

Digital Banking Behavior across Demographic Customer Segments of Public Sector Banks in Kerala

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Abstract: Digital Banking has become the most important segment of the global banking industry since the digital explosion that started in the last decade across the various industries. It has become all the more important and relevant in India after the demonetization and the call for cash-less economy by the government of India in 2016. The practicality of a cash-less economy in a country like India where digital access is still limited only to a minority has been questioned by many economists and rural banking experts. In this scenario it is highly relevant to conduct a research on the digital banking behavior across the various demographic customer segments of public sector banks in India. Kerala being the most literate and digitally aware state with the highest mobile phone penetration in India, the study makes sense in Kerala. The issues identified in Kerala would be an eye opener for the authorities while implementing this policy in other states which are followers in technology adoption. This study can be a baby step towards the large national level research required in this direction before the implementation of digital banking and cashless economic policies across the country.

IndexTerms – Banking Behavior, Digital Banking, Demographic Segments, Public Sector Banks, Mobile Banking, E-Wallets

I. INTRODUCTION

1.1. Global scenario of Digital Banking

With recently acquired status and highly developed technologies change the complete way customers behave and communicate in their daily life. They are completely transforming the business world strategic framework, by altering users' conduct and outlooks and formation of competition, hence the banking sector is no exception by any means. Digitalization takes over the concept of digital evolution to transform business conduct and the affiliation between consumer value and business revenue. There are many reasons which might give some justifications for why banking sector across the world is increasingly and continuously becoming digital; it is because of the influence on the digital transformation of financial services trends: The progression of advanced technologies and the change of customer expectations are also the major factors. However, Dasho, et al (2016) emphasized that the global force is somehow deferred, since there are not much measures taken in this area.

In terms of banking industry it is true that digital banking system is certainly the wave of the future. In general, the term digital banking gets taken for mobile and online banking system, since every part of these entail digital system, in one form or another. Most of the commercial banks have executed E-banking services that are largely beneficial to banks and the users as well. Banks across the world are keenly approaching and close to subjects related to digitalization both internally and externally. Narware, (2016) concluded that undoubtedly, in the near future e-banking will be preferred method of banking and indubitably replace traditional banking system.

Digital banking in banking sector has been in practice for years, with many specialists naming it the remedy for the devastated banking sector following the recent financial crisis. So, digital banking is no more a buzz word and new hype in the banking or financial market. It becomes an essential element of every bank's outline as a means to rise above outmoded techniques and mishandled customer relationships. On the other hand, the actions implemented so far—a blend of investigating new contributions and going behind other influential power in the market—are only the beginnings. Eistert, et al (n.d) emphasized that true conversion will necessitate deep, wide-ranging transition and eliminating age-old practices for example providing complex products and demanding clients to visit branches. In addition, it will mean clearing out legacy methods and technologies in the organization.

Despite its challenges and obstacles in the easy implementation of digital banking system, bright future is strongly anticipated by experts. The usage of ATMs, Debit and Credit cards have become a beneficial source of use of information technology services and have opened the way for Digitalization. Electronic Clearing Service (ECS) was started during 1990s in order to overprotect mass and recurring payments. Another method, popularly known as National Electronic Clearing cell in 2008 was taken place in order to deal with multiple credits to recipient accounts. In the end of 1990s, the retail funds transfer system was begun in order to permit e-transfer of fund for one person to another. Farooqui and Rajani (2017) highlighted that ICICI was the first bank which introduced digital banking in India followed by Citibank and HDFC Bank.

Digital banking makes every financial transaction easy, which can be done within a click. This also paves the way for convenient banking system. However, the increased access to the world from any place has initiated various crimes, which

eventually resulted in disaster to the user. Cyber crimes attack is an act of violence, which probably takes place from one computer to another computer by utilizing a network purposely to alter, deny, corrupt or trash the information and records hosted in the attacked system. These crimes have a negative impact on private individuals, businesses and even nations, and negatively influence the whole economic and social structure through the huge loss of funds incurred. More, et al (2015) put forward that tracking the origin of crime, various progression of the underground cyber crime economy, skilled manpower and prevalent use of pirated software are some of the challenges that involve in controlling cyber crimes in Banking Sector.

1.2. Digital Banking & Indian banks

The global economy is witnessing technology transformation at a fast pace and the effect of technological progression is being experienced in everyone's life and banking industry has also experienced the same. Indian banking industry is no exception to this transformation. With digitalization practice, Indian economy is already changing into cashless society, where digital banking is progressively strengthened. According to RBI data, about 928 million financial transactions value of Rupees 60 trillion were done by NEFT in the period between 2014 and 2015, which were around 661 million transactions of the worth of Rupees 44 trillion in the past financial year. Security and privacy risk, technical difficulties, customer education levels are some of the challenges found by Kaur (2017).

