

Cashless Transactions: Challenges Faced by the Consumers

¹Dr. Shilpi Saraswat, ²Dr. Mona Mehta

¹&² Assistant Professor, Department of Family and Community Resource Management,
¹&² Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Vadodara,
Vadodara, Gujarat, India
Email - ¹saraswat.shilpi@gmail.com, ²mona.mehta.map@gmail.com

Abstract: On November 8th 2016 Government withdrew 500 and 1000 rupees notes, the two highest denominations in circulation. The motive behind this was to fight counterfeit money and black money. This has given incredible boost to cashless transactions as card based and digital payments were not hindered. Today the cashless transaction is used for everyday transaction. Although new technologies have several benefits but their consumers usually have security, privacy and trust issues with them. Hence, the present study aims to find out the purpose of using cashless transactions and problems faced by the respondents while using them. The data were gathered through questionnaire from a sample of 210 consumers availing the facilities of cashless transactions through purposive sampling. The findings of the study revealed that all the respondents have internet facility on their mobile phone. It was found that majority of the respondents have downloaded “Paytm” application and were using it. The data analysed revealed that the respondents were using cashless transactions to least extent. Those respondents who were using cashless transactions faced low extent of problems while using them. With regards to the purpose it was found that less than three fourth of the respondents were using cashless transactions system for purpose of shopping stationary and vegetable & fruits. The findings also highlighted that less than tree fourth of the respondents had faced problem in using electronic payment application in security policies and software development lifecycle.

Keywords: cashless transactions, extent of usage, extent of problems.

1. INTRODUCTION:

The government has implemented a major change in the economic environment by demonetising the high value currency notes – of Rs 500 and Rs 1000 denomination. These ceased to be legal tender from the midnight of 8th of November 2016. The proposal by the government involves the elimination of these existing notes from circulation and a gradual replacement with a new set of notes. The reasons offered for demonetisation are two-fold: one, to control counterfeit notes that could be contributing to terrorism, in other words a national security concern and second, to undermine or eliminate the “black economy”.^[1] This decision has led to rise of cashless transactions. A cashless transaction refers to an economic setting whereby goods and services are transacted without cash^[2], either through electronic transfer or cheque payment.

The advancement of information technology has facilitated innovation in electronic payment where goods and services are traded without the use of physical cash. A cashless payment eliminates the usage of money as a medium of exchange for goods and services by allowing electronic transfer payments or non-electronic payment via cheques.^[3] Within the last decade or so, our world has become rapidly more digitized. For example, we now have internet purchases, and social interactions made via short message service (SMS), e-mails and social networks on the Internet. Two important factors that have contributed to this development are the use of mobile phones, and the use of the Internet.^[4]

Due to technology, mobile users can nowadays use their smartphones to make money transaction or payment by using applications installed in the phone. Besides payment, people can also store receipts, coupons, business cards, bills...in their smartphones. When smartphones can function as leather wallets, it is called “Digital Wallet” or widely known as “Mobile Wallet”.^[5] Mobile payments are defined as “payment for goods, services and bills with a mobile device such as mobile phone, smart-phone, or personal digital assistant (PDA) by taking advantage of wireless and other communication technologies”.^[4] A solution would be to replace the physical wallet with a digital wallet integrated into an existing mobile device like a cell phone. This digital wallet would allow the owner to carry multiple monetary and identification implements. These implements could be quickly searched by name, type, or other keywords. In addition, with the right software, these implements could be managed far more effectively. Finally, security would be enhanced as all data on the digital wallet would be encrypted and back up options would make recovering from loss easier.^[5]

2. COMMONLY USED DIGITAL WALLETS IN INDIA:

On a global perspective; mobile wallets are enabling economies to transition to a cashless society. The major tech giants all have solutions of their own - there's Apple Pay, Google Wallet, and Samsung Pay, to name a few.^[5] The popular digital wallet in India as suggested by Rathore, 2016 includes:

