ANALYSIS OF RURAL CUSTOMERS' DILEMMAS WITH DIGITAL BANKING SERVICES IN INDIAN BANKING SYSTEMS STUDY OF SELECTED VILLAGES IN PUNE DISTRICT OF MAHARASHTRA STATE

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ABSTRACT

This article aims to provide usages and constraints of digital banking services among the rural banking customers in the Pune district located in the Maharashtra state, India.

Keywords: Rural Banking Customer, Digital Payment Services, UPI/BHIM, Online Frauds, Precautions to Prohibit Online Frauds.

INTRODUCTION

Financial institutions such as banks deal with deposits, advances, and other services related to banking. As the intermediary between customers with capital deficits and customers with capital surpluses, a bank serves as a link between these two groups of customers. By automating business processes, banks have been able to enhance customer service, reduce manpower costs, and increase profitability Kashyap et al. (2010). Using the report of the Rangarajan committee, the banking sector in India began the process of computerization in the mid-80s with the introduction of advanced ledger posting machine Adu (2016).

Driving Rural India towards Cashless Economy - For preparing a cashless payment system, the merchant would need an Aadhaar number, the customer's fingerprint, and the bank's name.Some other banks, on the other hand, are still in the process of appointing pilots to its application. This strategy is intended for incentivizing merchants based on the system's scalability and sustainability over time Singh & Malik (2019).

Security Concerns of Digital Banking System- Increasing security concerns have become a major concern for the banking sector Prema (2011). Despite safety and security concerns, most customers refuse to take part in e-banking programs. Wherein 43% of internet users are still hesitant to use internet banking in India due to security concerns, according to the IAMAI (2006). In this sense, it is a primary challenge for banks to convince consumers of the benefits of online banking, which may boost usage. Data availability, integrity, and reliability are some of the biggest challenges. Akturan & Tezcan (2012) lowered consumers' perceived risk and perceived benefits by integrating a technology acceptance model (TAM) into their analysis of mobile banking adoption.The security breach world is divided into three categories; attackers with serious criminal intent (fraud, theft of commercially sensitive or financial information), and amateur hackers. Every day, hundreds of attacks are conducted against the systems of many banks, but the damages resulting from Hall et al. (2017) security breaches are relatively minor so far. Kujur & Shah (2015) recommend installing more sensitive "*burglar alarms*" so that banks can evaluate the nature and frequency of attempted accesses to their system Ahmad & Al-Zu'bi (2011).

LITERATURE REVIEW

Digital banking services- A digital transformation is the process of recognizing the changes in the digital landscape and the evolving consumer expectations. These expectations will rise as the landscape advances, leading to increased customer satisfaction Zouari, Abdelhedi, (2021). Technology has changed the habits of consumers Madwanna et al. (2021). Customers can now get what they want, virtually the moment they need it, with mobile devices, apps, and machine learning. Because of integrating digital technology across all aspects of the business, digital transformation revolutionizes how they work and deliver value to their customers Hanelt et al. (2021). Modern shoppers are influenced by these new digital technologies and expect new things. Technology has made consumers more informed, more knowledgeable, and more savvy Hall et al, 2017.

By using the bank's mobile app on your smartphone or tablet, you can perform banking transactions conveniently, easily and securely from the comfort of your own home anywhere, at any time. As a result, tasks are completed more quickly Japparova & Rupeika-Apoga (2017). Digital banking involves a comprehensive reengineering of the bank's internal systems and goes beyond online banking, Internet, e-banking, mobile banking and digital banking, which customers often confuse Kaur et al. (2021). However, how much does customer satisfaction depend on the risk factors? The digitalization of the banking industry has exposed banks to the threat of not meeting the needs and expectations of their clients Scholz et al. (2018). For intelligent management of digitalized banking services and products, there is a need for a deeper understanding of some of the most significant risk factors Syed et al. (2022).

Customers are at risk of dissatisfaction due to differences between their expectations and their perceptions of service performance, which is known as quality of service Raza et al. (2015); Toor et al. (2016). Since consumers are assured of receiving the best products and services from specific stores and experts, they tend to buy goods and hire services from those places. The consumers become more loyal and trusting because of this Parasuraman et al. (1988). A national dimension was also considered in this study because different cultures can relate to customer satisfaction differently Pakurár et al. (2019); Zouari & Abdelhedi (2021). By taking a practical look at the situation of banks in Northern India, this study contributes to literature on customer satisfaction in the banking sector in the digital age Al-Husein & Sadi (2015).