The access of foreign banks in India paved the way for advanced technology in Indian banking sector. Banking products were likely to become competitive to a greater extent. The ICICI Bank introduced e-banking system in 1996. Then the adoption phase was taken place from 1996 to 1998, while practice improved only in the end of 1999, on account of moderate Internet Service Provider (ISP) online fees, larger penetration level of computers and a tech-friendly environment. The competition has been particularly challenging for the public sector banks, since the invasion of private and foreign banks already became a leader in implementation of digital banking. As stated by Jindal (2015) digitalization in banking has not only improved effectiveness and expediency, but also created many challenges to the users and banks as well. The government of India passed the IT Act, 2000, that grants legal recognition to e-transactions and other ways of electronic commerce.

Comparatively, Indian banks are still lagging in terms of online services than banks in abroad. For digital banking system to get to a largest part there should be adequate number of customers and the enough infrastructures in position. In terms of India, the period of 1996 to 1998, is referred to as initial adoption stage for e-banking. On the other hand, public sector banks were not up to the mark in the e-banking services. To a large extent, the RBI has been practicing to promote itself as a controller and administrator of the technically conquered financial system. It published guiding principle on risks and control in telecommunication system to each and every registered bank, recommending them to assess the risks inherent in the systems and establish sufficient control mechanisms to deal with these risks. As emphasized by Basavarajappa (n.d.) the current regulatory framework over banks has been extended to digital banking system.

1.3. Internet banking in Kerala

E-banking is a record change in the banking sector in India and these products and services are keeping on updated in line with the developments and innovation taken place in technology. Though, other parts of the India are increasingly adopting e-banking services, Kerala is still in budding stage. All public and private sector banks are keen on improving e-banking services since it replaces and removes the conventional regional barriers-as it possibly will extend to customers from secluded areas as well. In Kerala, there has been a wonderful growth in the implementation of e-banking system. Comparatively, highly educated and income groups are likely to adopt e-banking services rapidly than unskillful and low income groups. Accordingly, Renjith, (2016) emphasized that in Kerala, usage of e-banking services is only limited to highly income and literate people.

E-banking makes bank services easy, which eventually lessen foot-fall of customers in their respective branches. Kamath, (2008) stated that Kerala holds a well established banking environment and it has a prolonged history of strong banking practices. With positive development, Kerala banking structure has reached a high growth with many nationalized and commercial banks. The union of two big things, i.e., information technology and traditional business in money has formed waves after waves of transformations. Employing information technology as a strategic tool, Kerala based banks are giving interrelated branches, anywhere banking, e-banking and mobile banking. In Kerala, Federal bank was the first bank that launched e-banking system in the state and received the esteemed Indian Bank Association (IBA) award for the greatest usage of information system in retail banking for the two successive years. The approval of the new technology has changed Kerala as one of the fastest developing ATM user region outside the metros (RBI, 2011). Furthermore Paul, (2014) emphasized that the strong business traditions and stable development have made Kerala banks sweethearts of the share market and focal point of takeover industrialists.

Over the last few years e-banking acceptance has been fast and effective globally and Kerala is not an exception. Customers are always wishing to adopt advanced services at any cost. Digital Banking has been broadly welcomed by banks as their essential marketing tool. It is assumed that, at some point, e-banking will retreat in significance as a strategic function to become a competitive requirement that should be accepted by the majority if not all banking and financial organizations. Keralites now relishes with a better level of affluence and wealth. Its banking sector is reaching greater heights. As specified by Sheena, (2016) the banking system in Kerala are aiming to accomplish all India standing with the best boundaries in productivity, effectiveness, systems and technology by keeping its mores with the commitment to quality in customer, investor and worker satisfaction whilst continuing to assist the community as a whole.

II. REVIEW OF LITERATURE

2.1. Concept of digital banking

According to IDRBT (2016) in the area of e-banking digital banking is a new concept which targets to enrich online standards and services of mobile banking by combining digital techniques for instance social media interactions, strategic analytics tools, mobile technique, creative solutions of payment and user experience. Holding a complete digital strategy needs end to end bank modernization. It needs a transition from the view based on account of banking consumers to one that knows them as individuals and develops the experience of customer with personalized, relevant and convenient services and products. Digital banking is the technology application to assure seamless end to end method of banking transaction started by client assuring maximum utility to client in terms of cost, availability and usefulness to the bank in terms of reduced costs of operation, enhanced services and zero errors. A digital bank provides customers seamless and contextualized experiences that change the journey of customer. Becoming a digital bank means delivering a relevant and compelling execution and customer experience through a flexible, open and integrated architecture. The digital banking is based on execution and customer experience. The experience that enhances firms to deliver on demand services with minimal involvement of human through straight processing whilst enhancing users of online bank to serve clients through offline channels and develop processes and products continuously. Similarly the experience that enhances customers in real time through numerous devices with context of environment that results in a relevant and personal experience is the customer experience in digital banks.

