A digital customer has to be alert security issues when using e-payments systems.	○	○	○	○	○
E-payments offers a greater choice for consumer and merchant in the way they send and receive payment.	○	○	○	○	○
E-payments transactions costs are hidden	○	○	○	○	○
E-payments can be easily understood and readily adopted	○	○	○	○	○
Problems will not arise if your debit card is lost or stolen	○	○	○	○	○

APPENDIX – 2 (Article)

A STUDY ON USAGE OF ELECTRONIC PAYMENTS DURING ONLINE PURCHASING

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ABSTRACT:

Now-a-days we all notice that more and more consumers are moving towards E-payments during online shopping due to many reasons like convenience, various method, secured, etc. The e-commerce sector has boomed with the ease of purchasing and selling products or services, availability and connectivity of latest technologies over the Internet. As the trust level towards e-payments platforms are increasing; the consumers are becoming progressively comfortable in using different options like Credit card, Debit card, Smart card, E-wallet, etc.. It makes E payment at any time through the internet directly to the transfer settlement and form E-business environment. Studied have been carried out on E-Payment system .E-Payment system an integral part of electronic commerce. An efficient payments system reduces the cost of exchanging goods and services, and is indispensable to the functioning of the interbank, money, and capital markets. Although many consumers are getting tuned towards usage of various electronic devices and E-payment platforms by installing and using numerous applications in their smart devices but there are still many consumers who prefer Cash on Delivery. So it is important for the online businesses specifically to understand the payment usage of ever changing consumers for better sustainable growth. The study is conducted by selecting 122 sample respondents who are using E-payment for purchasing products online; on the basis of age, purpose of usage, frequency of usage, various problem faced by using it and E-payment effect on online purchasing.

I. INTRODUCTION:

In today's digital era the usage of the internet has increased drastically. All counts of age are consuming and producing loads of data each second. Many organizations are analyzing and altering based on the study that they been able to capture from the consumer analysis. With the ease of smartphones and virtual accessibility of products, services and payments online have boosted the way people are shopping and making payments online. The ecommerce industry initially started with the Cash on Delivery basis for the people to get the feel of the new online industry and also to build up their trust. After the customers are well versed with the organization ns, the company started introducing various platforms of the online payments. E-Payment has given access to various financial platforms like debit card, credit card, net banking, digital wallets, etc. Cash has become a less common mode of transaction as the appearance of e-payments has allowed consumers and buyers with greater convenience, but at the same time it has raised a doubt or a threat as there has always been increasing issues regarding the fraud and privacy concern that has been the top fear in the minds of internet users.

We all have witnessed that the traditional payment modes have been replaced by various types of e-payments that are quick and efficient. In e-payment process both buyer and seller uses digital modes to send or receive money, it is an automatic process where seller and the buyer can avoid visiting their bank. It eliminates the physical cash that is risky to handle at times. Today consumers can make payment through electronic modes by using cards and other platforms that are made available through all types of smart devices. The acceptance of particular payments by sellers and businesses has an important influence on the purchases made by their clients, as the availability of the various modes help the consumer to choose that is suitable or available to them as well.

Past few years' smartphones are having a tremendous growth due to accessibility and availability of the internet. The mobile wallet providers like PAYTM, PayPal, MOBIKWIK, etc. with the payback schemes also attracting many consumers to use e-payment modes aiding the organizations with significant growth. The digital wallets are further enabling economies to a cashless society. Electronic wallets and mobile wallets are

moreover digital version of the hard cash in physical wallet with more features and functions. E-payments wallets reduce cost of cash holding and handling for the retailers. Retailers on online platform have introduced lucrative discounts and cashback offers to get payment orders for all the cashless payments. The online platform retailers have encouraged more customers to choose a payment mode other than Cash on Delivery, it also helps a business to retain their customer.

II. METHODOLOGY:

STUDY DESIGN:

This studied have been carried out on uses of E-payment during online shopping. Data used in this study collected basically from the secondary sources. Primary data also collected through personal interview method conducting the person who is supposed to have knowledge about the topic. Secondary data have been collected from various sources including websites, newspapers, various published and unpublished article about pre-primary education etc. Research methodology is a way to systematically solve the research problems. It may be understood as a science of studying how research is done scientifically. It includes the overall research design, the sampling procedure, data collection method and analysis procedure.