Electronic Funds Transfers at Point of Sale Terminals, Electronic Compensation Services and Tele Banking by Jagtap (2018) explores the need and progress of digitalization in the banking sector.It was determined that many customers are aware of the benefits of digitalization in the banking sector, according to Munna & Khanam (2021). In addition to exploring the benefits and drawbacks of digitalization in banks, the study also explores their drawbacks. A discussion of the importance of digital banking in rural areas was provided by Nayak (2018).

Objectives

1. To check the different usages of digital payment services among the respondents.
2. To study satisfaction matrix of digital payment services among the respondents.
3. To check various challenges of digital payment services faced to respondents.
4. To find degree of frauds due to use of digital payment system among the respondents.
5. To understand precautionary measures taken against protecting from the fraud by the respondents.

H_1- Null Hypothesis (N0)- There was no significant differences in the level of satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

Alternate Hypothesis (N1)- There was definite significant differences in the level of

satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking Rana et al. (2019).

H_2- Null Hypothesis (N0)- There was no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

Alternate Hypothesis (N1)- There was no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

H_3- Null Hypothesis H0 = There is no significant association between trusting of digital payment with raising level of precautions during using of digital payment services in rural banking customers.

Alternate Hypothesis H1= There is definite significant association between trusting of digital payment with raising level of precautions during using of digital payment services in rural banking customers Rahman et al. (2017).

Research Design

A descriptive exploratory design was used to investigate the phenomenon of diffusion of digital banking in the Pune district of Maharashtra state in India and the related factors affecting technology and security challenges among rural bank customers Kolte et al. (2019).

Study- Pune is one of the most progressive districts in Maharashtra state in terms of social, economic, and educational progress. Approximately 1866 villages are located in this district. According to the census data for the year 2021, the total population of the top 10 villages is more than 3000. Due to the fact that these villages are equipped with banking facilities, there is a high probability that digital banking services may be widely used by customers in these villages. These villages are located across different tehsil bocks in Pune district. Names along with sample shown in Table 1.

Table 1 VILLAGE AND SAMPLE SIZE	
Village name	Sample Size
Maan	100
Chandoli Bk	100
Korhale Kh	100
Shriramnagar	100
Kambleshwar	100
Pilanvadi	100
Shivapur	100
Kalamb	100
Malegaon	100
Moregaon	100
Total	1000

Method of Data Collection- A self-reported interview schedule that was structured and pilot tested was used for collecting quantitative research data Datta et al. (2020). The list of 29 questions includes socio-economic, demographic, and usage information, as well as challenges and threats associated with digital banking. Reliability and validity of data collection tool- To assess the reliability of the interview schedule, the Cronbach Alpha test was conducted with a

score of 0.856, which is considered 'Good'. A total of 134 samples were tested for Cronbach Alpha after pilot testing. By using SPSS software, a correlation coefficient of all the questions is calculated to determine the validity of a construct. This correlation coefficient test value provides a measure of the validity level of all questions greater than the observed value, i.e. $p=0.245$ to 0.799 ($\alpha=0.00$, df=998) > predicted value = 0.198 Khidhir (2020).

Strategy for Sample Selections- For the present investigation, a total of 1000 respondents were selected. Each village was sampled using a non-probability accidental sampling strategy that is non-probabilistic. In order to conduct interviews with banking customers, the researcher visited nationalised banks during working hours Analysis of Data- Data analysis was performed using SPSS (Version 22.3) for various statistical tests. In order to meet the objectives and test hypotheses, parametric and non-parametric tests were conducted. ANOVA and Chi-Square tests are used to analyse descriptive statistics Table 2.

RESULTS AND DISCUSSION

Table 2 DEMOGRAPHIC PROFILE OF RESPONDENTS		
	Frequency	Percent
Age		
Less than 20 years	11	1.1
20-30 years	41	4.1
30-40 years	191	19.1
40-50 years	198	19.8
50-60 years	321	32.1
Above 60 years	238	23.8
Total	1000	100
Gender		
Male	775	77.5
Female	225	22.5
Total	1000	100
Education		
Upto SSC	18	1.8
Junior College/Diploma	93	9.3
Degree	582	58.2
PG	307	30.7
Total	1000	100
Profession		
Govt. Employee	74	7.4
Private Employee	231	23.1
Business/Self Employment	61	6.1
Farming/Peasants	466	46.6
House wife	139	13.9
Student	11	1.1
Unemployed	18	1.8
Total	1000	100
Income		
No income	77	7.7
<Rs.20,000	286	28.6
Rs.20,001-Rs.50,000	183	18.3