Digital banking can be referred as expanding the facility of transaction to customers by banks through different digital channels securely by taking care of information security, regulatory aspects by banks and risk mitigation. This is accomplished by combining mobile and online services of banking by recent digital technique adoption like social media, analytics, mobile technology and creative payment solutions with the purpose of exceeding convenience and experience and expectation of customers (CelebrateBanking, 2017). According to Avoka (2017) digital banking is the digitization of entire banking programs and activities that were feasible to customers when inside a branch of bank physically. This involves activities like management of loan, withdrawals, money transfer, money deposits, bill pay, account services, saving/checking management of account and applying for financial products. The preferences of customers have shifted to mobile and online devices but several financial firms have trouble shifting their experiences of onboard online and to little screens.

2.2. Status of digital banking services among the public banks of Kerala

According to the study of Paul and Pillai (2017) the present demonetization has influenced digital banking. Much demand on transactions digitally has led to rise in digital banking activities namely use of debit or credit cards at merchant point of sale, small shops transactions, much use of mobile wallets for making little payments for rides in auto and making offerings to temples. There is developed electronic transactions and online transfers as an alternative for transactions of cash. Many citizens who chose cash to electronic are regarding the digital way of medium. With the emphasis of government on condition of digital transactions for electronic transactions are made much feasible. With ease of electronic transactions there is a favourable surrounding for digital banking. Payment and bank players have to be electronic ready to harness the developing digital banking. Some of the digital banking off shoots has been sudden increase in point of sale machines at shops, mobile payment platforms such as free charge, paytm, etc and unified payment interface by banks digital users. The Indian government established Bharat Interface for Money which is a mobile application based on UPI for making immediate payments from bank to bank and which can enhance collection and payment of money using virtual payment address of mobile number. According to The Hindu report in (2015) Kerala has the greater penetration of mobile with greater than 30 million links for 33 million populations, with a rapid rise in the usage of mobile devices. It has greater rate of penetration enclosing 15% through mobile and 20% of households through broadband as per the latest statistics of TRAI. The below figure depicts the electronic statistics of Kerala.

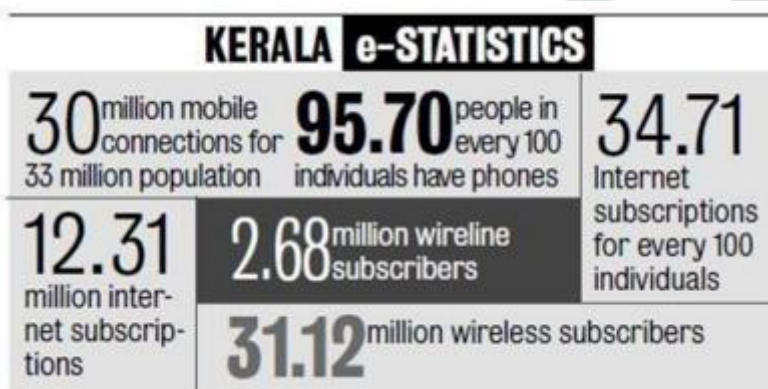


Figure 1: E-statistics in Kerala

(Source: New Indian Express, 2015)

According to Firstpost report (2016) small vendors and traders in local transport facility providers and retail sector in Kerala have initiated to switch over a cashless system. This report describes the Akshaya centres role in performing with the campaign of go cashless to market digital payment platforms among public and merchants. The centre was attempting to popularize customers with platforms of digital payment by arranging live validation. Customers were also provided tips on developing security for

internet banking at the sessions of training. The main focus of banks was to offer credit/prepaid/debit cards, Unified payment interface, Unstructured Supplementary Service Data, electronic wallet and Aadhaar enabled system of payment to customers. The electronic wallet system was preferred much by customers and the total transactions digitally in Kerala are evaluated to be 30% as of 2016. Kerala accomplished 100% coverage of bank account for entire household way in 2011. Kerala has only one branch of bank for every 6000 customers as against India average of 11000. The digital payments growth in diesel and petrol sale in Kerala is projected nearly 20% as of 2016. Some other privileges that favour electronic readiness of Kerala is that it becomes the first complete digital state in India in 2015 after it accomplished 75% electronic literacy and 100% mobile density. Kerala has implemented electronic district programs in entire districts and has connected Aadhaar card with bank accounts. Even in Sabarimalai the temple administration have initiated using a swipe machine for offerings. The facility has been set up the Dhanalaxmi Bank.

2.3. Various digital banking services in public banks of Kerala

Due to the globalization and digitization all the banking sectors have gradually increased to provide online banking options. In spite of industrial backwardness and overall dull in economic activities Kerala is declared as the first digital state of India. Jazeela (2001) says that it has been a fertile ground for the growth of banks. One of the reasons behind for the growth of banks in Kerala is “money orders” most of the Kerala people go to abroad for working purpose and send money for their families in Kerala through money order this caused complexities in getting the money from the post offices. So there emerged some Private bank as well as public banks which offer internet banks. Some of these banks were in rapid growth of trajectory even before liberalization in the early 1990’s. The success of these banks took place under rather a protected environment wherein customers had very limited choice. With the gradual opening up of the Indian economy there emerged new nationalized as well as private banks in Kerala.

