

CUSTOMER PERCEPTION AND SATISFACTION ON M-BANKING

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***Abstract:** Technology is rapidly changing very frequently and common man also is keen to use it in his daily life as it saves him time and money. Mobile revolution started a decade back and is the most fasted in adaptation compared to any other technologies. India will be successful in achieving the objective of Financial Inclusion if it is able to implement the MOBILE BANKING as people will be able to send and receive money from their mobiles. But this is not as easy as said because people in the country are averse to its usage because of issues like security, privacy and high cost of mobile handsets and are not aware of its cost effectiveness and customer protection measures they can avail. The study is conducted to know perceptions and intentions of mobile banking users and study factors affecting mobile banking usage in Vijayawada with a sample size of 110 and deals with all age group and Occupation of customers in the market.*

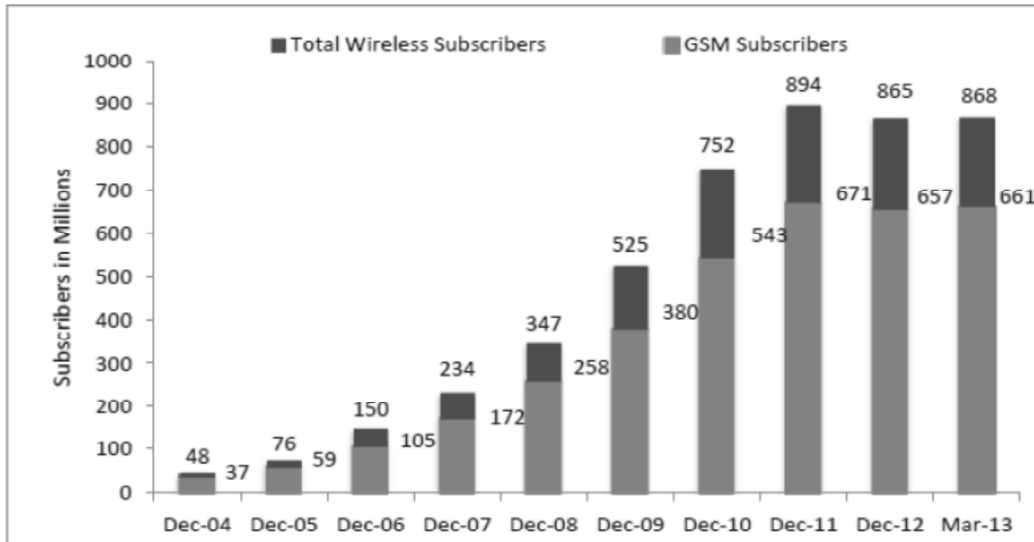
***Key Words:** Customer Perception, Customer behavior, Customer Retention, lifestyle.*

I. INTRODUCTION

Kolkata became the first metro to have a cellular network in 1995. TRAI was set up in the year 1997 for the regulation of telecommunication sector in India. In March 1999 National Telecom Policy (NTP) was announced. In 2003 CDMA network was launched. In 2004 Broadband policy was announced. Mobile phone subscribers had reached 100 Million by 2006. In 2008, RBI issued operative guidelines for banks for mobile banking transactions in India. By the year 2009, wireless subscriber base crossed 400 million. At present wireless mobile phone subscribers are 867 Million *i.e.* it has almost doubled in the last four years. With the advancement in the operating systems of the mobile phones and mobile technology like 2G, 3G, 4G has brought a significant change in the way of working of mobile banking services providers. Since the introduction of 2G and the subsequently 3G, the demand for mobile phone has increased many folds. This can be interpreted by a rapid increase in the number of mobile phone subscribers (Figure 1).

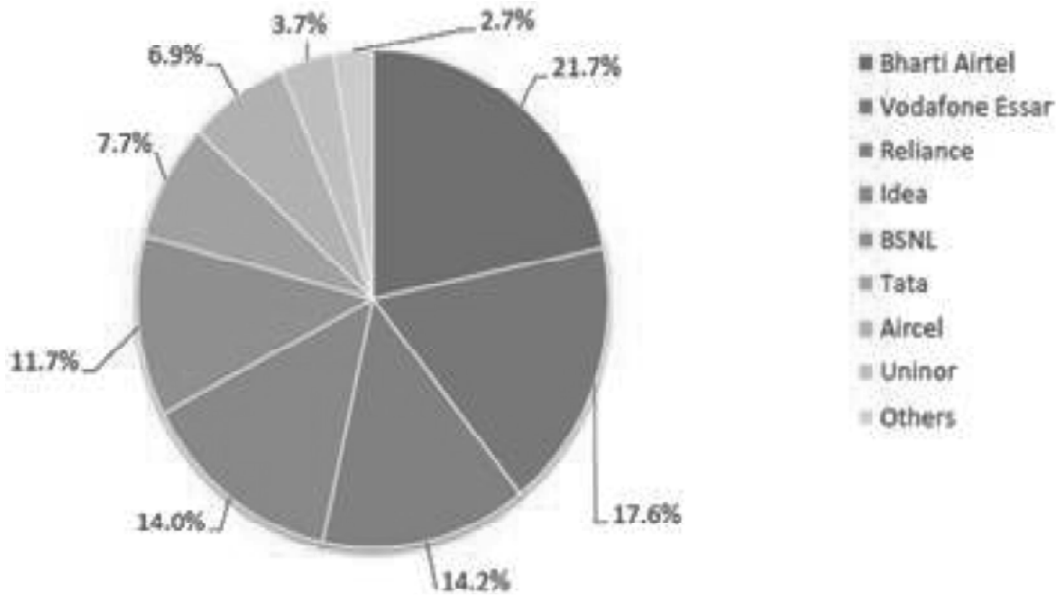
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Source: TRAI and COAI annual report, 2013