Rs.50,001- Rs.80,000	132	13.2
Rs.80,001-Rs.1,00,000	258	25.8
>Rs.1,00,001	64	6.4
Total	1000	100
Type of Bank account		
Saving	732	73.2
Jan Dhan	54	5.4
Current	41	4.1
Salary	173	17.3
Total	1000	100
Bank account		
Less than 1 year	107	10.7
2-5 years	216	21.6
6-10 years	467	46.7
More than 10 years	210	21
Total	1000	100

It is noteworthy that respondents from the 50-60 years of age are the most numerous among the age groups. Male respondents account for 77.5% of the total respondents, as compared to female respondents (22.5%). There is a high level of education among the respondents in the present study, with more than 88% completing a degree program. A total of 46.6% of respondents were engaged in peasantry or Diener & Špaček (2021) farming as their primary occupation, which represents the structure of rural communities. Almost 13.9% of respondents in this study are housewives, who are engaged in banking as a result of Jan Dhan accounts and membership in self-help groups which are equally weighted in involving women in banking. Even in rural areas, the number of saving account holders is greater while the number of salaried account holders (17.3%) is also significant Table 3.

Table 3 DIFFERENT DIGITAL PAYMENT SERVICES USE BY RESPONDENTS		
Digital Payment Services	Frequency	Percent
UPI/BHIM		
Always	601	60.1
Very Often	77	7.7
Sometimes	71	7.1
Rarely	105	10.5
Never	146	14.6
Total	1000	100
Mobile Banking		
Always	63	6.3
Very Often	110	11
Sometime	177	17.7
Rarely	104	10.4
Never	546	54.6
Total	1000	100
Net Banking		
Always	85	8.5
Very Often	135	13.5
Sometimes	70	7

Rarely	58	5.8
Never	652	65.2
Total	1000	100

Table 3 shows the usability of digital payment services by respondents proposed by their banks. It is seen that UPI/BMIM undoubtedly famous payment online services than Net Banking and Mobile Banking's. Payment systems have been described as revolutionary since the introduction of the Unified Payments Interface (UPI) and Bharat Interface for Money (BHIM). A pilot program has also been launched for the Bharat Bill Payment System (BBPS). Among other non-cash payments maximum 67.8% adapted UPI/BHIM than Net banking (22%) and Mobile banking (7.4%) Usman (2021). A single mobile application platform will support several bank accounts (from any participating bank) through the United Payments Interface (UPI). Payments from merchants are seamless and integrated with multiple banking features. It facilitates the transfer of funds between individuals. With UPI, you get Open Source, Security, Cost-Effectiveness, Simplicity, and Adaptability. With UPI, you can move money at any time of the day or night, 365 days a year, including holidays, without any hassle. Transactions with a debit card are also faster than those with an e-wallet. In the current scenario, non-cash payments account for 40% of all transactions, but that number is expected to increase to 65 percent by 2026 Taskinsoy (2020) Table 4.

Table 4 SATISFACTION OF DIGITAL PAYMENT SERVICES USE BY RESPONDENTS		
Responses	Frequency	Percent
UPI/BHIM		
Strongly Agree	432	43.2
Agree	208	20.8
Undecided	64	6.4
Disagree	31	3.1
Strongly Disagree	265	26.5
Total	1000	100
Mobile Banking		
Strongly Agree	31	3.1
Agree	96	9.6
Undecided	227	22.7
Disagree	403	40.3
Strongly Disagree	243	24.3
Total	1000	100
Net banking		
Strongly Agree	91	9.1
Agree	19	1.9
Undecided	293	29.3
Disagree	124	12.4
Strongly Agree	483	48.3
Total	1000	100

The satisfaction of various banking digital payment systems is mentioned in Table 3. UPI/BHIM has also been shown to be popular as out of 67.7% who have this app, 64% are satisfied. The number of respondents who are satisfied with Mobile Banking services is only 12.7%, while only 11% are satisfied with Net Banking services Table 5.