According to Renjith (2016) swift technological changes are happening in the banking sector. One of such changes is Online Banking. Bank receives instructions and provides its services and products to customers through internet and it is called as Internet Banking. Technology plays a vital role in the development of the Internet Banking. To engage with the modern technology and to provide the fastest banking services the banks adopted Internet banking. Easy access to internet and World Wide Web has transformed the world totally into a global village. In the present situation of the world internet has become an outlet to let out banks value added services to its customers. Banks utilize internet to give very quick and convenient internet banking services. Any customer can access his or her bank without the physical presence in the bank to access it. Internet is a means of communication between the banking sector and its customers. Bank receives and delivers instructions about their products and services. All public sector and private sector banks focus and put their effort on enhancing the products of online banking services.

Juwairiya and Binoosa (2014) with greater advancement of internet technologies and advent of mobile phones, mobile banking has earned feasible option in providing the financial services. Mobile banking delivers financial transactions services such as fund transfer, balance check, and bill payments by using the mobile devices such as smart phones, Personal Device Assistants, and cell phones. Branchless banking refers to a distribution channel that allows financial institutions and commercial actors to offer financial services outside traditional, mortar and brick bank premises. Mobile banking is always considered as an increasing alternative channel of delivering banking services. According to the customer’s opinion on the banks of Kerala, Most of the respondents are using mobile banking for checking their account balance and making bill payments. Some of the customers are utilizing the mobile banking for fund transfer and make their savings and purchasing goods through internet. Most of the customers are using the mobile banking services for paying the electricity bill, school and college fees and also mobile bill. According to Customers of Kerala public sector banks they consider mobile banking as cheaper than the traditional retail banking. The awareness of local mobile banking service is quite cheap and usage level is reasonable.

Bindu, Kavya and Athira (2017) proposed a research on usage of electronic banking services among rural customers in Kerala. Revolution of technology and financial liberalization have permitted the growth of much effective and new processing and delivery channels as well as much modern services and products in banking sector. The institutions of banking are facing rivalry not only from each other but also from non bank financial intermediaries as well as from alternative financing sources. Another strategic barrier facing the institutions of banking nowadays is the changing and developing expectations and needs of customers in tandem with developed levels of education and developing wealth. Customers are becoming highly discerning and have become much included in their decisions of finance. Digital banking has been developing over years rapidly with technological development and increasing several online users across different regions. It has evolved an efficient channel of distribution for banking services and products. Digital banking attracts customers and also performs banking anywhere without opening branch. This research examines the factors which estimate the utilization level of electronic banking services of respondents associating to usage of automatic teller machine cum credit/debit cards, mobile banking, and online banking as well as to predict the reason for limited usage of electronic banking service among rural customers.

Aneesh Kumar, Fernandez and Gireesh Kumar say Internet banking has made a sea change in the working banks of Kerala. Technological innovation has brought about fast processing and transmission of information, easy marketing of banking products, development of customer awareness and access, wider networking and regional and global links on an unpredictable scale. It is revealed that most of the mobile banking users come under the age group of twenty to thirty either employee or student with monthly income of below 40000 with educated with the average computer knowledge. And it is also proved that people with smart phones are using the mobile banking services more efficiently.

According to Fozia (2013) the overall perception of the customers regarding the internet banking services are changing. Age and occupation are the important demographic factors in the banking sectors which have been used to measure the perception of the customers on internet banking services. Internet banking will be successful for banking sectors only when they have commitment to the Internet banking with the deep understanding of customer needs. This can come only when the banking organization has a very bid base of customers, a service attitude and best people. Different age group of customers have different perception toward the Internet banking services and the usage of level of these banks. It is found that people of different age group, different occupation and different educational qualifications are interested to use only e-banking regardless of all their differences in Kerala.

2.4. Benefits of digital banking services

In this modern era each and everything we do has been modernized and digitalized like shopping and banking. This makes the work of people so simple and easy. Kumar, Reddy, Sreenivasalu (2017) says that online banking is also called as virtual or internet banking. Banks used the latest technology to give the better quality services at greater speed. The internet banking has become the fastest growing technology which is playing a significant role in day to day activities of the people. The internet and mobile banking made people to do their banking transaction from anywhere in the world regardless of the geographical distances. So banking is no more going and visiting the bank and waiting in the queue for hour and hours for single money transaction. Financial institution or banking sector enables its customers to do their money transactions through their own online official websites. We can do all sorts of transaction in online itself. The online banking is typically controlled, conducted, managed and monitored by the banks of the customers. No other external financial sectors include in this process. The database of the transactions made by the customers of the particular banking sector is updated by the bank once it is modified.

