

Influence of Digital Banking on Customer Satisfaction- Case of Urban Cooperative Banks in Pune City

Author(s): Ms. Isha Apte (Research Student, MIT-WPU, Pune, India)

Dr. Varsha Nerlekar (Associate Professor- MIT WPU School of Management (PG))

Abstract

Purpose-The purpose of the paper is to investigate the influence of digital banking on customer satisfaction using different parameters namely speed of transactions, accessibility, adaptability and affordability in Urban Co-operative Banks.

Design/methodology/approach-52 Urban Co-operative Banks in Pune District, out of which a sample size of 12 banks is chosen and analysis of 120 customers using digital platforms was done. Questionnaire is used to collect the primary data (customer's perception). Analysis was undertaken with the aid of Statistical Package for Social Sciences where both descriptive and correlation analysis were performed.

Findings-There is a strong positive correlation between speed of transactions, accessibility of digital banking, adaptability of digital banking and customer satisfaction was a negative significant relationship between affordability and customer satisfaction.

Practical implications-The results of the study provide insights for bankers and policymakers to enhance Urban Co-operative Banking sector. It will help the policy makers in designing a customer centric techno business strategy for the sector.

Social implications- it will act as an enabler for Urban Co-operative Banking Sector to get into the financial mainstream hence living the financial inclusion vision.

Originality/value- This study is considered as the first attempt in investigating the role of digital banking and its influence to customer satisfaction in Urban Co-operative Banks

Keywords- Customer Satisfaction, Digital Banking, Urban Co-operative Banks

Paper type- Research paper

1. Introduction

1.1 Customer satisfaction

All industries go by, Customer is King, and Banking service is no exception with customer is everything ideology. The businesses strategies are curated to add more value to the existing system and to give a value add to the customers. Service industries are based on customer footfall, and have to cater two challenges, one retaining the existing customers and two increasing footfall. Terrence Levesque (1996)

Customer centric evolving banking operations through Digital Banking has become the basis of Banking Industry. Digital Banking—a new concept in the area of electronic banking, which aims to enrich standard online and mobile banking services by integrating digital technologies, for example strategic analytics tools, social media interactions, innovative payment solutions, mobile technology and a focus on user experience. These developmental changes results in new delivery of channels for banking products and services such as implementation of core banking system(CBS), installation of Automated Teller Machines (ATMs), Telephone Banking, PC-Banking, and Electronic Funds Transfer(EFT) and mobile banking. Customer satisfaction has become the aim of all the banking operations ranging from services to payments to personalized plans.

1.2 Urban Co-operative Banks

A bank is a financial institution that provides banking and other financial services to their customers. A cooperative is defined by the International Labor Organization (ILO) (2015) as an “autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise”. The term Urban Co-operative Banks (UCBs), though not formally defined, refers to primary cooperative banks located in urban and semi-urban areas. These banks, till 1996, were allowed to lend money only for non-agricultural purposes. This distinction does not hold today.

Urban cooperative banks were set up with the objective of promoting sustainable banking practices amongst a relatively specific target clientele viz., the middle income strata of the urban population. They were brought under the regulatory ambit of the Reserve bank by extending

certain provisions of the banking regulation act, 1949, effective from March 1, 1966.K.V.S.N (2012). Urban Co-operative Banks (UCBs) are at the base level in the 3-Tier structure of co-operatives in India and for this reason they are referred to as Primary (Urban) Co-operative Banks. The cause of concern in UCBs mostly relates to non-professional management. This in turn results in relatively weak internal control and risk management systems in the UCBs, which is very well stated in the Reserve Bank of India, Report of the Expert Committee on Licensing of New Urban Co-Operative Bank in 2011.