Table 5 RESPONDENTS VIEW ON 'DIGITAL BANKING SERVICES ARE RELIABLE PAYMENT METHODS'		
Responses	Frequency	Percent
Strongly Agree	419	41.9
Agree	226	22.6
Undecided	82	8.2
Disagree	168	16.8
Strongly Disagree	105	10.5
Total	1000	100

Respondents view on reliability of digital payment systems shows that 41.9% 'Strongly Agree' and 22.6 'Agree'. Whereas somehow rejections in terms of 16.8% Disagree and 10.5% 'Strongly Disagree' showing many question marks Polillo (2012) for continuing usages of digital payment systems. On the earlier responses their satisfaction level appreciates the further use of digital payment services here reliability retains the spread and acceptability of digital payments systems Table 6.

Table 6 RESPONDENTS VIEW ON 'I AM MORE TRUSTING ON DIGITAL BANKING SERVICES'		
	Frequency	Percent
Strongly Agree	403	40.3
Agree	108	10.8
Undecided	255	25.5
Disagree	64	6.4
Strongly Disagree	170	17
Total	1000	100

There are almost fifty one percent (51.1%) of respondents who only trust digital banking services. This contradicts the earlier results and suggests respondents may be ambivalent about the benefits of digital banking services Burns (2017). Shettar (2019) Perhaps this is due to the increase in fraud and technical glitches. Respondents view on 'I do not face any technical difficulty during using of Digital banking services' Table 7.

Table 7 RESPONDENTS VIEW ON 'I DO NOT FACE ANY TECHNICAL DIFFICULTY DURING USING OF DIGITAL BANKING SERVICES'		
	Frequency	Percent
Strongly Agree	24	2.4
Agree	42	4.2
Undecided	184	18.4
Disagree	383	38.3
Strongly Disagree	367	36.7
Total	1000	100

There are only 6.6% of respondents who do not encounter any technical difficulties while using digital services. An interesting statistic is that 65.0% of respondents reported having difficulty making payments via their digital banking systems. In a pilot study conducted by the Reserve Bank of India (RBI), it was noted that technical capabilities were at an incipient stage.It can be very worrying for bank customers when they lose funds or data as a result of a crash Table

8.

Table 8 RESPONDENTS VIEW ON 'I FACING SECURITY ISSUES DURING USING DIGITAL BANKING SERVICES'		
	Frequency	Percent
Always	471	47.1
Occasionally	41	4.1
Rarely	307	30.7
Very Rarely	53	5.3
Never	128	12.8
Total	1000	100

One of the striking observations to reported for security challenges to digital payment systems by respondents was shown in the Table 9. It is found that degree of security challenges 'Always' encounter Gupta (2011) to 47.1% respondents, 'Occasionally to '4.1%' and 'Rarely' to 30.7% respondents. There is ample of evidences to reveals that breaching of security for digital banking systems was more commonly prevalent in the respondents from rural areas Table 9.

Table 9 RESPONDENTS VIEW ON 'MY MONEY GETS LOST IN ONLINE FRAUD BURNING USE OF DIGITAL BANKING SERVICES		
	Frequency	Percent
Once a while	427	42.7
Twice while	218	21.8
Thrice a while	28	2.8
Never	327	32.7
Total	1000	100

It was also observed in this article that the financial loss caused by fraudulent activities in digital banking services contributes to the agony of being a victim of cybercrime. Except for 32.7% of respondents, the remaining respondents lost money as a result of Revathi (2019) online fraud as a result of referring digital banking services Tiwari et al. (2021). Due to a lack of awareness of the safety of digital payment systems, many respondents in the present investigation became victims of cybercrime not just for the first time, but also for the second time (21.8%) and for the third time (2.8%) Table 10.

Table 10 RESPONDENTS VIEW ON 'TODAY'S DIGITAL BANKING SERVICES MAKES ME MORE CASHLESS		
	Frequency	Percent
Strongly Agree	420	42
Agree	233	23.3
Undecided	166	16.6
Disagree	70	7
Strongly Disagree	111	11.1
Total	1000	100

There have been mixed results in recent years in India when it comes to driving financial inclusion Table 11.

Table 11 RESPONDENTS VIEW ON 'WHAT TYPE OF E-PAYMENT METHOD DID YOU USE MOSTLY'		
	Frequency	Percent
UPI	366	36.6
Net Banking	105	10.5
Mobile banking	22	2.2
Debit Card	488	48.8
Mobile Wallets	19	1.9
Total	1000	100

E-payment systems use a variety of characteristics that make them popular: simplicity, scalability, convertibility, interoperability, efficiency, anonymity, traceability, and type of authorization Zamani & Giaglis (2018). There are several characteristics that would make an ideal electronic payment system Thirupathi et al. (2019) . These characteristics include reversals, immediate response, compliance, finality, free access (non-discriminatory), anonymity, transparency, and little consideration for the amount of the transaction Sumanjeet (2009) Table 12.