Driga (2014) says that in the present world of banking services based on lending and depositing operations have become only a part of banking activities. Because of the advent of a knowledge based society and economy as communication and information technology advanced, the quality of customer reduce transaction cost and service delivery, banks invested to a higher extent in ICT and have adopted ICT networks for providing a higher range of banking products and banking services. Banks all over the world accepted new banking technologies and internet banking services in the recent years. The banking sectors are being reshaped by the globalization, innovation and competition and the needs of the customer. The most vital factor in the development of banking in upcoming years, allows banks to cause complicated products, to have better infrastructure of market and to reach geographically diversified and distant markets. Today's consumers require more personalised and privatized banking products and banking services and they also expect to access those services anywhere and anytime. In addition customers are looking for more simplified banking. In the recent years the usual nature of banking has changed gradually.

According to Nigudge and Pathan (2014) businesses lay on the efficient and fast accessing to banking information for cash flow reviews daily financial transaction processing and auditing. E-banking provides ease of access, 24 hours banking options and secure transactions. From small business to large industries people prefer only online banking to establish more entities and eliminate runs to bank and to make financial decisions with more latest information. The important factors of banking are Activity Review, is nothing but the reviewing of the transaction made by the person. Reduced Fraud, it is the increased security of the banks through audits and anti fraud measures. Low Banking Costs, banking costs and relationships are based on the resource requirements. Productivity e-banking leads to productivity gains. Automated regular bill payments, reduces the need of direct visit to the bank. Reduced Errors, use of Internet banking reduces the errors regarding banking. Automation of bill payments and other consistent financial activities conforms that payments are made on time and may stop errors caused by typing in keyboards or user errors. The popular services offered under E-banking are Automated Teller Machines, Telephone Banking, Electronic Clearing Cards, Smart Cards, Electronic Funds, Transfer (EFT) System, Electronic, Clearing Services, Mobile Banking, Internet Banking, Tele-banking and Door Step Banking.

Shah and Clarke (2009) points out the reasons behind why most of the people prefer internet banking. Understanding internet banking is important for several business holders, not least of which is the management of banking sectors, since help them to extract the benefits of online banking. The internet services delivery is fundamentally different from other services like Automatic teller machine, Telephonic banking and so on. In the competitive battle over customers, providing unique experience is the compulsive factor in retaining the customers. A customer's first approach may be critical for the success of e-banking. Customers hold the key to success so it is important to fulfill the needs of the customer. The banking sectors must know the customer's needs from different aspects. In the modern world customers want greater choices. They want the traditional banking services to be influenced by the convenience of online capabilities and stronger concentration on the personal relationships of banks with the customers. E-banking helps to enhance the status of the organization as a customer focused innovative concern. Internet banking has changed the traditional retail banking business method in various ways. Internet banking has resulted in the credit card lending as it is a means of transactional loan which mostly accessible over internet.

Chandran (2014) says the advantages as well as the disadvantages of Internet banking. The advantages are time is saved in internet banking. Instead of scheduling the time to walk into bank it is quite easy and simple to do online banking. We can check balances, receive payments, organize your accounts and receive payments when we are on the go. Convenience is the most important factor for the success of the online banking. The ability to access the bank accounts, track investments regardless of the place and time and make payments. Secured transactions can be made using mobile banking apps where high security is guaranteed and a SMS verification code or One Time Password is given to access the bank account which highly confidential. The disadvantages are mobile banking user receives fake SMS messages and scams which threats the people that they are in high risk. If suppose the mobile device of an online banking user is suppose theft or lost there is a chance of extracting the information

of the person's bank account. Some banks do not offer the same level of protection for online banking. There is a case of hacking the online banking passwords.

III. RESEARCH METHODOLOGY

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Secondary data: collected from annual reports of banks, websites, RBI publications, SLBC (State Level Bankers Committee) publications, DLTC (District Level Technical Committee) Reports, Lead banks and other publications / circulars by bank s/regulators etc.

Primary data: collected by way of a structured questionnaire with four parts to collect the response from customers of public sector banks on demographical data, service quality, customer satisfaction and effect of digital banking services.

Sampling Plan:

Three districts were randomly selected from Northern, Central and Southern districts of Kerala. Seven public sector banks from each district were randomly selected. From these 21 bank branches 7 customers each are selected to get 147 sample customers.

Research Tools:

Statistical or analytical tools like descriptive statistics, scaling, testing of hypothesis etc are used to conclude on inferences from the study.

Theoretical & Literature Review:

Literature review

was done in the area of Banking Services, Digital Banking Services, Global scenario, Indian Scenario and Kerala Scenario of Digital Banking

Objectives of the study:

- To study on the digital banking behavior of the various demographic customer segments of public sector banks operating in Kerala state.
- To find out the various factors which effect the digital banking adoption by customers from various backgrounds.
- To identify the level of adoption of digital banking and the demographic segments which are early adopters and laggards.