1.3 Digital Banking

Digital Banking—a new concept in the area of electronic banking, which aims to enrich standard online and mobile banking services by integrating digital technologies, for example strategic analytics tools, social media interactions, innovative payment solutions, mobile technology and a focus on user experience. Embracing a fully digital strategy requires end to-end modernization of a bank's often outdated infrastructure. Equally important, it requires a transition from an account-based view of banking customers to one that knows them as individuals and enhances the customer experience with relevant, convenient and personalized products and services.

While strategizing the digital framework and its intervention in banking practices, there were mainly two perspectives, one sustaining and improving the banking services and two creating value for customer in terms of satisfaction and customized solutions through cyber security lens. M. Kannan (2019)

This study adds to the literature of inter connecting digital banking practices to service quality and hence customer satisfaction through measurement of parameters namely speed of transactions, accessibility, adaptability and affordability.

1.4 Speed of Transactions: A measure of the quickness of a transaction using digital banking, to deliver desired result in a timely manner.

1.5 Accessibility: Extent to which a consumer or user can obtain a good or service at the time it is needed and at the convenient location and contact the organization which is in charge of that particular good or service.

1.6 Adaptability: Ability of a bank customer to alter their responses to the changed circumstances or environment brought about by digital banking. Adaptability shows the ability to learn from experience.

1.7 Affordability: A price or cost that is believed by bank customers to be within their financial means.

2. Literature Review

2.1 Digital Banking and Customer Satisfaction

T.Swapna Chander (2016) states that digital banking enables to conduct banking business electronically over the internet where the costs are minimal and it is no longer bound by time or geographical boundary.

Ravi et al(2016) Digital Banking is the application of technology to ensure seamless end-to-end processing of banking transactions/operations; initiated by the client, ensuring maximum utility to the client in terms of availability, usefulness and cost; to the bank in terms of reduced operating costs, zero errors and enhanced services.

Cross (2014) cites that what digital essentially does is that it uses technology to design experiences, both seen and unseen. Digital is all about making what can be seen unseen – making services so smooth and seamless that it becomes invisible to the customer. It involves planning for digital initiatives which requires more than just the automation of services, but to also taking into account the emotional aspect of banking – how do customers feel about money and what do they do with it?

Kotler (2012) in defining Customer satisfaction he says it involves customer creation, customer maintenance and retention. Schlich (2014) notes that customers are satisfied with convenience of traditional banking but expectations are constantly rising as new technologies and consumer behaviors develop. Adaptions of new technologies have become the only way to sustain in emerging markets.

Dr. Suresh Chandra Bihari (2012) in his article on "Banking Technology in India - A Stepping Stone for Financial Inclusion" has mentioned that the focus however has been on the deployment of latest technology in the Indian Banking so that we can take banking to the masses in an efficient manner. It is important to resort to technology considering the scale of operations of Indian Banking which can only be supported by a strong and time tested technological platform. Over time the RBI has introduced several IT related initiatives either directly or through its Research and Technology wing IDRBT. The technology initiatives which have been highlighted in this report are some of the measures taken by RBI and GOI to attain the same. At the same time, India can also present worthy examples of implementation of banking technology before the world by means of its ambitious projects like Aadhar Enabled Payment System (AEPS).

Namita Rajput & Monika Gupta (2011) in their research states that, there is an increasing trend in performance of Indian banks caused by IT innovation and enlarged investment in new information technology during the recent time period (2005 - 06 to 2009 - 10). Introduction of new technology-based services to their customers, for e.g. e-banking, mobile banking, ATM facility and card based funds transactions, etc. became a part of their functional norms. Hence, Indian commercial banks have improved efficiency and performance after the advent of IT in recent era. The card-based payment systems have been evolving over the period. About 230 million cards have been issued in the country. We have been witnessing an increase in the usage of cards (debit, credit) across various delivery channels like ATMs, Point of Sale (POS), internet transactions, etc.