Table 12 RESPONDENTS VIEW ON 'WHAT PRECAUTIONS YOU TAKE DURING USING DIGITAL BANKING SERVICES'		
	Frequency	Percent
Frequently Changing Passwords or Pin		
Always	89	8.9
Occasionally	159	15.9
Rarely	367	36.7
Very Rarely	276	27.6
Never	109	10.9
Total	1000	100
By Avoiding Third Party/ Malicious/unauthenticated Apps, websites, emails		
Always	143	14.3
Occasionally	141	14.1
Rarely	81	8.1
Very Rarely	365	36.5
Never	270	27
Total	1000	100
Always use Antivirus for computers and Mobile		
Always	34	3.4
Occasionally	6	0.6
Rarely	158	15.8
Very Rarely	62	6.2
Never	740	74
Total	1000	100

Among respondents, just 8.9% state that they constantly change their password or pin,

15.9% state that they occasionally change their password, while 36.7% say that they rarely do so. In contrast, 27.6% of users did not change their passwords or pins. Such customers who do not change their passwords or pins are always at risk for fraud because of poor precautions. In the present rural banking customers/respondents to avoid third-party apps/malicious/unauthenticated apps, websites, emails are higher as compared to protecting the password or pin and using antivirus. In this case, 14.3% said they avoided third party/malicious/unauthenticated apps, websites, and emails as a matter of course, 14.1% said they avoided them occasionally, and 8.1% said they rarely avoided them.

Digital payment security was poorly managed by respondents when it came to the use of antivirus on computers and mobile devices. In terms of anti-virus software, only 3.4% use it 'always' for computers and mobile devices, while 0.6 use it 'occasionally'. The majority of respondents never use antivirus software.

H_1 *The socio-economic features of villages in India are typical oriented to its class, caste and systems. Therefore, each village wasn't similar with one another and carrying their identities. Hence, attempt made to check usages of whether there is any difference in usages of digital payment system in Indian villages.*

N_0 *There was no significant differences in the level of satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.*

N_1 *There was definite significant differences in the level of satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.*

The above hypothesis was tested through the Chi-Square (X2) tested presented in the following Table 13.

Table 13 CHI-SQUARE (X2)) TEST SHOWS ASSOCIATION BETWEEN SATISFACTION OF VARIOUS DIGITAL PAYMENT SYSTEM IN VARIOUS VILLAGES			
	Value	df	Asymp. Sig. (2-sided)
UPI/BHIM			
Pearson Chi-Square	48.529a	36	0.049
Likelihood Ratio	52.074	36	0.041
Linear-by-Linear Association	0.002	1	0.966
N of Valid Cases	1000		
Net Banking			
Pearson Chi-Square	31.967a	36	0.661
Likelihood Ratio	32.182	36	0.651
Linear-by-Linear Association	2.619	1	0.106
N of Valid Cases	1000		
Mobile Banking			
Pearson Chi-Square	27.903a	36	0.831
Likelihood Ratio	29.972	36	0.75
Linear-by-Linear Association	0	1	0.992
N of Valid Cases	1000		

From the above table it shows value of UPI/BHIM used in various villages X2=48.529 at the significance level p=0.049 is lower than assumed significance level (α =0.05) rejects Null Hypothesis and retains Alternate Hypothesis i.e. There were definite significant differences in the level of satisfaction in various villages with UPI/BHIM. This shows that in the selected 10 villages the uses of UPI weren't similar as well as their level of satisfaction not equal. This may

be due to differ in socio economic factors not equally among all these villages Sinha & Mukherjee (2016).

From the above table it is also seen value of Net Banking used in various villages X2=31.967 at the significance level p =0.661 is greater than assumed significance level (α =0.05) retains Null Hypothesis i.e. There was no definite significant differences in the level of satisfaction in various villages with net banking Sironi (2016).

In the next it also seen value of Mobile Banking used in various villages X2=27.903 at the significance level p =0.831 is greater than assumed significance level (α =0.05) retains Null Hypothesis i.e. There was no definite significant differences in the level of satisfaction in various villages with net banking.