- **Paytm:** It started out with mobile recharges, DTH plans, and bill payments, and then launched an ecommerce marketplace in February 2014. Its wallet partners include Uber, Book-my-show, and Makemy-trip, along with others in categories such as shopping, travel, entertainment, and food. It has a license from RBI to set up a payments bank, enabling it to offer current and savings account deposits, issuing debit cards and offering Internet banking services.
- **FreeCharge:** It lets one recharge any prepaid mobile phone, postpaid mobile, electricity bill payments, DTH and data card in India. It recently added metro card recharging as a feature of its platform. The wallet can be topped up with debit cards, credit cards and net banking, and can be managed via an app or from the Web browser.
- **MobiKwik:** It can also be used to recharge mobiles and pay bills, but it's also accepted across merchants such as Book-My-Show, Make-My-Trip, Domino's Pizza, eBay, among others. MobiKwik has also tied up with Big Bazaar and SagarRatna franchises enabling mobile payments. It has a section with cash backs offers listed on its website with include both online and offline players. Top ups can be done using net banking, debit cards, and credit cards, the app can be used to send and request money between friends and family members as well, using a mobile number or email ID. There is no additional charge for such remittances.
- **Vodafone M-pesa:** It claims to be India's largest cash out network, with over 85,000 M-pesa agents spread across the country. The service lets you send money to anyone, to recharge prepaid numbers, DTH connections, postpaid Vodafone numbers, utility bills and online shopping. Money can be transferred to bank via its inbuilt IMPS service, or to a mobile number. DTH and prepaid recharges can be done through m-pesa for free. Benefit of using Digital Wallet to various parties Digital wallet appears to be beneficial in generating real revenue stream to all the stakeholders of mobile ecosystem like- customers, banks, mobile-operators, financial institutions.

3. BENEFITS OF CASHLESS TRANSACTIONS FOR DIFFERENT STAKEHOLDERS:

The cashless transactions have several benefits to its different stakeholders.^[5] They are discussed as below:

- **Benefits to Consumers:** Cashless transactions can be done anywhere, anytime payment which is the essence of immediacy and ubiquity. There is no dial-up, no configuration or booting requirement to ensure instant connectivity through wireless route. It helps in substituting voice communication through texts and images for deaf or mute users. Taking a consumer point of view, mobile payments contain some practical advantages in the form of queue avoidance, time, place independence, remote access to payment services, availability and increased speed.^[6]
- a. **Benefits to Bank:** It acts as additional income stream through innovative user-friendly services. These transactions help in establishing enhanced brand image through alternate sales channel in mobile payment space and thus leading to loyalty development. It extends value-added services through 24x7 branchless banking experiences. Judging the bank's perspective, the cashless society implies advantages in the form of savings. Cashiers and bank assistants would become superfluous and only a few assistants would be needed to assist at self-service counters.
- **Benefits to Financial Institutions:** Cashless transactions ensure enhanced customer's satisfaction and their retention together with direct marketing promos for tailored offerings to specific clients. It generates new business leads by one to one bank client relationship. Also enables Financial Institutions to keep constant connection with clients through 24x7 formats to serve their diverse needs everywhere, all the time. Increased reach to more customers, specially the unbanked segment due to increasing mobile usage rate and thereby reduced operating costs out of fewer direct teller interactions happened physical branches. Another benefit to the bank is the possibility of a reduction in card production costs when customers pay with their personal mobile phone or their personal payment card, information on the paper is transferred together with the money, thus omitting the need for loyalty, bonus and member cards.
- **Beneficial gains to mobile operators:** These transactions offer expanded service portfolio and increased brand promotion to create a differentiating factor to generate more new leads. It have benefit of lucrative route to strengthen client loyalty base visà-vis lessen "churn" and "attrition" rates. Financial Institutions gain increased revenue by high mobile traffic build up. It enable users to check bank account status & recharge prepaid mobile account instantly using mobile payment gateway (IMPS).

4. ADVANTAGES OF CASHLESS TRANSACTIONS:

There are several advantages of cashless transaction^[7] given by Olusola et. al., 2013 are discussed in detail as follows:

- A lot has been said about the convenience of electronic cash, the time it saves for individuals, and the ease of access resulting in money being instantly available without having to be carried around while currency exchange will be largely unnecessary.
- A cashless society will experience a high degree of control as the move from cash to electronic money (electronic credit) is a part of a well-organised attempt to unify the world and control it through its currency. It will be a big booster for bringing the economic uniformity in the world.
- A cashless society will further enhance the globalization that characterise our present time. The computerised systems can be used to reduce the amount of paper trail.
- Unlike traditional cash transaction, cashless payments discourage robbery and other cash related crimes.^[3] When people opt for other alternative modes of payment, they tend to hold less physical cash when they shop. Thus, it eliminates the incentive for robbers to commit cash related crimes. Also replacing paper cash with cashless credits or electronic money transfers can at least minimize crime, illegal drug trade, terrorism, illegal immigration, human trafficking, and corruption.
- A cashless society will go a long way in making our society, and the earth a better place to live, with a reduced rate of criminal activities.
- Physical paper cash is non-traceable, unaccountable, easy to hide or lose, steal, counterfeit, and spend without a trace. As such, paper cash has allowed all sorts of criminal activity to thrive. However, in a cashless economy, this will change with certain crimes almost eliminated. Violent crimes such as bank robberies, store holdups, armed robberies, employee cash theft, armour car heists, kidnap for ransom, and purse snatching would be significantly reduced, if not entirely eliminated, because carriage of Cash would be lite.
- The illegal drug trade and human trafficking are ‘cash’ businesses, and in a Cashless economy all illegal enterprises will be disrupted.
- Cashless payments were also regarded as hygienic for food vendors.^[2] There is also the reduced risk of transferring diseases. Citizens would be less likely to become ill due to contamination from bank notes and coins, as cash has been identified as disease carriers and medium of diseases transmission.
- As for vendors, the ease of transaction through various cashless payment modes will increase their revenue, improve operational efficiency and lower operating cost.^[8]
- Electronic card payments will have a meaningful impact on the world economy. At present, the electronic payment has substantially replaced payment by cheques but it has not led to a cashless society.^[9]
- Cashless payment might have a positive impact on economic activities^[10, 11, 12] but it also provide an opportunity for corruption^[13], caused bankruptcy among youth^[14] and reduced policy control of the monetary system.^[15&16]