Figure 1: All India Total Cellular and GSM Cellular Subscriber Base



Source: The Indian Telecom Services Performance Indicators, TRAI March 2013

Figure 2: Market Share of Wireless Operators

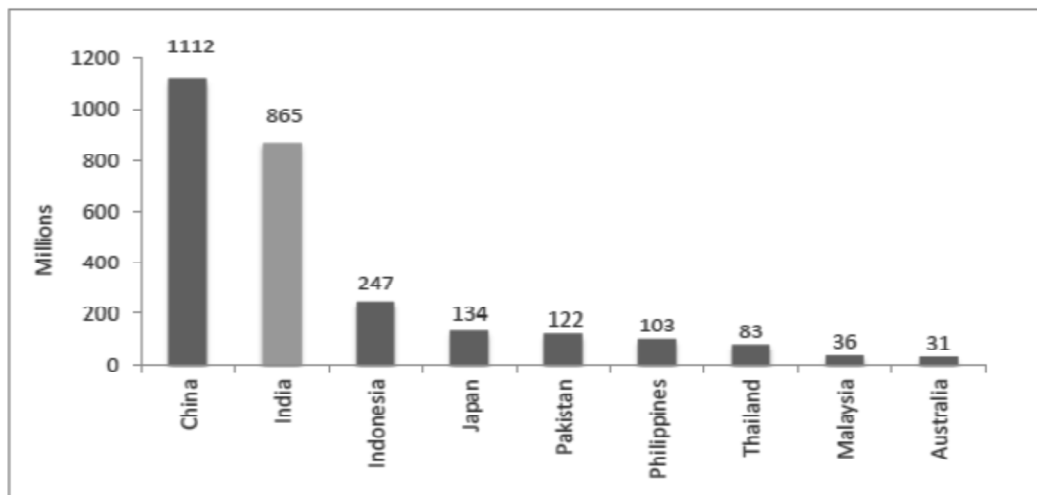
There are many wireless operators in India but Bharati Airtel has got the maximum share of 21.7% please see Figure 2.

TOP TEN COUNTRIES IN MOBILE PHONE SUBSCRIBERS BASE

Mobile phone technology has become very common in all the countries of the world. According to Merrill Lynch Global research report 2011, China has the maximum number of mobile phone subscribers *i.e.* 1112 million and India stands on the Second position with 865 mobile phone subscribers. (See Figure 3)

EVOLUTION OF MOBILE COMMERCE

Mobile Commerce in India is increasing at a very fast pace. According to TRAI (2013), subscribers who access the internet through wireless phones are 143.2 Million. Mobile commerce has emerged after the introduction of electronic commerce. A simple definition of E-Commerce describes it as: *“the buying and selling of products and services over the Web”* (Kalakota and Robinson, 2001). E-Commerce has gained importance in the last few years. E-Commerce applications developed so far, assume basically fixed users with wired infrastructure such as PC Connected with internet using a LAN (Local Area Network). Many new E-Commerce applications are possible using wireless and mobile networks. These applications are termed as ‘Wireless E-commerce’ or ‘Mobile Commerce’. With the increase in the number of wireless internet subscribers and advancement in the operating systems of mobile phones, mobile commerce has reached to every nook and corner of the world. M-Commerce is an area which is rapidly changing the way people conduct their financial transactions. Tiwari, Buse



Source: Merrill Lynch Global Research Dec-2013

Figure 3: International Trend of Subscriber Base

and Herstatt (2006) discussed the features of mobile Commerce. According to the author M-commerce is characterized by many unique features as compared to the conventional form of commercial transactions like: Ubiquity, Immediacy, Localization, Instant Connectivity, Proactive Functionality and Simple Authentication Procedure.

Ubiquity

It means users can avail the services and carry out transactions independent of the geographical location ('anywhere' features).

Immediacy

This feature is attractive in the way users can buy the goods anytime, *i.e.* without a wait ('anytime' feature).