QUESTIONNARIE DESIGN AND DATA COLLECTION:

Well Structured Questionnaires has been prepared for collection of primary data. Most of the questions are consist of multiple choices. The structured Questionnaire method was undertaken. Proper care was taken to frame the Questionnaire in such a manner it should be easily understood in view of educational level of the employees. This is the descriptive research, the primary data was collected through a survey sent to diverse users of e-payments during online shopping; this is to understand their acceptance, usage level, problems and the impact on the organizations .The data collection took place between February 1, 2021 to March 10, 2021 during which 122 professionals filled the questionnaire.

III. STATISTICAL ANALYSIS:

Microsoft excel has been used to analyze the collected data. The various charts are been represented to show the variations on how it works to detail them

IV. RESULTS:

The obtained data from google form, are interpreted and analyzed. This form is been circulated among the top most construction firms and the workers across the country. 122 respondents were filled this form across Tamil Nadu who were use the e-payments during online shopping .The differ in opinion among them were taken into account and the majority of it was declared as the result.

The questionnaire mainly consists of three parts, they are

- I. Demographic Model
- II. Usage of e-payments during online shopping
- III. Effect of e-payments during online purchasing

Demographic Model:

1. From the collected data it is observed that the no of respondents less than 18 years of age is 12%, 18-28 years of age is 69%, 29-40 years of age is 18%, more than 40+ age is 1%.
2. From the collected data it is observed that the no of male respondents are 69%, female respondents are 31%.
3. From the collected data it is observed that the 17% of the respondents are high schooler, 15% of the respondents are Diploma holder, 39% of the respondents are Bachelor's degree holder, 29% of the respondents are Master's degree holder.
4. From the collected data it is observed that the 30% of the respondents are Employers, 22% of the respondents are Self- employed, 48 % of the respondents are Student.
5. From the collected data it is observed that the 83% of the respondents are awareness about e-payments, 17% of the respondents are non-awareness about e-payments.
6. From the collected data it is observed that the 29% of the respondents are using e-payments less than 1 year, 45% of the respondents are using e-payments 1-5 years, 26% of the respondents are using e-payments more than 5 years.

7. From the collected data it is observed that the 30% of the respondents are using e-commerce less than 1 year, 46% of the respondents are using e-commerce 1-5 years, 24% of the respondents are using e-commerce more than 5 years.

Usage of e-payments during online shopping

1. MOST USABLE PAYMENTS MODE

From the collected data it is observed that the , 58% of the respondents are using cash mode, 5% of the respondents are using check payments, 35% of the respondents are using E-payments mode, only 2% of the respondent are using wire transfer mode.

2. SAFEST MODE OF E-PAYMENTS

From the collected data it is observed that the 61% of the respondents are satisfied with credit/debit card, 18% of the respondents are satisfied with e-wallet, 12% of the respondents are satisfied with Smart card, 9 % of the respondents are satisfied with digital cash.

3. MOST USABLE PAYMENT METHOD DURING E-COMMERCE

From the collected data it is observed that the 35% of the respondents were use Credit/debit card method during e-commerce, 37% of the respondents are using COD payment method, 18% of the respondents are using Bank transfer method, 10% of the respondent were using wallets.

4. MOST USED E-COMMERCE WEBSITES

From the collected data it is observed that the 36% of the respondent are use Amazon Websites, 46% of the respondents are use Flipkart, 12% of the respondents are use MYNTRA Websites, only 6% of the respondents are use SNAPDEAL websites.

5. MAIN REASON FOR CHOOSING E-PAYMENT SERVICES:

From the collected data it is observed that the 35% of the respondents are choosing safe and secure reason for e-payment services, 21% of the respondents are choosing low services charges reason, 24% of the respondents are choosing privacy reason, 20% of the respondents are choosing convenience reason.

6. REASONS FOR BUYING ONLINE

From the collected data it is observed that the 15% of respondents are satisfied with comparison of prices and products, 28% of respondents are said convenience reason, 38% are satisfied with discounts option, 26% of respondents are choosing lots of variety found option.