5. DISADVANTAGES OF CASHLESS TRANSACTIONS:

- Despite the usefulness of the proposed technology, there are some disadvantages^[7] of a Cashless transaction^[7] as enumerated by Olasola et. al., 2013 are as below:
- The unstable electronic value of money will become even more volatile especially, given that people will be conducting business with imaginary money.
- The government would be able to monitor purchases, spending habits and businesses patronised. Under this new system, the government will have a total control of our transaction and therefore exposing the privacy of individuals.
- Another issue concerns the transaction involving children with the challenge of determining the age at which such children will have for such transactions as accessing their substance ‘pocket’ money since it would need a mobile phone or a payment card to use store their money.
- A cashless society would therefore force parents to acquire mobile phones or payment cards for their children earlier than they may wish if they would want to give their children pocket money.
- The proper handling of a mobile phone or payment card therefore becomes an additional challenge given that users must be able to remember details as personal identification number (PIN) and passwords. This might be a problem for elderly or illiterate people who might have to compromise privacy and divulge their personal codes in search of assistance.
- Another issue is the possibility of theft. People are likely to lose mobile phones more than their wallets. In relation to this is the security issue. It is a fact that electronic systems designed by experts can be disassembled by others who have unwholesome intensions and used for bad antisocial.^[17]

Mobile ownership across the world far exceeds that of any other device or platform, and its adoption is increasing rapidly. Significant investment and innovation across industries is now focused on using mobile as a delivery channel to bridge the gap of last mile delivery. The capability to store and process payments has further allowed companies to

create a seamless delivery and payments experience. The payments landscape in India is undergoing a transformation which was traditionally a cash based economy, it has seen an increase in card based and mobile transactions.^[18]

6. CHALLENGES TO CASHLESS TRANSACTIONS IN INDIA:

Although mobile payments are on the rise in India, there are challenges in scaling them up. Currently, mobile payments are largely being driven by single programme managers that are creating closed loop payment systems. For instance, digital wallet companies in India that have acquired a large customer base are building an acceptance platform by empanelling merchants to accept payments. The speed of mobile transactions is still slow, especially at the point of sale, where consumers and merchant look for a quick turnaround. Moreover, in areas of poor connectivity, transactions often fail or time out. This result in poor consumer experience, which discourage them from using mobile payments. The third challenge is the low digital literacy of consumers. A large segment of the target population is not comfortable with technology. Consumers are inherently slow to change their habits and trust new service providers, especially when it relates to their payments and transactions. Most mobile payments platforms also require customers to have a pre-existing bank account, which is a challenge as segments of the Indian population still remain unbanked. Security concerns around mobile money services need to be addressed. While mobile networks already have encryption on the message transmitted across the network, mobile transfers require additional tracking and logging for regulatory compliance. A final set of issue relates to the last mile delivery of services. For consumers to use mobile payment services on a regular basis, it is critical that they are ensured of easy availability of cash whenever they require, especially in the remotest parts of the country.^[18]

As it is said that every coin have two sides, in a similar manner every new concept comes into existence have pro's and con's. The cashless transactions have several benefits but have several constraints which restrict its uses. Therefore, this study was planned to find out the purposes for which people are using cashless transactions and also to find out the extent of problems faced by them in using them. This will help to know the obstacles faced by people in using cashless transactions, so that the concerned authorities can take necessary measures to overcome the obstacles and have a better economy for successful nation.