Henceforth, Null Hypothesis (H0) = There was no significant differences in the level of satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM rejected with the (α =0.05) level of significance. Whereas, Alternate hypothesis(H1) = There was no significant differences in the level of satisfaction in various villages with all the digital payment systems i.e. UPI/BHIM is retained.

Hypothesis was recorded reversely for Net Banking and Mobile Banking. Comparatively, net banking and mobile banking were less popular than UPI.

N_0- There was no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

Alternate Hypothesis (N1)- There was no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

The above hypothesis was tested through the Chi-Square (X2) tested presented in the following Table 14.

Table 14			
A) CHI-SQUARE (X2) TEST SHOWS ASSOCIATION BETWEEN TYPES OF BANK ACCOUNT AND DIFFERENT DIGITAL PAYMENT SYSTEMS			
	Value	df	Asymp. Sig. (2-sided)
UPI/BHIM			
Pearson Chi-Square	1.186E3a	12	0.002
Likelihood Ratio	910.375	12	0.003
Linear-by-Linear Association	435.205	1	0.001
N of Valid Cases	1000		
Net Banking			
Pearson Chi-Square	1.399E3a	12	0.000
Likelihood Ratio	1.19E+03	12	0.005
Linear-by-Linear Association	206.706	1	0.006
N of Valid Cases	1000		
Mobile Banking			
Pearson Chi-Square	9.573E2a	12	0.002
Likelihood Ratio	825.346	12	0.002
Linear-by-Linear Association	2.123	1	0.145
N of Valid Cases	1000		

From the above table it shows value of UPI/BHIM, Net banking and Mobile Banking with various bank accounts X2=1.186 at the significance level p =0.002 for UPI BHIM, X2=1.399 at the significance level p =0.000 Net Banking and X2=9.573 at the significance level p =0.002 for Mobile banking was lower than assumed significance level (α =0.05) rejects Null Hypothesis i.e.

There were no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking.

Henceforth, Null Hypothesis (H0) = There was no significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking was rejected with the (α =0.05) level of significance.

Whereas, Alternate hypothesis(H1) = There was definite significant differences in bank accounts with all the digital payment systems i.e. UPI/BHIM, Net Banking and Mobile Banking was retained Table 15.

Table 15 B) SYMMETRIC MEASURES OF CARMER'S V AND PHI FOR TYPES OF BANK ACCOUNT AND DIFFERENT DIGITAL PAYMENT SYSTEMS.		
UPI/BHIM		
Phi	1.089	0.002
Cramer's V	0.629	0.002
	1000	
Net Banking		
Phi	1.183	0.000
Cramer's V	0.683	0.000
	1000	
Mobile Banking		
Phi	0.978	0.002
Cramer's V	0.565	0.002
	1000	

Phi and Charmer's tests provide further insight into the degree of correlation between two variables. A moderate relationship was observed between UPI/BHIM and types of bank accounts, whereas a moderate relationship was observed between Net Banking and types of bank accounts as well. A similar trend was observed between UPI/BHIM and types of bank accounts. Accordingly, types of bank accounts seem to have a moderate impact on respondents' choice of banking payment systems. It is evident that Bank accounts have also played a significant role in encouraging rural customers to adopt digital banking Table 16.

H_3 The following hypothesis has been proposed to test their association through an ANOVA test.

H_0 There is no significant association between trusting of digital payment with raising level of precautions

during using of digital payment services in rural banking customers.

H_1 There is definite significant association between trusting of digital payment with raising level of

precautions during using of digital payment services in rural banking customers.

Table 16 ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
What precautions you take during using digital banking services- Blocking spam messages and Calls	Between Groups	651.517	4	162.879	146.692	0.000
	Within Groups	1104.799	995	1.110		
	Total	1756.316	999			
What precautions you take during using digital banking services- Always use Antivirus for computers and Mobile	Between Groups	491.872	4	122.968	236.612	0.000
	Within Groups	517.104	995	0.520		
	Total	1008.976	999			
What precautions you take during using digital banking services- By Avoiding Third Part/ Malicious/unauthenticated Apps or websites	Between Groups	1339.895	4	334.974	565.277	0.000
	Within Groups	589.621	995	0.593		
	Total	1929.516	999			
What precautions you take during using digital banking services- Frequently Changing Passwords or Pin	Between Groups	689.023	4	172.256	333.889	0.000
	Within Groups	513.328	995	0.516		
	Total	1202.351	999			