Localization

Positioning technologies *i.e.* GPS (Global Positioning Services) allows companies to offer goods and services to the user as per his/her current location.

Instant Connectivity

With the introduction of the GPRS (General Packet Radio Service) mobile users are constantly online. This feature brings convenience to the users.

Pro-Active Functionality

M-commerce brings opportunities for the companies like push marketing, where users can opt for 'Opt-in advertising' so that they are informed about new products and services in the form of SMS.

Simple Authentication Procedure

With the help of Subscriber Identity Module (SIM) and Personal Identification Number (PIN) the authentication process has become very simple.

FEATURES OF M-BANKING

1. To Check Account Balances and your latest transactions
2. To Create new beneficiaries to transfer to and perform both local and international transfers
3. To View available card credit limit and pay credit card bills
4. Request for cash advances on credit card
5. Paying bills (Real Estate and Property, Legal Documents)
6. Make real time payments and buy prepaid services (Business services)

7. Pay other bills for schools, health clubs, insurance and more
8. Order CHEQUE book
9. Set the app in a prefectural preferred language (Arabic/English)
10. To Activate, Block or replace Credit Card or Debit Card
11. Subscribe to mobile banking service by financial institution and cancel the subscription at any time
12. Add or delete a bank account from a list of available accounts managed through mobile banking
13. To Verify the balance of the bank accounts
14. To View the most recent transactions on the bank accounts
15. To verify Accounts managed through mobile banking
16. To Check the amount of credit available on the credit cards
17. To Check the balance of the credit card accounts
18. To Pay the credit card account
19. To Recharge the pre-paid mobile accounts
20. To registered with the financial institution
21. To Pay utility bills, such as electricity, Internet and mobile subscriptions, or any other bill that can be registered with the financial institution

BENEFITS FOR THE END USER OF MOBILE BANKING APPLICATION

1. Provides state of the art security
2. Requires no configuration
3. Is readily available
4. Is low cost (no data connection) it's resides on the SIM, the browsing is local.
5. Is device independent, supported on ALL phones from low to high-end

II. LITERATURE REVIEW

Davis (1989) introduced Technology Acceptance Model (TAM), which is used for modeling user acceptance of information systems. The aim of TAM is to provide an explanation of the determinants of computer acceptance. The two specific beliefs as per TAM are perceived usefulness and perceived ease of use, which are of importance for computer acceptance behaviors. The influence of perceived ease of use and perceived usefulness on the probability of system use can be studied using TAM. Any individual's behavioral intentions is influenced directly by his attitude and perceived usefulness.

TAM has been used widely to find out the probability of adopting an online system and user perceptions of system use. Stated that the diffusion of electronic banking is more determined by customer acceptance than by seller offerings. Not enough is known regarding how customers perceive and evaluate electronically delivered services, Have also recently highlighted the need for further research to measure the influence of e-service on customer-perceived service quality and satisfaction. This study considers the four factors perceived usefulness, perceived ease of use, consumer awareness about mobile banking and perceived risks associated with mobile banking. Half of the people that have tried mobile banking services will not become active users. Highly publicized cases involving major security failures might have contributed to the public's concern and lack of acceptance of mobile banking.

The present study aims at examining the impact of perceived usefulness, perceived ease of use, consumer awareness on mobile banking and perceived risk on the acceptance of mobile banking by the consumers.

Mobile Banking, also known as M-Banking, can perform various functions like mini statement, checking of account history, SMS alerts, access to card statement, balance check, mobile recharge etc. via mobile phones (Vinayagamoorthy and Sankar, 2012). Banks are constantly updating their technology and want to increase their customer base by reaching to each and every customer. There are many advantages of using mobile banking, such as people in the rural or remote areas can also get an easy access to mobile banking whenever required. Vinayagamoorthy and Sankar, (2012) have discussed about the mobile banking and according to them it is a term that is used for performing various banking transactions like fund transfer, balance check, payments etc. via mobile phones.

First mobile banking transaction services in India were offered by ICICI bank in January 2008 (Mr. V. Vaidyanathan, 2008) but SMS alerts started in 2005-06 (Alpesh Patel, 2013). Wireless phone subscribers in India crossed 867.8 Million in 2013, as per TRAI (Telecom Regulatory Authority of India Act, 1997) as compared to 261.07 in March 2008. So there is approximately 4 times increase in the number of subscribers. However, according to this report, subscribers who access the internet through wireless phones are 143.2 Million. Almost 16.5% of wireless mobile phone subscribers are using the Internet over their mobile phones. According to a Mobile banking report by Deloitte (Alpesh Patel, 2013), 17 Million Indians are using mobile phones for banking transactions. So, approximately 2% of wireless phone subscribers are using banking services on their mobile phones. Mobile banking is still in its nascent stage in India. Therefore, identifying and understanding the factors influencing the behaviour of mobile phone subscribers is one of the fundamental requisite for development of mobile banking services in India.