7. LITERATURE REVIEW:

Olusola et. al. (2013) conducted a research with an aim to find out the drivers and challenges of cashless society in Nigeria. This study examines the cashless economic system so as to assess its feasibility in Nigeria with regards to timeless, preparedness and adequacy against the backdrop of level of development both technologically and educationally. Structured questionnaire was used for collection and was analysed using simple percentage procedure. The findings of the study showed that majority of Nigerians were already aware of the policy and majority agreed that the policy will help fight against corruption/money laundering and reduce the risk of carrying cash and can also foster economic growth. The major problems foreseen which can impede the implementation of the policy were cyber fraud, limited point of sales and numeracy illiteracy.^[7]

Tee and Ong (2016) examined the effect of adopting cashless payment in five Cashless European Union (EU) countries, namely, Austria, Belgium, France, Germany, and Portugal, for the period of 2000-2012. The real gross domestic product was computed by dividing gross domestic product (GDP) by its consumer price index (CPI). The annual GDP and CPI of Austria, Belgium, France, Germany, and Portugal 2004 to 2012 were obtained from International Monetary Fund's International Financial Statistics. Data for telegraphic transfer, card payment, electronic money and cheques payment for the period 2004 to 2013 were obtained from the European Central Bank's Statistical Data Warehouse. Telegraphic transfer was computed by summing up the credit and transfers of respective countries. The within and between effect of adopting cheque payment, telegraphic transfer, card payment and electronic money on these EU's economy are examined by applying the Pedroni residual cointegration and Panel Vector Error Correction Model (VECM). The results reflected that there is short run causality running from cheque payment to telegraphic transfer and card payment, as well as causality running telegraphic transfer to card payment. In the long run, there is significant effect of adopting cashless payment on the economy of the five EU countries. Thus, the adoption of one type of cashless payment will affect another type of cashless payment in the short run. The impact of adopting cashless payment on economic growth can only be significantly observed in the long run. Hence, any policy that promotes cashless payment will not affect the economy immediately.^[19]

A study was conducted by **Rathore (2016)** on "Adoption of digital wallet by consumers" with an aim to find out the perception of consumers towards digital wallets, influencing factors, risk and challenges in its adoption. The data were collected from 132 smart phone users who were using digital wallet for online payments. The questions were based on consumer's preference for online mode of payment, the factors affecting their choice and the challenges faced by them while using digital wallet. It was found that digital wallets were becoming the medium of online payments. Consumers are also using digital wallets frequently due to convenience and ease of use. Tech-savvy shoppers are increasingly demanding seamless, omni-channel retail experiences and looking for solutions that deliver this.^[15]

8. OBJECTIVES OF THE STUDY

The study was undertaken considering the following objectives:

- To find out the extent of usage of cashless transactions by the respondents.
- To study the extent of problems faced by the users while cashless transactions.

9. METHODOLOGY:

The research design for the present study was descriptive survey method. A structured questionnaire was used to collect data from 210 smart phone users who were using cashless transaction for online payment selected through convenience sampling procedure. The questionnaire contained three sections. First section comprised of question related to background information of the respondents. Section two encompassed statements pertaining to extent of usage of cashless transactions. Statements associated with extent of problems faced while using cashless transaction were included in section three. Section two and three were Likert type summated rating scale. It had 3 point continuum for responses “To High Extent”, “To Moderate Extent” and “To Least Extent” which were scored 3 through 1 respectively for each responses. The possible minimum and maximum scores were divided into three categories having equal intervals which determined the extent of usage and problems faced while using cashless transactions. The reliability coefficient derived for all the scale 0.746 through split half method.

10. FINDINGS AND DISCUSSION

The findings of the study obtained through the analysis of the data supported discussion and interpretations are presented here.

10.1. Background information of the respondents: This section deals with the personal and family information of the respondent.