7. GOODS OR SERVICES THAT ARE PURCHASED ONLINE

From the collected data it is observed that the 24% of the respondents are using online services mostly to pay utility bills, 23% of respondents are purchased foods on online, 28% of the respondents are purchased GOODS like apparels and Electronic on online, 11% of the respondents are purchased local transport tickets on online, 14% of the respondents are purchased movies, events tickets on online.

8. ADOPT AN ONLINE PAYMENT PLATFORM OVER PHYSICAL PAYMENT

From the collected data it is observed that the 23% of the respondents are choosing convenience option, 13% of respondents are choosing cashback options, 20% of respondents are choosing time saving option, 19% of respondents are choosing discounts option, 10% of respondents are choosing coupons/deals option, only 6% of the respondents are choosing easy to track option, 9% of respondents are choosing different payment option. Majority of the respondents are satisfied online payment is convenience than physical payment.

9. MOST USABLE DIGITAL PAYMENT PLATFORM:

From the collected data it is observed that the 27% of respondents are using PAYTM platforms, 1% of respondents are using MOBIKWIK platforms, 35% of the respondents are using Google pay platforms, 37% of the respondents are using PHONEPE platforms.

Effects of e-payments during online purchasing:

1. PROBLEMS WERE FACING DURING E-PAYMENT

From the collected data it is observed that the 57% of the respondent are facing server problem during e-payment, 23% of the respondent are facing Payment issue problems, 20% of the respondent facing transaction issue problem.

2. SECURITY MEASURES THAT COULD SECURE AGAINST VARIOUS KINDS OF E-PAYMENT ATTACKS

From the collected data it is observed that the 32% of the respondents are secured self-awareness in security measures, 37% of the respondents are secured Limiting online activity measures, 10% of the respondents are secured User education measures, and 21% of the respondents are secured updating level of security measures.

3. TRUST ABOUT SECURITY OF E-PAYMENT

From the collected data it is observed that the 31% of the respondents are don't trust the security, 32% of the respondents are more trust about security of e-payment, 37% of the respondents are little trust about security of e-payments.

4. REASON ABOUT NEVER USED E-PAYMENTS ON ONLINE SHOPPING:

From the collected data it is observed that the 47% of the respondent says the reason for concerned about security, 17% of the respondent says don't get on with technology, 20% of the respondent to say don't trust e-payment, 16% of the respondent to say the reason for Theft issue.

5. LOST MONEY DUE TO DIGITAL FRAUD ON ONLINE PURCHASING

From the collected data it is observed that the 33% of the respondents are lost money due to digital fraud on online purchasing, 67% of the respondents are don't lose money on online purchasing.

CHI-SQUARE TEST

HYPOTHESIS:

HO: There is no significant difference between the Educational Qualification and Awareness of E-Payment.

Educational Qualification						
Awareness of E-payment	Particular	HIGH SCHOOL	DIPLOMA	BACHELOR'S DEGREE	MASTER'S DEGREE	Total
	Yes	15	10	43	33	101
	No	6	8	5	2	21
	Total	21	18	48	35	122

Chi square analysis= $\sum (O-E)^2/E$

O	E	(O-E) ²	(O-E) ² /E
15	17.3	5.29	0.30
10	14.9	24.01	1.61
43	39.7	10.89	0.27
33	28.9	16.81	0.58
6	3.6	5.76	1.6
8	3	25	8.33
5	8.2	10.24	1.24
2	6	16	2.66
$\sum(O-E)^2/E$			16.59

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

(4-1)(2-1)

$$3*1 = 3$$

Level of significant= 5% level

Calculated value: 16.59

Table value: 7.81

Calculated value > Table value

Result:

From this analysis it reveal that the calculated value is greater than the table value at 5% significant level.

Null Hypothesis:

There is no significant relation between the Educational Qualification and awareness of E-payment. We reject Null hypothesis, and accept Alternative hypothesis.

Alternative Hypothesis:

There is significant relation between the Educational Qualification and Awareness of E-payment

CHI-SQUARE TEST

HYPOTHESIS:

H0: there is no significant difference between the E-payment method and E-commerce websites.