Research in the field of mobile banking is at the introductory stage in India. It started in the year 2005-2006, with the introduction of short message services (SMS) of mobile alerts for transactions. Then in the year 2008, Reserve Bank of India (RBI) issued

the guidelines for mobile banking transactions. In the same year MTNL (Mahanagar Telephone Nigam Ltd.) launched 3G in India. In 2010-2011 India launched its first IMPS

(Immediate Payment Service (IMPS) which is an instant interbank (similar to NEFT) transaction that can be initiated only through mobile phones or online or through SMS. In the year 2011-12, Vodafone and HDFC bank launched m-paisa and Airtel launched Airtel Money in 5 cities in India. In 2012-13 Airtel-Axis Bank launched a mobile banking service for financial inclusion and money transfer. According to operative guidelines for banks by RBI, only those banks which are licensed and supervised in India and have a physical presence in India will be permitted to offer mobile banking services (Chugh, 2014). According to RBI report, there are 82 banks that are permitted by RBI to provide mobile banking services throughout the India (Reserve bank of India, 2014) as compared to 21 Banks in the year 2010.

During the last four years, the numbers of banks providing mobile banking services in India have increased four times. But numbers of mobile banking users have not increased at the same pace. There are many challenges that Indian banks are facing for increasing the mobile banking user database like Handset operability, Security, Scalability and Reliability, Application Distribution etc. Acceptance and adoption of this innovative technology is very complex and this 'complexity' attribute is studied by various researchers and they have suggested that banks should make these services easy to use by the Indian population because Indian population is not very well versed with this upcoming technology (Chaipoopirutana, Combs, Chatchawanwan and Vij (2009); Lin (2010); Sahin (2006).

To understand the adoption behaviour of users, many researchers have done research on the factors that helps indetermining the acceptance and the attitude of users towards mobile banking. TAM (Technology Acceptance Model), TPB (Theory Planned Behaviour), IDT (Innovation Diffusion Model) (see Figure 5,6,7) have been discussed by Bhatti (2007) and Sadi and Noordin (2011) and they claimed that all the 13 factors *i.e.* Perceived Usefulness, Perceived ease of use, Personal Innovativeness, Perceived Trust, Perceived Cost, Subjective Norm, Social Influence, Self-Control, Perceived Behavioural Control, Facilitating condition, Self-Efficacy, Attitude towards use, and Intention to use M-commerce are statistically significant and by using exploratory factor analysis they concluded that the mere introduction of M-commerce is not sufficient but focus should be laid on the improvement of attributes that effect the M-Commerce adoption. Out of all the factors, perceived usefulness is found to be the critical factor thus, the service provider should take care that customers should perceive their services as valuable and useful to keep up with their fast paced lifestyle. This research also found that trust is also an important factor and should be taken into consideration by the Service providers; if consumers do not feel secure they will be reluctant to use the services. (Kim, Shin, and Lee 2007). It is also found that people have less trust in the mobile banking services and personal disposition to trust played

a positive role in developing initial usage in mobile banking. To some extent the success of acceptance of M-commerce transactions depends on the customer as well as vendor's trust (Singh, Srivastava, and Srivastav, 2010). Kim, Shin, and Lee (2007) and AL-Majali and Mat (2011) also discussed that if customers believe that a mobile banking firm is able to develop effective service delivery strategies and provide adequate protection from fraud and violation of privacy, then adoption (or continue-to-use) intentions of the mobile phone users will increase.

Facilitating Condition is also an important attribute of consumer behavioural control towards intention to use; therefore it is necessary to improve the facilitating conditions of mobile application services like connection speed, secure systems and easy transaction method (sadi and Noordin, 2011).

Bhatti (2007), used all the three models TAM, TPB and IDT and found out that the perceived ease of use, perceived usefulness, subjective norm, personal innovativeness and perceived behavioural control are strong determinants of the intention to adopt M-commerce. The study has revealed that subjective norms and perceived behavioural control impact perceived ease of use and intention to adopt mobile commerce. Perceived control of users can be increased by offering them free use of service for a short period of time. Rapid adoption of technology, because of its social influence, is studied in terms of subjective norms and it is found to be a significant factor as the behavioural intention is very much affected by peer group influence.

Chaipoopirutana, Combs, Chatchawanwan, and Vij (2009) and Lin (2010), claimed that the adoption of mobile banking is 'complex' as it has the negative relation with intention to adopt mobile banking. In this paper they have discussed the Roger's (1995) innovation diffusion model's attributes: complexity, compatibility, relative advantage and trialability and found that Relative advantage, compatibility, ease of use (opposite of complexity) has a significant effect on attitude to adopt mobile banking services. They have also suggested that complexity must be reduced in order to increase the number of adopters in internet banking and compatibility has a positive relation with the adoption of internet banking. It implies that banks should start advertising their internet banking services to the consumers so that they can relate it to their values, beliefs and experiences of the adopters. Customers have a favourable attitude towards adopting mobile banking services, if they have positive belief about the relative advantage of mobile banking. Relative advantage refers to the degree to which a technology provides more benefits than its precursor (Rogers, 2003).