IV. ANALYSIS:

Frequency Tables of Demographic Segments

Gender of Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	93	63.3	63.3	63.3
	Female	54	36.7	36.7	100.0
	Total	147	100.0	100.0	

Age category of Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25	71	48.3	48.3	48.3
	26-35 years	52	35.4	35.4	83.7
	36-45 years	21	14.3	14.3	98.0
	46-55 years	2	1.4	1.4	99.3
	Above 56	1	.7	.7	100.0
	Total	147	100.0	100.0	

Educational status of respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below HSE	17	11.6	11.6	11.6
	Graduate	56	38.1	38.1	49.7
	Post Graduate	74	50.3	50.3	100.0
	Total	147	100.0	100.0	

Occupation of Respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	119	81.0	81.0	81.0
	Business	23	15.6	15.6	96.6
	Agriculture	4	2.7	2.7	99.3
	Others	1	.7	.7	100.0
	Total	147	100.0	100.0	

Marital Status of Sample					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	84	57.1	57.1	57.1
	Unmarried	63	42.9	42.9	100.0
	Total	147	100.0	100.0	

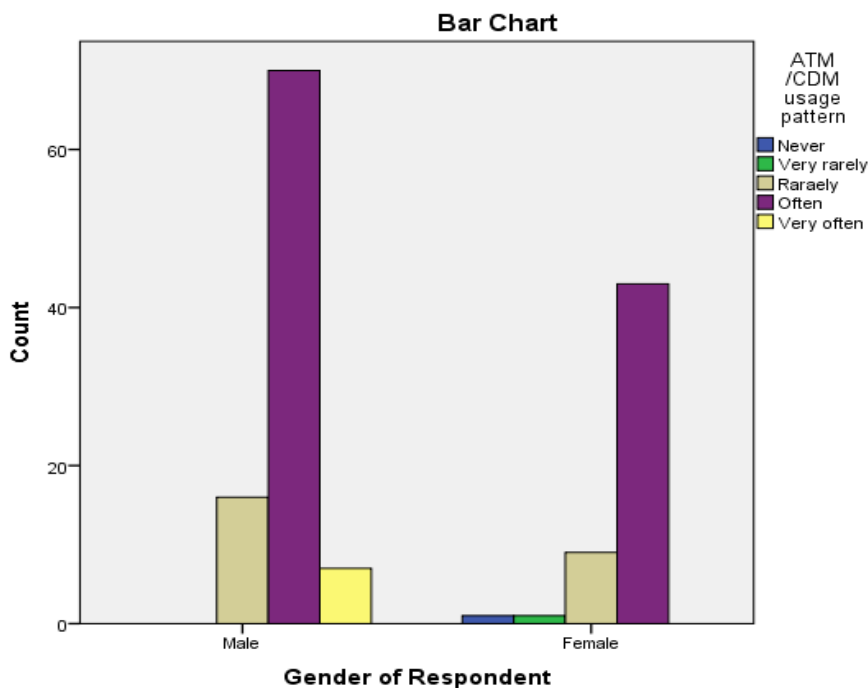
Monthly Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<10000	23	15.6	15.6	15.6
	10000-30000	88	59.9	59.9	75.5
	30000-50000	24	16.3	16.3	91.8
	>50000	12	7.5	7.5	100
	Total	147	100.0	100.0	

Hypothesis 1:

Null Hypothesis Ho – There is no significant relationship between gender of the customer and usage of ATM/CDM

Alternate Hypothesis Hi- There is significant relationship between gender of the customer and usage of ATM/CDM

Gender of Respondent Vs ATM /CDM usage pattern Cross-tabulation							
Count		ATM /CDM usage pattern					Total
		Never	Very rarely	Raraely	Often	Very often	
Gender of Respondent	Male	0	0	16	70	7	93
	Female	1	1	9	43	0	54
Total		1	1	25	113	7	147



Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.599 ^a	4	.107
Likelihood Ratio	10.505	4	.033
Linear-by-Linear Association	3.181	1	.075
N of Valid Cases	147		

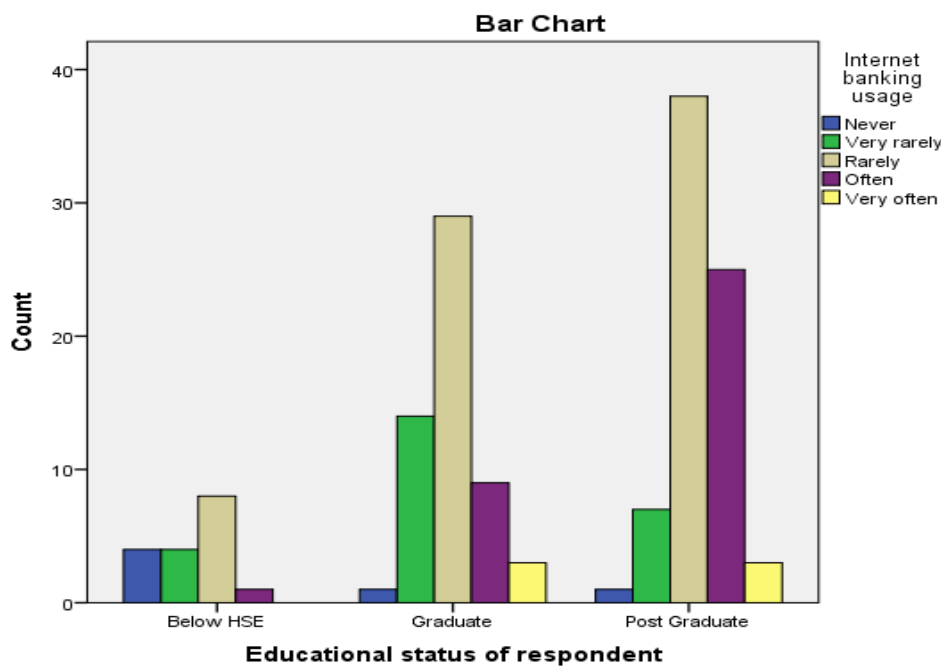
Ho is rejected as P value is greater than 0.05