Uppal R.K. (2010) studies the extent of mobile banking in Indian banking industry during 2000-2007. The study concludes that among all e-channels, ATM is the most effective while mobile banking does not hold a strong position in public and old private sector but in new private sector banks and foreign banks m banking is good enough with nearly 50 pc average branches providing m-banking services. M-banking customers are also the highest in ebanks which have positive impact on net profits and business per employee of these banks. Among all, foreign banks are on the top position followed by new private sector banks in providing m-banking services and their efficiency is also much higher as compared to other groups. The study also suggests some strategies to improve m banking services.

The study conducted by Gotlieb, and Denny (1993)"*", is one of the studies that deals with the impact of IT on banking productivity. Computerization is one of the factors which improve the efficiency of the banking transactions. They concluded that higher performance levels have been achieved without corresponding increase in the number of employees. Also, it has been possible for Public Sector Banks and Old Private Banks to improve their productivity and efficiency by using IT.

Uppal R.K. (2008) analyzes the quality of ebanking services in the changing environment. The sample size of bank customers is 25. The data is collected through pre-tested and well-structured questionnaire in Ludhiana; Punjab in May 2006. The study concludes that the customers of ebanks are satisfied with the different e-channels and their services in the spread of ebanking services. It also suggests some measures to make ebanking service more effective in the future. The present study is mainly concerned with the Indian banking industry in general and particular those banks that are producing service through e-channels i.e. ebanks.

Qureshi T.M., Zafar M.K. and Khan M.B. (2008)' ^**' evaluates the customer acceptance of online banking. The study concludes that majority of customers are accepting online banking culture because of many favorable factors like usefulness, security and privacy are the main perusing factors to accept online banking system in Pakistan. The other factor is amount of information which is provided to the customers by different means like advertisement through print and electronic media about online banking is usefully in customer acceptance of online banking in Pakistan. These factors have a strong and positive effect on customers to accept online banking system. Online banking system is getting appreciation in different parts of the country due to which almost 50 pc of the customers have shifted from traditional banking system to online banking system.

2.2 Digital Banking Channels

Internet Banking- It allows the customer to cater all the services on a click. There is no restriction on time, geography or background. It has opened a whole new customer base. Efficiency has increased as service availability is 24*7. This includes payment applications like Paytm, UPI, BHIM, and RuPay etc.

ATMs – Automated Teller Machines allow the customers to perform all payment transactions physically in front of an electronic kiosk. The services provided by ATMs are distinct in every bank.

Tele Banking services – They refer to the 24 *7 services provided over telephone from anywhere and anytime.

Digital Wallets – These are electronic devices that allow for making financial transactions. An individual's account can be linked to the digital wallet. Digital wallet systems enable the wide spread use of digital wallet transaction among various retail vendors in the form of mobile payment systems and digital wallet applications. In Pune, VISA a Master Card being the major players.

Mobile Banking- Mobile banking/app based as, provision and availing of banking and financial services through the help of mobile telecommunication devices. In Pune, many banks use mobile applications and mobile websites for using banking services. Also, we can see certain shared platform cases too.

Point of Sale (POS) Terminals- These are small electronic gadgets that are mainly used by traders to transact online credit and debit transactions. It has many features given that it is fast, reliable and secure. It is a cheaper means of transacting and encourages spontaneous buying or spending, encouraging less cash economy.

2.3 Accessibility and Customer Satisfaction

Accessibility defines how the digital channels make a meaningful experience to the customers in terms of access to their funds, access to banking facilities and services and feedback.

It determines whether customers find the products to be serving their needs when they want it, in a way that makes their banking convenient Villers (2012).

Many Urban Co-operative Banks have partnered with top banks like Cosmos Co-operative Bank and other technology partners that provide these e platforms for wider access.

2.4 Speed of Transactions and Customer Satisfaction

Speed of transactions has much to do with reliability (the ability of the system to deliver on its expectation in a timely and secure manner with no errors). Mobile Banking provides full access to your account information, right securely view your account balances and transaction history, transfer funds, pay bills, receive alerts and instant messages with account information, and so much more on your smart phone or cell phone. Some big Co-operative Banks such as Cosmos Co-operative Banks, Janata Sahakari Bank and others have introduced their own payment platforms/apps that go a step beyond mobile banking.