III. OBJECTIVES OF THE STUDY

1. Study Perceptions and Intentions of Mobile Banking Users.
2. Study Factors Affecting Mobile Banking Usage in Vijayawada.
3. Identify The Problems of Using M-banking Services in The Present Scenario.
4. Suggest Different Ways to Improve Mobile Usage by Customer

IV. SCOPE OF STUDY

The Inferences from the study are based on the responses given by the consumers in a specific area. This study will be helpful in getting an insight into the study perceptions and intentions of mobile banking users. It may not fully reflect the mindset of the consumers as they may shy from answering all the questions straight forwardly.

V. RESEARCH METHODOLOGY

5.1 Research Design

The study is based on both primary data and secondary data. The primary data was collected through structured questionnaire for which samples of 110 respondents were selected for this study. The collected samples using convenient sampling method was validated and took it for further analysis. Secondary data is also been collected from database sites and articles. The collected data were analyzed with the suitable tools like Chi-Square tools with the following assumptions were made on the onset of the project.

5.2 Area of the Study

The respondents are randomly selected for this study.

5.3 Research Approach

Survey and Questionnaires Method

Survey method is used for collecting data from MOBILE BANKING USERS at various banks. We requested all respondents to fill in the questionnaire, by self after explaining the various aspects mentioned in it. It contained both open and closed ended questions in a structured format very easy to understand on the first look.

5.4 Sampling Technique

A convenient sample (non – probability sampling method) of 110 MOBILE BANKING USERS was collected for the current study in which respondent of the study was request to complete the questionnaire on voluntary basis.

5.5 Sample Size

The Size of the sample taken in this study is 110.

5.6 Data Usage

For analysis and interpretation, only primary data is used. However for conclusion and recommendations both primary and the secondary data along with the verbal knowledge and information although obtained from respondents, though they are

GENDER	Male	Female	
	74	36	
AGE	20-24	25-29	
	17	53	
	30-40	>40	
	21	19	
EDUCATION	DIPLOMA	GRADUATION	PG
	41	35	34
PROFESSION	BUSINESS	IT-EMP	NON-IT-EMP
	27	34	49
INCOME	<20,000	20,000-40,000	>40000
	29	35	46
HOW MANY MOBILES DO YOU HAVE IN USAGE?	ONE	TWO	THREE
	66	31	13
WHICH MOBILE BANKING PURPOSE DO YOU USE YOUR MOBILE?	BOOKING TRAVEL TICKETS	ONLINE FEE AND BILL PAYMENTS	ONLINE BANK TRANSFERS
	17	11	9
	ALL THE ABOVE	NONE	
	27	46	
WHAT WILL YOU DO IF MOBILE BANKING IS INTERRUPTED ON YOUR PHONE?	DELAY TRANSACTION TILL ITS WORKING	SEARCH FOR OTHER OPTIONS TO DO FINANCIAL TRANSACTIONS	
	YES	NO	
OVERALL, MOBILE BANKING FACILITIES ARE USEFUL FOR ME	64	47	
TO MY OWN OPINION, MOBILE BANKING IS EASY TO LEARN	68	42	
INSTRUCTIONS FOR USING MOBILE BANKING ARE EASY TO UNDERSTAND	50	60	
SECURITY CONCERN/RISKY IN USING MOBILE BANKING	62	48	
RELIABILITY IN USING MOBILE BANKING	82	28	
COST EFFECTIVENESS IN IN USING MOBILE BANKING	86	24	
DO YOU INSTALL ANY APPS IN YOUR MOBILE PHONE FOR ONLINE BANKING	54	56	