Hypothesis 2:

Null Hypothesis Ho – There is no significant relationship between educational status of the customer and internet banking usage.

Alternate Hypothesis Hii- There is significant relationship between educational status of the customer and internet banking usage.

Educational status of respondent * Internet banking usage Cross-tabulation							
Count							
		Internet banking usage					Total
		Never	Very rarely	Rarely	Often	Very often	
Educational status of respondent	Below HSE	4	4	8	1	0	17
	Graduate	1	14	29	9	3	56
	Post Graduate	1	7	38	25	3	74
Total		6	25	75	35	6	147



Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30.608 ^a	8	.000
Likelihood Ratio	24.598	8	.002
Linear-by-Linear Association	16.746	1	.000
N of Valid Cases	147		

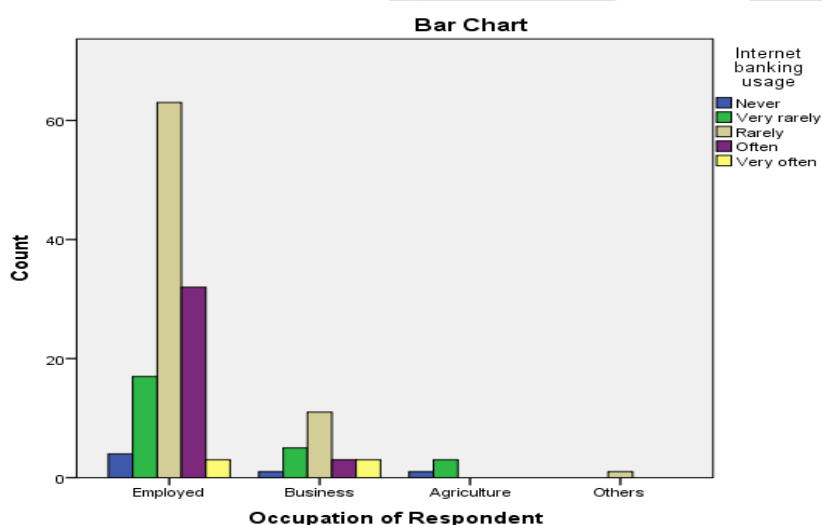
Ho is accepted as P value is less than 0.05

Hypothesis 3:

Null Hypothesis Ho – There is no significant relationship between occupation of the customer and internet banking usage.

Alternate Hypothesis Hiii- There is significant relationship between occupation of the customer and internet banking usage.

Occupation of Respondent * Internet banking usage Crosstabulation							
Count		Internet banking usage					Total
		Never	Very rarely	Rarely	Often	Very often	
Occupation of Respondent	Employed	4	17	63	32	3	119
	Business	1	5	11	3	3	23
	Agriculture	1	3	0	0	0	4
	Others	0	0	1	0	0	1
Total		6	25	75	35	6	147



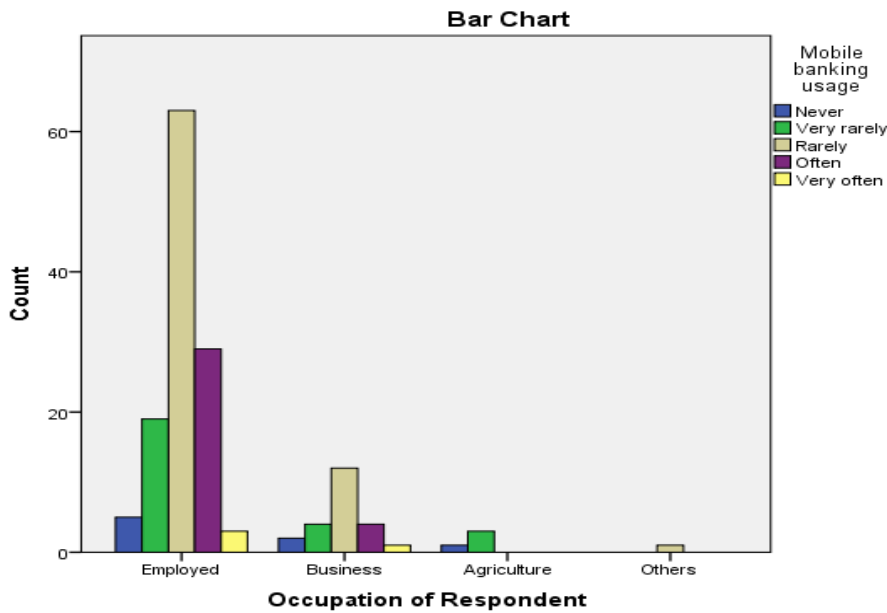
Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24.253 ^a	12	.019
Likelihood Ratio	20.466	12	.059
Linear-by-Linear Association	3.605	1	.058
N of Valid Cases	147		
Ho is accepted as P value is less than 0.05			