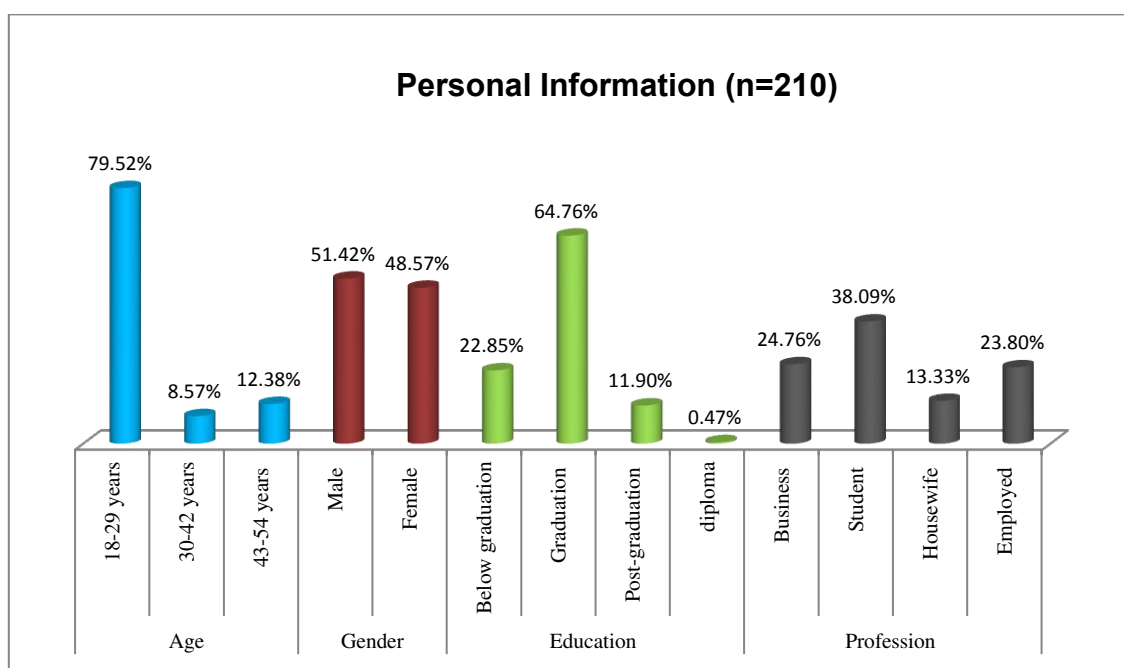


Figure 1: Distribution of the respondents according to their personal information

The age of the respondents ranged between 18 to 54 years with a mean of 27.32 years. It was found that majority (79.52%) of the respondents were in age group of 18-29 years (Fig. 1). Only 12.38 per cent of the respondents were in the age group of 43-54 years. Very few respondents (8.57%) were in age group of 30-42 years. It was found that more than one half respondents were male and rest were female. The data revealed that less than two third of the respondents were graduate and less than one fourth of the respondents were educated below graduation. Only 11.90 per cent of the respondents were post graduate. The profession of the respondent was categorized as business, student, housewife and self-employed. The data (Fig.1) gathered revealed that more than one third of the respondents were students while less than one fourth of the respondents were doing business (24.76 %) and self-employed (23.80%). Only 13.33 per cent of the respondents were housewife.

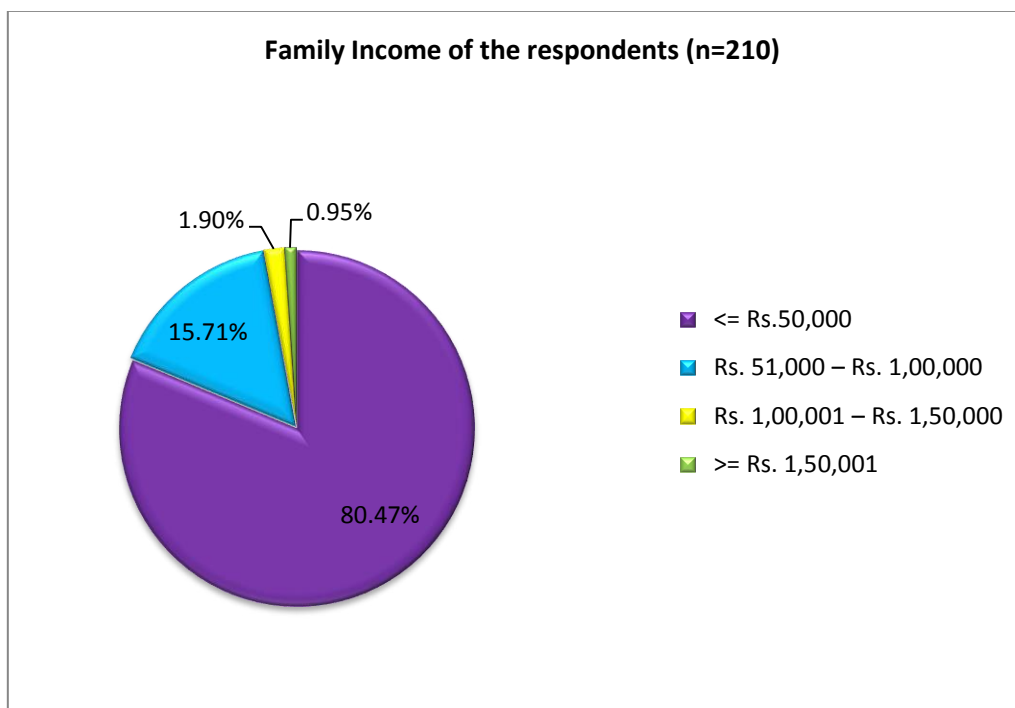


Figure.2: Distribution of the respondents according to their family income

It was found that majority of the respondents had monthly income less than or equal to Rs. 50,000. Very few i.e., 15.71 per cent and 1.90 per cent of the respondents had monthly income ranged between Rs. 51,000 to Rs. 1,00,000 and Rs. 1,00,001 to Rs. 1,50,000 respectively. Only 0.95 per cent of the respondents had monthly income more than or equal to Rs. 1, 50,001.