2.5 Affordability and Customer Satisfaction

If we really want the masses and the low-income people to join banking, then we should make financial products very affordable, and that is the value proposition that we are making to the market Affordability is the real proposition that goes to the market. The pain is not the bank charges but the cost of accessing the banks (travel, cost, time, and efforts). Each Urban Co-operative Bank has different model for charging the customers for using the services. Also, it is based on the category of Customer accounts (Platinum, Gold, and Silver)

2.6 Adaptability and Customer Satisfaction

To survive, banks need to be more agile, adaptable to change, embrace the new meaning of trust and operate as flexible, technology enabled information businesses that are using digital to reinvent their relationship. Innovation in banking technologies keeping customers perspective in mind is highly valued. Flexibility leads to customization of services and products. Also, it has reference to changing RBI (Reserve Bank of India) and IT (Income Tax) norms for certain transactions. Hence, easy adaptation of modifications is the key enabler. PwC's research found that customers are willing to pay for digital banking when they believe it offers convenience and value.

2.7 Conceptual Framework-

The conceptual framework in figure 2.7 identifies the independent variables namely: speed of transactions, accessibility, adaptability and affordability of digital banking influence customer satisfaction along with other intervening variables such as education which can impact on whether the customers embrace digital banking, culture which can impact on how a particular aspect say mobile banking is acceptable within a particular cultural setting. Government policies may also be in favor or against adoption of some aspects of technology being implemented.