E-payment method							
E-commerce websites	Particular	Credit card	Debit card	E-wallet	Bank transfers	UPI	Total
	AMAZON	11	9	4	8	12	44
	FLIPKART	14	12	7	13	9	55
	MYNTRA	4	2	1	4	4	15
	SNAPDEAL	2	1	1	2	2	8
	Total	31	24	13	27	27	122

Chi square= $\sum (O-E)^2/E$

O	E	(O-E)²	(O-E)²/E
11	11.1	0.01	0.0009
9	8.6	0.16	0.01
4	4.6	0.36	0.07
8	9.7	2.89	0.29
12	9.7	5.29	0.54
14	13.9	0.01	0.0007
12	10.8	1.44	0.13
7	5.8	1.44	0.24
13	12.1	0.81	0.06
9	12.1	9.61	0.79
4	3.8	0.04	0.01
2	2.9	0.81	0.27
1	1.5	0.25	0.16
4	3.3	0.49	0.14
4	3.3	0.49	0.14
2	2	0	0
1	1.5	0.25	0.16
1	0.8	0.004	0.05
2	1.7	0.09	0.05
O	E	(O-E)²	(O-E)²/E

2	1.7	0.09	0.05
$\Sigma(O-E)^2/E$			3.1616

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

(4-1)(5-1)

$$3 \times 4 = 12$$

Level of significant= 5% level

Calculated value: 3.1616

Table value: 21.0

Calculated value < Table value

Result:

From this analysis it reveal that the calculated value is lesser than the table value at 5% significant level.

Null Hypothesis:

There is no significant relation between the E-payment method and E-commerce websites. The Null hypothesis is accepted.

CORRELATION CO-EFFICIENT:

The table Shows that the analysis a services of E-payments during online purchasing:

Opinion of the respondents	Yes	No	Total
Excellent	10	14	24
Very Good	28	12	40
Good	20	8	28
Satisfactory	8	10	18
Poor	6	6	12
Total	72	50	122

X	Y	XY	X ²	Y ²
10	14	140	100	196
28	12	336	784	144
20	8	160	400	64
8	10	80	64	100
6	6	36	36	36
ΣX=72	ΣY=50	ΣXY=752	ΣX²=1384	ΣY²=540

Correlation co-efficient formula:

$$n(\sum x y) - (\sum x)(\sum y)$$

$$r = \frac{\quad}{\quad}$$

$$\sqrt{[n\sum x^2 - (\sum x)^2]} \sqrt{[n\sum y^2 - (\sum y)^2]}$$

$$r = \frac{5(752) - (72)(50)}{\sqrt{[5(1384) - (72)^2]} \sqrt{[5(540) - (50)^2]}}$$

$$r = \frac{3760 - 3600}{\sqrt{6920 - 5184} \sqrt{2700 - 2500}}$$

$$r = \frac{160}{\sqrt{1736} \sqrt{200}}$$

$$r = \frac{160}{\sqrt{347200}}$$

$$r = 0.2715$$

INFERENCE:

It is clear from the above calculation that the variables are positively correlated. The respondents are satisfied with the services during e-payments on online purchasing. It can be anticipated that the e-payments credibility will be good among its customers and it will soon become prominent among its customers.

V. DISCUSSIONS:

Technology has arguably made our lives easier. One of the technological innovations in banking finance and commerce is the Electronic Payments. Electronic Payments (e-payments) refers to the technological breakthrough that enables us to perform financial transactions electronically, thus avoiding long lines and other hassles. Electronic Payments provides greater freedom to individuals in paying their taxes, licenses, fees, fines and purchases at unconventional locations and at whichever time of the day, 365 days of the year. After analysis and comparison of various modes of electronic payment systems, it is revealed that it is quite difficult, if not impossible, to suggest that which payment system is best. Some systems are quite similar, and differ only in some minor details. Thus there are number of factors which affect the usage of e-commerce payment systems. Among all these user base is most important. Added to this, success of e-commerce payment systems also depends on consumer preferences, ease of use, cost, industry agreement, authorization, security, authentication, non-refutability, accessibility and reliability and anonymity and public policy. Reliable and Cashless payment system offers immunity against theft of paper and e-money, and adopting e-payment solutions or systems for different reasons. In addition to cost reduction, reference was made to a number of other benefits, including improved customer service, improved working capital, increased operational efficiencies and cycle times, processing efficiencies and enhanced compliance to organizational policies and procedures .This opportunities e-payment operation increases different levels of risks for marketing. More than ten Years of Internet marketing research have yielded a set of important findings. Based on our review of these findings, it is clear that the Internet is playing a more and more important role in the field of e-payment .peoples are becoming aware of the need to measure the collaborative effects of e-payment .The study reveals that the peoples were not aware and educated. They have not any knowledge of e-payment. The study is based on survey .The respondent have to answer the questions on their own. Some people satisfy with our views. But some peoples are not satisfies with us. This study states that e-payment provides greater reach to customers. Feedback can be obtained easily as internet is virtual in nature. Customer loyalty can be gain. Personal attention can be given by bank to customer also quality service can be served. We came to know various strengths of e-payment System such as quality customer