Table 6.1
General Profile of the Respondents

PARAMETER	SA	A	NUETRAL	DA	SDA
USING MOBILE BANKING FOR FINANCIAL TRANSACTIONS IS NOT SAFE	21	18	13	12	46
THERE IS A FEAR OF DISCONNECTION OF INTERNET WHILE MAKING A TRANSACTION	48	8	8	35	11
PRIVACY ISSUE HAS AN INFLUENCE MOBILE BANKING	18	17	14	29	32
THERE IS ALSO A PROBLEM OF LOW CHARGE OF BATTERY WHILE MAKING A TRANSACTION	48	12	16	23	11
RELIABILITY OF APPLICATION IS THE FACTOR INFLUENCING MY USE OF MOBILE BANKING	57	27	21	4	1
THERE IS HIGH FREQUENCY OF SERVICE NOT AVAILABLE ERROR?	33	15	14	21	27
SERVICE FACILITIES WILL BE AVAILABLE WHILE I AM ON ROAMING	27	22	6	9	46
STOP CHEQUES FACILITIES AVAILABLE THROUGH MOBILE BANKING INSTRUCTIONS	27	11	17	17	38
FREQUENTLY I DO GET SESSION EXPIRED ERROR?	38	31	11	21	9
MOBILE BANKING SERVICES TO BE AFFORDABLE SERVICE	33	20	20	18	19
USE OF MOBILE BANKING ENABLES ME TO UTILIZE BANKING SERVICES MORE QUICKLY AND EFFECTIVENESS	36	22	9	4	39
BANKS SEND SMS ALERTS WITH SPECIFIC INFORMATION ABOUT THE BANK SERVICES/NEW PRODUCTS	23	31	9	21	26

Table 6.2
 Respondents views about MOBILE BANKING

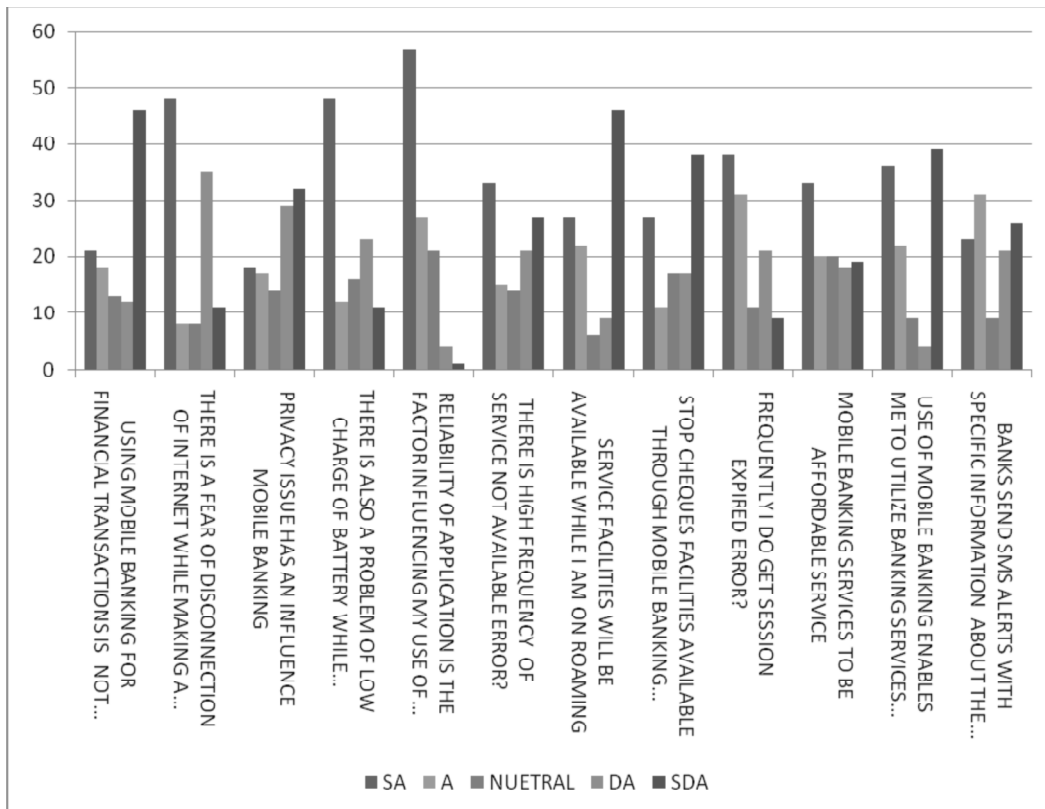


Figure 6.3

outside the parameters of questionnaire were also included. The data collected from these sources were analyzed using various tools like percentage analysis, chi-square test, cross table analysis method.

5.7 Tools

Frequencies and cross tabulation have been calculated for the responses of the respondents. Chi-Square test analysis was conducted on the data of part II in questionnaire.

VI. ANALYSIS AND INTERPRETATION

Interpretation

From the above table, we infer that 74 of the total respondents are male and 36 are female. On further classification according to age group, we find that of all the respondents 17 are 20-24 Years old, 53 are of the age group 25-29 Years, 21 of the age group 30-40, 19 are of the age group with more than 40 years. From the responses collected 41 respondents are Diploma holders, 35 are Graduates and 34 are Post-Graduates. On the Monthly Income basis 29 Respondents earn less than 20,000 Rs, 35 of them earn 20,000-40,000 Rs, while the remaining 46 earn more than 40,000 Rs.