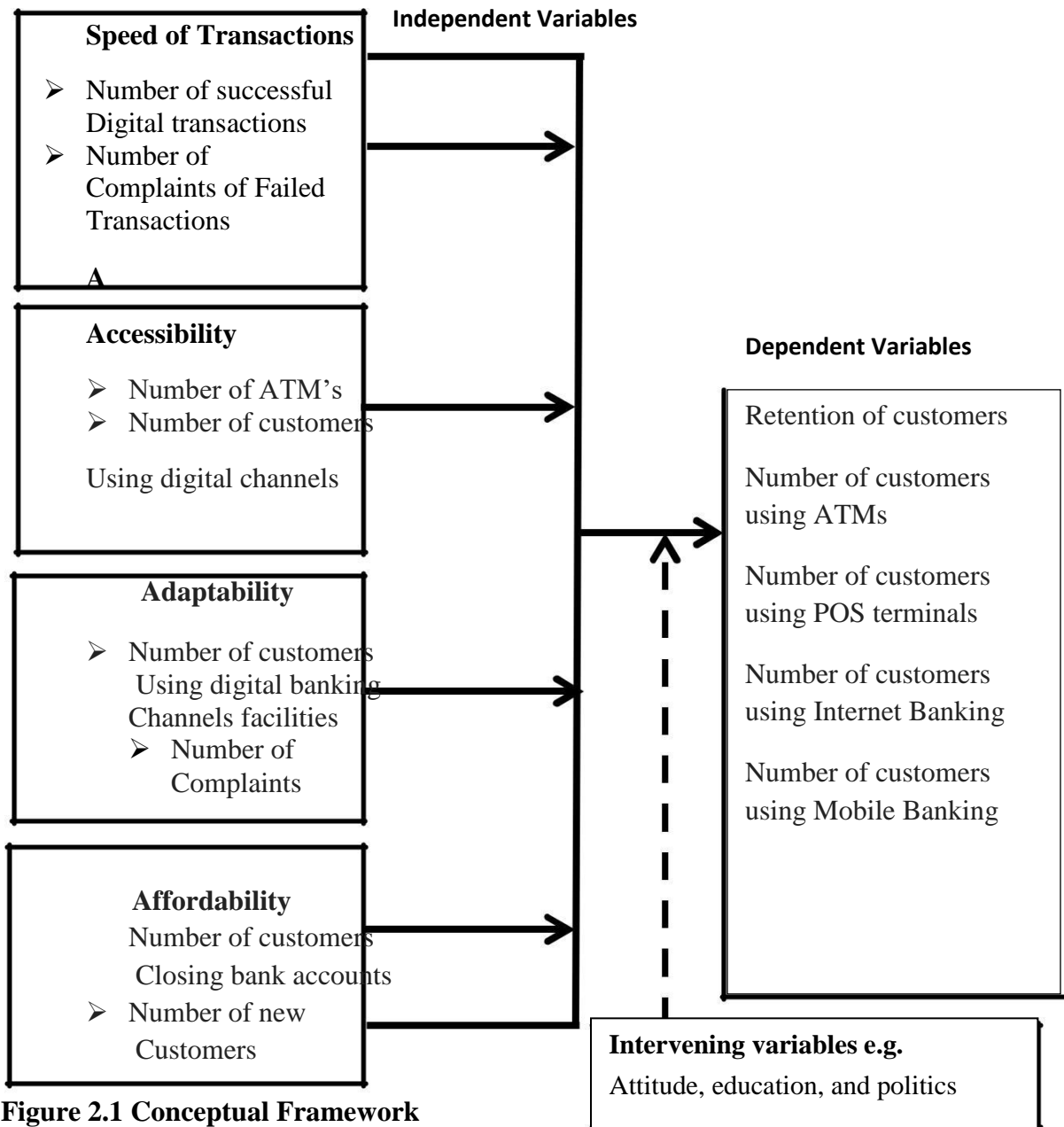


Figure 2.1 Conceptual Framework

3. Data Analysis and Methodology-

3.1 Research Design

The researcher used a descriptive survey design because it is concerned with describing the characteristics of a particular group and can't manipulate the independent variables with the view to determine their effect on dependent variables thus their relationship is determined retrospectively. It involved collection of information by interviewing bank staff and administering survey questionnaires to customers considering respondents' current status without any manipulation.

3.2 Target Population

The target population of this study was 132, 120 customers and 12 bank staff. Cooper and Emory (1995) assert that a target population is the total collection of all elements about which the researcher wishes to make some inferences

Data were collected for Urban Co-operative Banks (UCB) in Pune covering the period from 2007 to 2017. The sample consists of 12 UCBs operating in Pune during the period of analysis (2007–2017). Overall, 52 Urban Co-operative Banks (UCB) are operating in Pune. They accept deposits and channel them as loanable funds and various investments. C level executive from each bank was interviewed.

3.3 Hypotheses

H1 Speed of transactions of digital banking does not influence Customer Satisfaction

H2 Accessibility to digital banking does not influence Customer Satisfaction

H3 Adaptability of digital banking does not influence Customer Satisfaction

H4 Affordability of digital banking does not influence Customer Satisfaction

(*All four hypotheses are a Case of Urban Cooperative Banks in Pune City)

Sample size

Sample size of 120 customers was selected and 12 bank staff.