service, greater reach, time saving customer loyalty, easy access to information, 24 hours access, reduce paper work, no need to carry cash easy online applications etc.

VI. REFERENCES:

- 1) S. Kowsalya, S. K. (2017, March). **A Study on the Perception of Customers towards E-Commerce and E-Payments in Local Survey**. International Journal of Innovative Research in Science, Engineering and Technology, 6(3). Retrieved from https://www.ijirset.com/upload/2017/march/105_A%20%20STUDY.pdf
- 2) Singh, V. (2018). Retrieved from Inc42: <https://inc42.com/resources/blockchain-digital-finance/amp/>
- 3) TIWARI, M. (2018, March). **'WhatsApp to disrupt digital payments market in India'**. Technology. Retrieved from <http://www.financialexpress.com/industry/technology/whatsapp-to-disrupt-digital-payments-market-in-india/1091805/>
- 4) Denis Abrazhevich, **"Electronic Payment Systems: a User-Centered Perspective and Interaction Design"**, ISBN 90-386-1948-0NUR 788, 2004.
- 5) Ailya Izhar, Aihab khan, Malik Sikandar Hayat Khiyal, 4Wajeeh Javed and Shiraz Baig, **"Designing and implementation of Electronic Payment gateway for developing countries"**, journal of Theoretical and applied information technology, vol. 26 No. 230 April 2011.
- 6) Hossein Bidgoli (2002).**Electronic commerce**. Academic press. Ed. California: USA.
- 7) Delali Kumaga Dec 2010, **A challenges of implementing Electronic Payment Systems – The Case of Ghana's E-Payment System**.
- 8) Yang Jing, "On-line Payment and Security of E-commerce". Proceedings of the 2009 International Symposium on Web Information Systems and Applications (WISA'09)Nanchang, P. R. China, May 22-24, 2009, pp. 046-050.
- 9) Dezan Shira and Associates (2017) **Growth of Digital Payments Systems in India**.<http://www.india-briefing.com/news/growth-of-digital-payments-systems-inindia-14797.html/>
- 10) Watal R (2017) **Digital payments surge 55% in 2016-17**. <http://www.livemint.com/Industry/hF8D3D6bWBie6IoJzWtdZO/Digitalpayments-surge-55-in-FY17-Niti-Aayog.html>

- 11) Pratik B (2017) Demonetization effect: **Digital payments India's new currency**; debit card transactions surge to over 1 billion.
- 12) Demonetization effect: **Flipkart, Amazon, Snapdeal** witness 50% spike in undelivered COD Orders <http://www.bgr.in/news/demonetization-effect-flipkart-amazonsnapdeal-witness-50-spike-in-undelivered-cod-orders/>
- 13) **Go Cashless**: Digital Wallets, NEFT, IMPS, UPI, Debit Cards, Credit Cards <https://www.bemoneyaware.com/blog/cashless-digital-walletsneft-imps-upi-debit-cards/>
- 14) Premchand A., Choudhry A., **Future of Payments in E-Payments**, International Journal of Emerging Technology and Advanced Engineering 5 (2015), 110-115.
- 15) Post demonetization, which digital payment to use? <http://mfsys.com.pk/post-demonetisation-which-digital-paymentmethod-to-use/>
- 16) Roy S., Sinha I., Determinants of Customers' **Acceptance of Electronic Payment System in Indian Banking** Sector-A Study, International Journal of Scientific & Engineering Research 5(1) (2014), 177-187.