10.2 Cashless transactions in Mobile Phone: It includes information regarding internet facility on mobile phone, downloaded cashless transactions and use of these applications.

All the respondents had internet facility on their mobile phone. It was found that majority of the respondents have downloaded “Paytm” application and were using it. More than one fourth of the respondents had downloaded “Freecharge” application but 21.42 per cent of them were using this application. One fourth of the respondents had “HDFC Chilx” application downloaded in their mobile phones where 3.33 per cent of them were using it. Applications viz. “State bank money” and “Mobikwik” were downloaded in the mobile phones of 13.80 per cent and 13.33 per cent of the respondents and 10 per cent and 9.04 per cent of them were using them respectively. Very few percentages of the respondents had downloaded applications viz. “ICICI pocket”, “Pay u money”, “Google wallet”, “Payzap”, airtel money” and “City master pass” and using them.

10.3 Purpose of using electronic payment system: This section deals with various purposes of using cashless transaction by the respondents. The reasons were categorized into five sub scale viz. “Shopping”, “Booking”, “Banking”, “Medical” and “Recharge/bill payment”. The responses were in terms of “To High extent”, “To some extent” and “To least extent”

10.4 Extent of use of Cashless transactions by the respondents: An overall view: An attempt was made to find out the purpose of using electronic payment application. In order to find out the extent use of electronic payment application on various aspects the responses were given scores of 3 through 1 respectively for the responses “To high extent”. “To some extent” and “To least extent”. The possible range of maximum and minimum scores was divided into three categories having equal intervals.

It can be concluded from the obtained data that less than two third (61.42%) of the respondents used cashless transactions to least extent for shopping purpose. More than one half of the respondents used them to least extent for different bookings (58.09%) followed by banking (52.8%) purposes. It was also found that majority of the respondents were using it to least extent for medical purpose. Less than one half of the respondents used them to moderate extent for recharge/bill (49.04%) payment. The analysis of entire scale revealed that less than two third (61.42%) of the respondents were using these cashless transactions to least extent for various purposes.