$$n = \frac{N}{1+N(e^*e)}$$

Where N=Population

e =expected error (0.05) and” n” =Sample size

Table 3.1: List of Sampled Co-operative Banks

Name of the Bank	Year of Establishment	Total Deposits(cr)	No. Of Branches	Rural	Urban
Cosmos Co-op Bank	1906	Type equation here. 15650	36	3(8.33%)	33(91.66%)
Janta Sahakari Bank	1949	Type equation here. 8472	22	7(31.81%)	15(68.18%)
Vidya Sahkari Co-op Bank	1974	Type equation here. 455	24	2(16.66%)	10(83.33%)
Janaseva Co-op Bank	1975	Type equation here. 1762	24	5 (20.83 %)	19(79.16%)
Vishweshwar Co-op Bank	1972	Type equation here. 1611	18	3(16.66%)	15(83.33%)
Pune People's Co-op Bank	1952	Type equation here. 1048	16	2(12.5%)	14 (87.5 %)
Bhagini Nivedita Co-op Bank	1974	Type equation here. 833	13	3 (23.07 %)	10(76.92%)
Baramati Co-op Bank	1961	Type equation here. 1330	13	7(53.84%)	6(46.15%)
Seva Vikas Co-op Bank	1971	Type equation here. 934	22	3(13.63%)	19(86.36%)
Rajgurunagar Co-op Bank	1930	Type equation here. 969	10	8 (80%)	2 (20 %)
Muslim Co-op Bank	1931	Type equation here. 624	17	3(17.65%)	14 (82.35 %)
Shivajirao Bhosale Co-op Bank	1972	Type equation here. 537	11	2(16.66%)	8 (72.72 %)

Source: Annual Report of PDUCBA: 2016 - 2017.

A triangulation of research instruments was used in collection of data. These include questionnaire, interview schedule and use of bank document. Documentary analysis was used to gather relevant data pertaining to the use of digital banking channels. These included records or registers for various digital banking channels.

3.4 Data Analysis Techniques

Cross checking of the survey questionnaires and responses from the interview to ensure that the questions were answered well was conducted. Quantitative data collected was coded and fed into a computer statistical software SPSS (Statistical Package for Social sciences) to run the analyses. Descriptive data analysis entailed counts, percentages, cross tabulations and measures of central tendencies. Correlation analysis was used to check on the relationship between dependent and independent variables. Qualitative data from the interview schedule entailed use of thematic analysis techniques. The results were interpreted and data presented in a tables for uniformity and ease of interpretation. Conclusions and recommendations were made basing on the interpreted data.

Table 3.2 Operational Definition of Variables

Variable	Type of Variables	Indicators	Measurement Scale	Data Collection Tool	Statistical Analysis
Customers Satisfaction	Dependent	Number of customers Frequenting the bank.	Scale	Questionnaire	Pearson Correlation
Speed of Transactions	Independent	Number of successful digital Transactions.	Ordinal Scale	Questionnaire	Descriptive
		Number of complaints recorded	Nominal	Interview Schedule Document schedule	Pearson Correlation. Thematic Analysis
Accessibility to Digital Banking	Independent	Number of customers using digital channels	Ordinal	Questionnaire	Descriptive
		Number of ATM points	Nominal	Interview Schedule Document schedule	Pearson Correlation. Thematic Analysis
Adaptability of Digital Banking	Independent	Number of customers using digital banking channels	Ordinal	Questionnaire	Descriptive
		Facilities	Nominal	Interview Schedule Document schedule	Pearson Correlation. Thematic Analysis
Affordability of Digital Banking	Independent	Number of customers closing bank accounts	Ordinal	Questionnaire	Descriptive
		Number of recruited customers	Nominal Scale	Interview Schedule Document schedule	Pearson Correlation.

Background Information: The following tables will analyze the responses taken from customers through various data collection tools.

Table 3.3 Age and Banking Years of Respondents

Age and Banking Years	N	Minimum	Maximum	Mean	Std. Deviation
Age of Respondents		18	70	38.57	11.431
Banking Years		1	20	10.06	4.656
Valid N	132				

Table 3.3 shows the age and number of banking years the customers have had.