6.4 Chi-Square Test

6.4.1. Is There a Relation between income of the respondent and the perception that mobile banking is affordable?

Case Processing Summary						
Cases						
	Valid		Missing		Total	
	N	Percent		Percent	N	Percent
MONTHLY INCOME * MOBILE BANKING IS AFFORDABLE	110	100.0%	0	.0%	110	100.0%

MONTHLY INCOME * MOBILE BANKING IS AFFORDABLE							
Count							Total
		MOBILE BANKING IS AFFORDABLE					
		STRONGLY AGREE	AGREE	NUETRAL	DISAGREE	STRONGLY DISAGREE	
MONTHLY INCOME	<20,000	6	7	6	5	5	29
	20,000- 40,000	9	7	6	7	6	35
	>40000	18	6	8	6	8	46
Total		33	20	20	18	19	110

Chi-Square

MONTHLY INCOME				MOBILEBANKING IS AFFORDABLE			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
<20,000	29	36.7	-7.7	STRONGLY AGREE	33	22	11
20,000-40,000	35	36.7	-1.7	AGREE	20	22	-2
>40000	46	36.7	9.3	NUETRAL	20	22	-2
Total	110			DISAGREE	18	22	-4
				STRONGLY DISAGREE	19	22	-3
				Total	110		

Test Statistics			
	MONTHLY INCOME	MOBILEBANKING IS AFFORDABLE	
Chi-Square	4.055a	7.000b	
df	2	4	
Asymp. Sig.	0.132	0.136	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.
 b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.0.

From the above SPSS calculation we infer that there is a significant relation between income of the respondent and the perception that mobile banking is affordable.

6.4.2. Is There a relation between gender of respondent and privacy issue effecting mobile banking?

GENDER OF RESPONDENT * PRIVACY ISSUE EFFECTS MOBILE BANKING Crosstabulation							
Count		PRIVACYISSUE					Total
		STRONGLY AGREE	AGREE	NUETRAL	DISAGREE	STRONGLY DISAGREE	
GENDER	Male	8	10	8	22	26	74
	Female	10	7	6	7	6	36
Total		18	17	14	29	32	110

Chi-Square

GENDER OF RESPONDENT				PRIVACY ISSUE EFFECTS MOBILE BANKING			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
Male	74	55	19	STRONGLY AGREE	18	22	-4
Female	36	55	-19	AGREE	17	22	-5
Total	110			NUETRAL	14	22	-8
				DISAGREE	29	22	7
				STRONGLY DISAGREE	32	22	10
				Total	110		

Test Statistics				
	GENDER OF RESPONDENT	PRIVACY ISSUE EFFECTS MOBILE BANKING		
Chi-Square	13.127a	11.545b		
df	1	4		
Asymp. Sig.	.000	.021		

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.0.

From the above SPSS calculation we infer that there is no significant relation between gender of respondent and privacy issue effecting mobile banking.

6.4.3. Is there a relation between education of respondent and his feeling that mobile banking instructions are easy to understand?

EDUCATION OF RESPONDENT * MOBILE BANKING INSTRUCTIONS ARE EASY TO UNDERSTAND Crosstabulation				
Count		MOBILE BANKING INSTRUCTIONS ARE EASY TO UNDERSTAND		Total
		YES	NO	
EDUCATION OF RESPONDENT	DIPLOMA	11	30	41
	GRADUATION	16	19	35
	PG	23	11	34
Total		50	60	110

Chi-Square

EDUCATION OF RESPONDENT				MOBILE BANKING INSTRUCTIONS ARE EASY TO UNDERSTAND			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
DIPLOMA	41	36.7	4.3	YES	50	55	-5
GRADUATION	35	36.7	-1.7	NO	60	55	5
PG	34	36.7	-2.7	Total	110		
Total	110						

	EDUCATION OF RESPONDENT	MOBILE BANKING INSTRUCTIONS ARE EASY TO UNDERSTAND Crosstabulation	
Chi-Square	.782a	.909b	
df	2	1	
Asymp. Sig.	0.676	0.34	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

From the above SPSS Calculation we infer that there is relation between education of respondent and his feeling that mobile banking Instructions are easy to understand.

6.4.4. Is there a relation between mobiles in usage and his perception that overall mobile banking is useful?

Count		OVERALL MOBILE BANKING IS USEFUL		Total
		YES	NO	
MOBILES IN USAGE	ONE	28	38	66
	TWO	7	24	31
	THREE	7	6	13
Total		42	68	110

Chi-Square

MOBILES IN USAGE				OVERALL MOBILE BANKING IS USEFUL			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
ONE	66	36.7	29.3	YES	42	55	-13
TWO	31	36.7	-5.7	NO	68	55	13
THREE	13	36.7	-23.7	Total	110		
Total	110						

	MOBILES IN USAGE	OVERALL MOBILE BANKING IS USEFUL
Chi-Square	39.618a	6.145b
df	2	1
Asymp. Sig.	0	0.013

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.
 b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

From the above spss calculation we infer that there is no relationship between mobiles in usage and his perception that overall mobile banking is useful.