From the above table it shows that one way ANOVA or Fishers' test for precautionary measures like blocking of spam messages and calls with trusting of digital payment system value F=146.92 at the significance level p=0.000. The assumed significance level (α=0.05) is lower than calculated values i.e. p=0.000. In the next precautionary measure Always use Antivirus for computers and mobile with trusting of digital payment system value F=122.968 at the significance level p=0.000. The assumed significance level (α=0.05) is lower than calculated values i.e. p=0.000. Whereas next precautionary measure by Avoiding Third Part/ Malicious/unauthenticated Apps or websites with trusting of digital payment system value F=334.974 at the significance level p =0.000. The assumed significance level (α=0.05) is lower than calculated values i.e. p=0.000. While in the last precautionary measures. Lastly precautionary measure Frequently Changing Passwords or Pin with trusting of digital payment system value F=172.256 at the significance level p =0.000. The assumed significance level (α=0.05) is lower than calculated values i.e. p=0.000.

Henceforth Null Hypothesis H0 = There is no significant association between trusting of digital payment with raising level of precautions during using of digital payment services in rural banking customers was rejected by 0.05 level of significance.

Whereas Alternate Hypothesis H1= There is definite significant association between trusting of digital payment with raising level of precautions during using of digital payment services in rural banking customers is retained Table 17.

Table 17
POST HOC TEST OF TRUSTING ON DIGITAL PAYMENT SERVICES AND PRECAUTIONS TAKEN DURING USING OF BANKING SERVICES

Dependent Variable		(I) I am more trusting on these banking services	(J) I am more trusting on these banking services	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
What precautions you take during using digital banking services- Blocking spam messages and Calls	Tukey HSD	Strongly Agree	Agree	-1.206*	0.114	0.000	-1.52	-0.89
			Undecided	-1.461*	0.084	0.000	-1.69	-1.23
			Disagree	-0.143	0.142	0.850	-0.53	0.24
			Strongly Disagree	0.753*	0.096	0.000	0.49	1.02
		Agree	Undecided	-0.255	0.121	0.218	-0.59	0.08
			Disagree	1.062*	0.166	0.000	0.61	1.52
			Strongly Disagree	1.959*	0.130	0.000	1.60	2.31
		Undecided	Disagree	1.317*	0.147	0.000	0.91	1.72
			Strongly Disagree	2.214*	0.104	0.000	1.93	2.50
		Disagree	Strongly Disagree	0.896*	0.155	0.000	0.47	1.32
What precautions you take during using digital banking services- Always use Antivirus for computers and Mobile	Tukey HSD	Strongly Agree	Agree	-0.337*	0.078	0.000	-0.55	-0.12
			Undecided	-0.337*	0.058	0.000	-0.50	-0.18
			Disagree	0.538*	0.097	0.000	0.27	0.80
			Strongly Disagree	1.663*	0.066	0.000	1.48	1.84
		Agree	Undecided	0.000	0.083	1.000	-0.23	0.23
			Disagree	0.875*	0.114	0.000	0.56	1.19
			Strongly Disagree	2.000*	0.089	0.000	1.76	2.24
		Undecided	Disagree	0.875*	0.101	0.000	0.60	1.15
			Strongly Disagree	2.000*	0.071	0.000	1.80	2.20
		Disagree	Strongly Disagree	1.125*	0.106	0.000	0.84	1.41
What precautions you take during using digital banking services- By Avoiding Third Party/ Malicious/unauthenticated Apps or websites	Tukey HSD	Strongly Agree	Agree	-0.906*	0.083	0.000	-1.13	-0.68
			Undecided	0.428*	0.062	0.000	0.26	0.60
			Disagree	2.110*	0.104	0.000	1.83	2.39
			Strongly Disagree	2.765*	0.070	0.000	2.57	2.96
		Agree	Undecided	1.333*	0.088	0.000	1.09	1.57
			Disagree	3.016*	0.121	0.000	2.68	3.35
			Strongly Disagree	3.671*	0.095	0.000	3.41	3.93
		Undecided	Disagree	1.682*	0.108	0.000	1.39	1.98
			Strongly Disagree	2.337*	0.076	0.000	2.13	2.55