Table 3.4 Background and perspective of Customers

Gender	Frequency	Percentage
Male	79	59.8%
Female	53	41.2%
Education		
Yes	125	94.6%
No	7	5.4%
IT Skills		
Yes	75	56.8%
No	57	43.2%
Understanding of Digital Banking		
Use of mobile money	81	61.36%
Use of technology to bank	67	50.75%
Payment for utilities	90	68.18%
Cashless payment systems	85	64.39%
Extent of Satisfaction with Speed of Digital Banking		
Small extent	20	15.15%
Moderate extent	65	49.24%
Large extent	47	35.6%

	Frequency	Percentage	
Use Internet to Carry Out a Transaction			
Yes	98	75.3%	
No	34	25.7%	
Internet enabled phones			
Yes	89	67.42%	
No	31	32.6%	

Table 3.4 shows the distribution of customers in terms of gender, education, IT skills. It also elaborates the customers understanding on Digital banking. The satisfaction levels of customer are high as seen. As the most of the Urban Co-operative Banks have their branches in the rural areas, availability of internet poses a critical question.

Table 3.5 Cross Tabulation between Type of digital Banking Technology and Reasons for Use

	Why do you use digital banking?			Total
	Accessibility	Affordability	Speed	
ATM cards	6.9%	9.1%	9.4%	25.5%
Which of the following				
Mobile Money	10.1%	12.6%	43.1%	65.8%
Do you mostly use?				
Online payment options				
e.g. debit, credit cards, payment platforms			8.7%	8.7%
Total	17.4%	21.7%	60.9%	100.0%

Table 3.5 indicate that mobile money was the most commonly used as presented by 65.8%, this was followed by ATM cards which had 25.5%. Majority of the respondents used digital banking because they are deemed to be fast.

Table 3.6 Cross Tabulation between Digital Application and Reasons for Not Having the App

		If no, what are the reasons that restrain you from using the digital Total technology application?							
		N/A	Security fears	Privacy issues	Expense Involved	I don't know how to use the application	I see no reason of using		
Do you have a Digital technology application?	Yes							35.0%	
	No	8.7%	46.1%	15.3%	4.9%	8.3%	7.7%	65.0%	
	Total	8.7%	46.1%	15.3%	4.9%	8.3%	7.7%	100.0%	

Table 3.6: The study established that 65% did not have a digital technology application on their phone while only 35% had. Of the 65% who indicated they did not have a digital technology application on their phones were required to give reasons in regard to this. 46.1% which were the majority cited security fears implying they felt having such an application does not provide them with the needed security. 15.3% were of the view that privacy issues kept them away.

Accessibility and Customer Satisfaction

Table 3.7 Statements on Accessibility

Understanding Accessibility	Frequency	Percent
Extent to which a consumer or user can obtain a good or service at the time it is needed	61	46.1
Ease with which a facility or location can be reached from other locations	35	26.6
Ease of contact with a person or organization	32	24.6
Authorization, opportunity, or right to access records or retrieve information	4	3.3
Total	132	100.0

The findings as presented by Table 3.7 indicated that majority of the respondents as represented by 46.1% were of the view that accessibility is the extent to which a consumer or user can obtain a good or service at the time it is needed.

Table 3.8: Access of Banking Services

	To what extent do you feel you can easily access banking services whenever there is a need?			Total
	Small extent	Moderate extent	Large extent	
Mobile		79.4%		79.4%
Banking				
E-Banking			3.7%	3.7%
POS terminals	5.3%	2.3%		7.6%
ATM	4.3%		5.0%	9.3%
Total	9.6%	81.7%	8.7%	100.0%

The findings as presented by Table 3.8 indicated that majority of the respondents as represented by 79.4% that access to banking services is moderately possible through mobile banking.

	Frequency	Percent
I can bank anytime anywhere, check my balance and access statements	39	30.3
I can easily transact, pay bills and access my Account	84	64
I can easily interact with my bank; express my opinions and grievances without visiting the Branch	3	2.3
I hardly visit my branch for services, thanks to E-banking, Mobile banking and POS terminals	6	3.4
Total	132	100.0

Adaptability of Digital Banking Channels

Table 3.10 Ease of Adapting to Various Digital Banking

	N	Minimum	Maximum	Mean	Std. Deviation
Mobile banking	132	1	10	7.24	2.702
E-Banking	132	1	10	4.09	2.716
POS terminals	132	1	10	5.65	3.210
ATM	132	1	10	4.58	3.179
Pay bill numbers	132	1	10	5.93	2.724
Mobile Money	132	1	10	7.69	3.304
Funds Transfers	132	1	10	3.81	3.338
Valid N (list wise)	132				