Hypothesis 4:

Null Hypothesis Ho – There is no significant relationship between occupation of the customer and mobile banking usage.

Alternate Hypothesis Hiv- There is significant relationship between occupation of the customer and mobile banking usage.

Occupation of Respondent * Mobile banking usage Crosstabulation							
Count							
		Mobile banking usage					Total
		Never	Very rarely	Rarely	Often	Very often	
Occupation of Respondent	Employed	5	19	63	29	3	119
	Business	2	4	12	4	1	23
	Agriculture	1	3	0	0	0	4
	Others	0	0	1	0	0	1
Total		8	26	76	33	4	147



Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.969 ^a	12	.193
Likelihood Ratio	14.705	12	.258
Linear-by-Linear Association	4.709	1	.030
N of Valid Cases	147		

Ho is rejected as P value is greater than 0.05

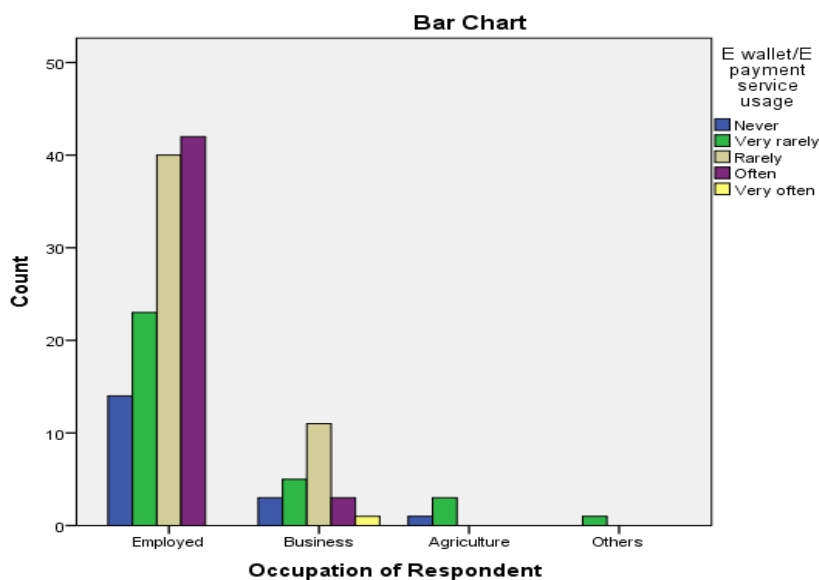
Hypothesis 5:

Null Hypothesis Ho – There is no significant relationship between occupation of the customer and E Wallet usage.

Alternate Hypothesis Hv- There is significant relationship between occupation of the customer and E Wallet usage.

Occupation of Respondent * E wallet/E payment service usage Crosstabulation							
Count							
		E wallet/E payment service usage					Total
		Never	Very rarely	Rarely	Often	Very often	

Occupation of Respondent	Employed	14	23	40	42	0	119
	Business	3	5	11	3	1	23
	Agriculture	1	3	0	0	0	4
	Others	0	1	0	0	0	1
Total		18	32	51	45	1	147



Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.043 ^a	12	.037
Likelihood Ratio	20.750	12	.054
Linear-by-Linear Association	4.851	1	.028
N of Valid Cases	147		

Ho is accepted as P value is less than 0.05

V. RESULTS AND DISCUSSION

- There seems to be a significant relationship between gender and usage of ATM/CDM of banks. It is observed from the analysis that usage by male customers is more than female customers.
- There seems to be no significant relationship between educational status of the customer and internet banking usage according the result of the analysis.
- There seems to be no significant relationship between occupation of the customer and internet banking usage by them according to the results of analysis.
- There seems to be a significant relationship between occupation of customer and mobile banking usage by them according to the results of analysis. Employed customers and business-men seem to be using more of mobile banking applications.
- There seems to be no significant relationship between occupation of customer and E-Wallet usage by them according to the results of the analysis.
- Females have to be targeted by banks to use more of digital banking services by awareness programs.

- Farmers and unorganized labor segment of customers are not availing digital banking services like mobile banking applications. Government and banks have a long way to go to make digital banking more inclusive.

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