		Disagree	Strongly Disagree	0.655*	0.113	0.000	0.35	0.96
What precautions you take during using digital banking services- Frequently Changing Passwords or Pin	Tukey HSD	Strongly Agree	Agree	0.880*	0.078	0.000	0.67	1.09
			Undecided	-1.327*	0.057	0.000	-1.48	-1.17
			Disagree	-2.268*	0.097	0.000	-2.53	-2.00
			Strongly Disagree	-0.215*	0.066	0.010	-0.39	-0.04
		Agree	Undecided	-2.207*	0.082	0.000	-2.43	-1.98
			Disagree	-3.148*	0.113	0.000	-3.46	-2.84
			Strongly Disagree	-1.095*	0.088	0.000	-1.34	-0.85
		Undecided	Disagree	-0.941*	0.100	0.000	-1.22	-0.67
			Strongly Disagree	1.112*	0.071	0.000	0.92	1.31
		Disagree	Strongly Disagree	2.053*	0.105	0.000	1.77	2.34
*The mean difference is significant at the 0.05 level.								

The comparison between various precautionary measures who are trusting on digital banking services was mentioned above. In the category of Blocking of spam messages, a Calls for trusting Strongly Agree shows that except Disagree (M=-0.143, p=0.850) others like Strongly Agree (M=-1.206, p=0.000), Undecided (M=-1.461, p=0.000) shows significantly strong associations and with Agree (M=0.753, p=0.000) it has moderate association. Likewise, for Agree except Undecided (M=-0.255, p=0.218) rest of the others Disagree (M=-1.062, p=0.000), Strongly Agree (M=-1.959, p=0.000) have strong association. In case of Disagree, there is moderate association with Strongly Agree (M=0.896, p=0.000).

In the next precaution i.e. Always use Antivirus for computers and Mobile with trusting on digital payment in case Strongly Agree there is weak association with Agree (M=-0.337, p=0.000), Undecided (M=-0.337, p=0.000), Disagree (M=0.538, p=0.000) and strong association with Strongly Disagree (M=1.663, p=0.000). For Agree there is do not have any Association with Undecided (M=0.000, p=1.000) whereas moderate association with Disagree (M=0.875 p=0.000) and strong association with Strongly Disagree (M=2.000 p=0.000). for Undecided it has moderate association with Disagree (M=0.875 p=0.000) and strong association with Strongly Disagree (M=2.000 p=0.000).

Precautionary measures like By Avoiding Third Party/ Malicious/unauthenticated Apps or websites for the Strongly Agree with Agree have moderate association (M=-0.906 p=0.000), weak association with Undecided (M=0.428 p=0.000) and strong association with Strongly Disagree (M= 2.765 p=0.000) and Disagree (M=2.110 p=0.000). For the Agree it has strong associations with Undecided (M= 1.333 p=0.000), Disagree (M= 3.016 p=0.000) and Strongly Disagree (M= 3.671 p=0.000). In Undecided with Disagree have strong association (M= 1.682 p=0.000) and same strong association with Strong Disagree (M= 2.337 p=0.000). Whereas with Disagree have moderately associated with Strongly Disagree (M= 0.655 p=0.000).

CONCLUSION

A contribution to knowledge is made by investigating awareness, usage, and fraud involving digital banking services among rural customers in the Pune district,India. Rural banking customers

were most likely to use UPI/BHIM because of its ease and compatibility. As a result of the introduction of cashless facilities by the Government of India, UPI/BHIM was the most satisfied payment service among all payment systems. Despite technological advancements as well as the influence of cashless payment systems on rural customers, rural bank customers were more convinced of the reliability of digital payments. Contrary to that, rural banking customers were less likely to trust the digital payment system due to a lack of belief in it. There was a significant concern regarding security issues of digital payment systems among most of the banking customers interviewed in the present study. Payment systems are being negatively impacted by technological advancements, which have caused economic losses and further frustrations for those debited of money. UPI/BHIM popularity has been identified as the most significant constraint to driving rural banking customers into online frauds. Furthermore, this study investigates the relationship between trusting digital payments and increasing precautions during use of digital payment services among rural banking customers.

LIMITATIONS

There are limitations to this study, just like any other. To begin with, a self-report questionnaire was used. Physiological reactions of banking customers based on their feedback may have less accurate information about digital banking services whenever they use them. As well as this, the recent banking frauds which have been reported on social media may influence them to give a negative impression of digital banking services. As a second limitation, accidental sampling method cannot be used to check the probability that the answers provided are correct. Furthermore, it explores the possibility of a sizeable sample among ten villages, which may not give an accurate picture of customer perceptions of digital banking services. It is also common to observe dismal conditions during banking services in rural areas due to the weak wireless communication network. It is likely that many banking customers are unaware of this.

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