6.4.5. Is there a relation between people profession of respondent and him installing mobilebanking apps in mobile?

Count		INSTALL MOBILEBANKING APPS IN MOBILE		Total
		YES	NO	
PROFESSION OF RESPONDENT	BUSINESS	14	13	27
	IT-EMP	26	8	34
	NON-IT-EMP	16	33	49
Total		56	54	110

Chi-Square

PROFESSION OF RESPONDENT				INSTALL MOBILEBANKING APPS IN MOBILE			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
BUSINESS	27	36.7	-9.7	YES	56	55	1
IT-EMP	34	36.7	-2.7	NO	54	55	-1
NON-IT-EMP	49	36.7	12.3	Total	110		
Total	110						

Test Statistics			
	PROFESSION OF RESPONDENT	INSTALL MOBILEBANKING APPS IN MOBILE	
Chi-Square	6.891a	.036b	
df	2	1	
Asymp. Sig.	0.032	0.849	

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.

From the above spss calculation we infer that there is a significant relation between people profession of respondent and HIM installing mobilebanking apps in mobile.

6.4.6. Is there a relation between age of respondent and their feeling that cyber security is a concern?

AGE OF RESPONDENT * CYBER SECURITY IS A CONCERN Crosstabulation				
Count		CYBER SECURITY IS A CONCERN		Total
		YES	NO	
AGE OF RESPONDENT	20-24	6	11	17
	25-29	15	38	53
	30-40	13	8	21
	>40	14	5	19
Total		48	62	110

Chi-Square

AGE OF RESPONDENT				CYBER SECURITY IS A CONCERN			
	Observed N	Expected N	Residual		Observed N	Expected N	Residual
20-24	17	27.5	-10.5	YES	48	55	-7
25-29	53	27.5	25.5	NO	62	55	7
30-40	21	27.5	-6.5	Total	110		
>40	19	27.5	-8.5				
Total	110						

Test Statistics			
	AGE OF RESPONDENT	CYBER SECURITY IS A CONCERN	
Chi-Square	31.818a	1.782b	
df	3	1	
Asymp. Sig.	.000	.182	
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 27.5.			
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 55.0.			

From the above SPSS calculation we infer that there is a significant relation between age of respondent and their feeling that cyber security is a concern

VII. FINDINGS

1. Many respondents felt that Customer Protection initiatives are not sufficient in INDIA in the case of Mobile Banking. There are no statutory bodies that deal with consumer grievances known to them.
2. The vast majority opined that priorities are to decrease customer costs for banking make it easier to transact and to increase customer outreach
3. Security concern is the major barrier in adopting mobile banking services
4. 67% of Mobile Banking users agree that the service is more convenient than traditional banking;
5. Transactions can be done faster and allows easy maintenance of transaction activities. 51 % agree that Mobile Banking is better than traditional banking
6. Insufficient operating guidance, difficulty in handling mobile phone, network problem and cost per transaction
7. Solution of network problems should be a priority.
8. Banks should always be updated with new e-banking and m-banking services.
9. The age group of 20-30 years is regularly using mobile banking service those are employees and business peoples.

10. Most of the people are willing using mobile banking is financially not secure
11. In survey 62 of the respondents are worried about security of mobile banking so it influences the usage of mobile banking
12. 56 of respondents agreed that the connectivity error problems while using mobile banking services.
13. 84 of people said that the mobile banking transactions are reliable.
14. Most of the people are using mobile banking on roaming services.
15. Through the mobile banking the customer can stop CHEQUE also.
16. 39 respondents said that mobile phone transactions are secure.
17. Because of time lagging 69 respondents faced problems with session expired error.
18. 58 customers said that use of mobile banking enables them to utilize banking services more quickly and effectiveness.
19. 68 respondents felt that Mobile banking is easy to understand.
20. 38 respondents agreed that PRIVACY ISSUE has an influence mobile banking.
21. Mobile banking provides reliability while transacting
22. Most of people agreed that m-Banking is cost effective.
23. Many respondents are using mobile banking for the purpose of prepaid recharges.

VIII. SUGGESTIONS

1. Only Indian Rupee-based services can be provided through mobile banking so banks to try to improve transact with other currencies.
2. Most of the people are worried about connection error because of the problem of and telecom sector and if telecom sectors provide good service in M-banking it will have excellent growth in future.
3. People are worried about security concern because Mobile banking is easily hacked by hackers. To avoid that people while using m-banking should use of antivirus software to reduce those problems.
4. While using M-banking people are using prepaid mobile recharges and sometimes consumers get errors because of telecom network problems.
5. Most of the people are not aware of M-banking services. It is better to provide information to the customers who are having internet banking.
6. Initiating awareness campaigns of mobile banking because banking is essential customers
7. Apps must be developed according to the customization of the customers.

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