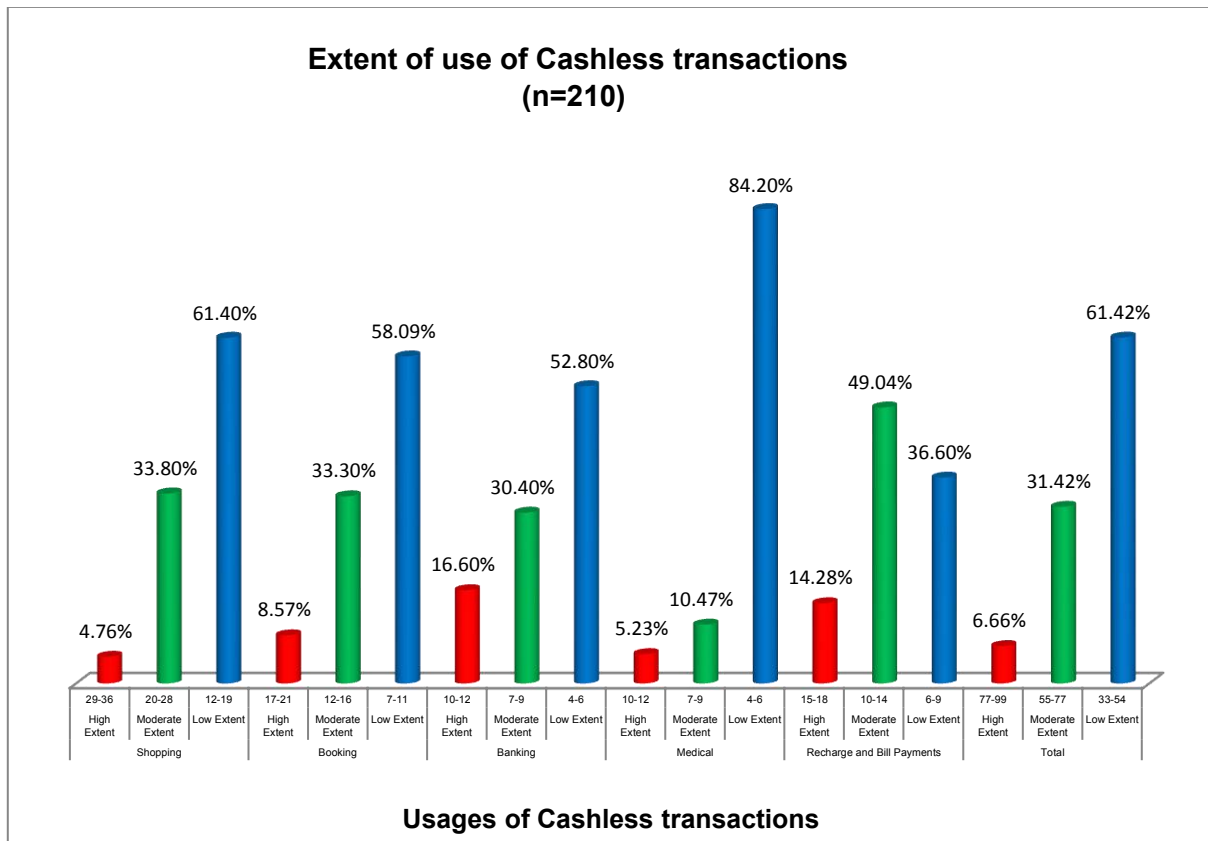


Figure 5: Distribution of the respondents according to the extent of use of cashless transactions

10.5 Extent of problem faced in using Cashless transactions: An overall view: An attempt was made to find out the problem faced by the respondents while using cashless transactions. In order to find out the extent of problem faced while using electronic payment application on various aspects the responses were given scores of 3 through 1 respectively for the responses “To high extent”, “To some extent” and “To least extent”. The possible range of maximum and minimum scores was divided into three categories having equal intervals.

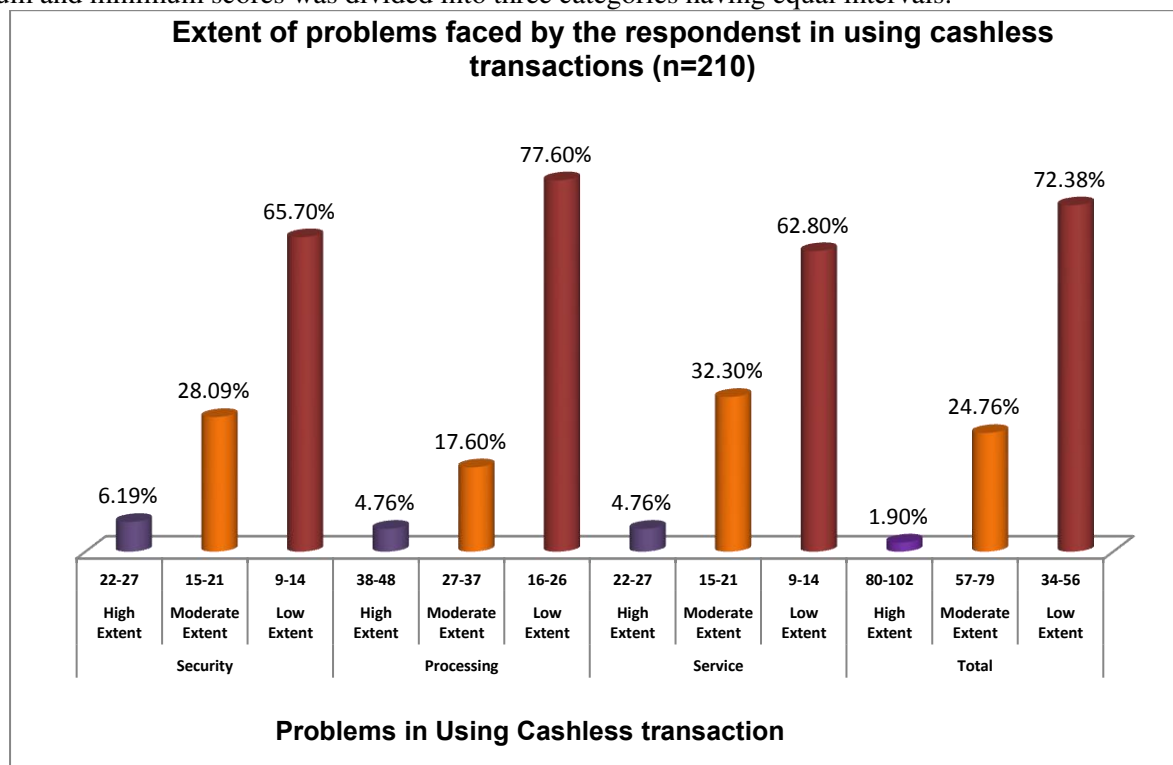


Figure 7: Distributions of the respondents according to the extent of problems faced by them in using cashless transactions

On analysing it was found that less than two third (65.7%) of the respondents had faced low extent of problems related to security of cashless transactions. More than three fourth (77.6%) of the respondents faced low extent of problem while processing cashless transactions. Less than two third (62.8%) of the respondents had faced low extent of problems in the services provided by the service centre of cashless transaction. The overall analysis reflected that less than three fourth (72.38%) of the respondents faced low extent of problems while using cashless transaction.

11. CONCLUSION AND RECOMMENDATIONS:

The data were collected from the smart phone users who were using cashless transaction for online payment. The respondent's age ranged between 18 to 54 years. It was found that more than one half of the respondents were male. Less than two third of the respondents were graduate. More than one third of the respondents were students and less than one fourth were doing business. Majority of the respondents had monthly family income less than Rs. 2, 50,000. It was found that all respondents have internet facility in their mobile phone. Majority of the respondents had downloaded and were using paytm application. Less than three fourth of the respondents were using cashless transactions system for purpose of shopping stationary and vegetable & fruits. Majority of the respondents were using cashless transaction for purpose of event booking and for taking medical appointment. More than one half of the respondents were using cashless transaction for conducting cheque transaction. More than three fourth of the respondents were using electronic payment system for payment of income tax. The respondents also had faced lots of problems in using these cashless transactions. Less than three fourth of the respondents had faced problem in using electronic payment application in security policies and software development lifecycle, in processing poorly written verification code and unmanaged growth of data. Moreover, more than two third of the respondents faced problem in using electronic payment application in providing proper statement request. Hence, it can be said as we are progressing towards digital India there are several hurdles faced. These needs to be overcome by combined efforts of government and citizens of the country. The government can make efforts in expediting the procedure develop a strong security set up which can built trust among the people. Every citizen should make efforts in understanding and learning new developments and try to not misuse the technology. These efforts will help in solving the problems and building trust.

REFERENCES:

1. National Institute of Public Finance and Policy New Delhi, *Working Paper No. 182, 2017*
2. Paul A, and Friday O., (2012): Nigeria's Cashless Economy: The Imperatives. *International Journal of Management Business Studies*. 2: 31–36
3. Armev L.E., Lipow J., and Webb N.J., (2014): The Impact of Electronic Financial Payments on Crime. *Information Economic Policy* 29: 46–57.
4. Dahlberg, T., Mallat, N., Ondrus, J. and Zmijewska, A., (2008): Past, Present and Future of Mobile Payments Research: A literature Review. *Electronic Commerce Research and Applications*, 2: 165-181
5. Rathore, H.S., (2016): Adoption of Digital Wallets by Consumers. *BVIMSR'S Journal of Management Research*. 8:1. 69-75
6. Mallat, N., (2006): Exploring Consumer Adoption of Mobile Payments- A Qualitative Study. *Sprouts: Working Papers on Information Systems*. Vol. 6. Article 44.
7. Olusola, M., Oludele, A., Chibueze, O., and Samuel, O., (2013): Cashless Society: Drive's and Challenges in Nigeria. *International Journal of Information Sciences and Techniques (IJIST)*. 3:2.
8. Contactless Payment and the Retail Point of Sale: Applications. Technologies and Transaction Models. A Smart card Alliance Report. 2003
9. Liao, W. and Handa J., (2010): Is the Modern Economy Heading Toward a Cashless and Checkless One? Evidence from the Payments System in Canada. *IUP J Bank Management* 9:48–71
10. Hasan I., De R.T. and Schmiedel, H., (2012): Retail Payments and Economic Growth. *Bank Finland Research*. 1–37
11. Oyewole O.S., El-Maude J.G., Abba M. and Onuh M.E., (2013): Electronic Payment System and Economic Growth : A Review of Transition to Cashless Economy in Nigeria. *International Journal of Science Engineering and Technology*. 2:913–918
12. Zandi M., Singh V., and Irving J., (2013): The Impact of Inequality on Economic Growth on Economic Growth. *Moody's Anal*. 1–16
13. Park J., (2012): Corruption, Soundness of the Banking Sector, and Economic Growth: A Cross-country Study. *Journal of International Money Finance* 31:907–929.
14. Noordin N., Zakaria Z., Mohamed Sawal M.Z.H. Ngah K. and Hussin Z.H., (2012) Bankruptcy among young executives in Malaysia. *International Conference of Economics Marketing Management IPEDR* 28:132–136

15. Al-laham M., and Al-tarawneh H., (2009): Development of Electronic Money and its Impact on the Central Bank Role and Monetary Policy. *Issues in Informing Science and Information Technology*. 6
16. Ezuwore-Obodoekwe C.N., Eyisi A.S., Emengini S.E., and Chukwubuzo A.F., (2014): A Critical Analysis of Cashless Banking Policy in Nigeria. *IOSR Journal Business Management* 16:30–42.
17. Anderson R. J., (2008). *Security Engineering: A guide to Building Dependable Distributed Systems*. New York: Wiley
18. The Case of Mobile Payments in India. *A report by Ernst & Young LLP*. 2016
19. Tee H. and Ong H., (2016): Cashless Payment and Economic Growth. *Financial Innovation*. 2:4. 1-9