Table 3.11 Number of Transactions and Years of Banking

	N	Minimum	Maximum	Mean	Std. Deviation
How many times do you transact in a day	132	1	20	5.44	4.038
How many years have you been using digital banking	132	1	11	6.19	3.187
Valid N (list wise)	132				

Further, the study revealed as presented in Table 3.11 that majority of the customers had been using banks for six years. The minimum number of years of use of banks was 1 while 11 was the maximum.

Table 3.12 Ease of Adapting to Digital Technology

Ease of Adapting to Digital Technology	Frequency	Percent
Yes	40	30
No	92	70.0
Total	132	100.0

From the finding as presented in Table 3.12, 70% indicated they did not find it hard to adapt to digital technology while only 30% revealed adapting to technology was hard. This implies that majority easily adapted to technology.

Table 3.13 Number of Banking Channels and Reliability of the Channels

Number of Banking Channels	Frequency	Percent
1-2	10	8.0
3-4	80	60.0
5-6	25	18.9
7 and above	17	12.8
Total	132	100.0

Reliability of Digital Banking		
Not reliable	12	9.1
Slightly reliable	21	15.9
Very reliable	99	75.0
Total	132	100.0

Majority (60.9%) of customers had between 3-4 banking channels, those with between 5-6 banking channels were 18.9%.

For reliability, majority of 75% though digital banking channels were very reliable.

Table 3.14 Ease of Adaptability by Bank Customers

Ease of Adaptability by Bank customers	Frequency	Percent
Easy online banking	12	9.1
Ability to use a debit card and not carry cash	11	8.3
Convenient branch locations	60	45.0
Convenient ATMS	35	26.5
Reduced fees	4	3.0
Total	132	100.0

From Table 3.14, it is clear that most respondents (50%) thought having convenient branch locations would make it easy for them to adapt. Results from the interview with bank staff revealed that the digital channels used were adaptable. There has been an increase in use of digital banking apart from normal banking transaction of depositing and withdrawal which is an indicator that bank customers are easily adapting to digital banking. Customers have further requested for personalized digital banking services which further was a pointer on their adaptability.

Table 3.15: Affordability and Customer Satisfaction

	N	Minimum	Maximum	Mean	Std. Deviation
With the various digital banking channels my banking is affordable and the fees levied if any is acceptable	132	1	5	3.50	1.475
Digital banking has made banking affordable and easy to open and run	132	1	5	3.50	1.315
I can efficiently and effectively run my bank account using digital channels without incurring unnecessary costs	132	1	5	2.49	1.375
I do not need to visit my branch to operate my account. This saves on my time and transport Incurred to visit my branch	132	1	5	3.59	1.415

Table 3.15 the study established that the level of affordability of the digital channels used had a mean of 6.52 which was considered high and a standard deviation of 3.336 which implied that the responses were three point dispersed away. It was deduced that the digital channels were affordable as presented by the given mean.

Correlation Analysis:

There was a need to check on the association between the dependent and the independent variables. Correlation analysis was performed and the results were presented as below.

Table 3.16 Correlation Analysis

		Customer Satisfaction	Speed of Transactions	Accessibility	Adaptability	Affordability
Customer Satisfaction	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	132				
Speed of Transaction	Pearson Correlation	0.749**	1			
	Sig. (2-tailed)	0.000				
	N	132	132			
Accessibility	Pearson Correlation	0.865**	0.600**	1		
	Sig. (2-tailed)	0.000	0.000			
	N	132	132	132		
Adaptability	Pearson Correlation	0.789**	0.484**	0.764	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
	N	132	132	132	132	
Affordability	Pearson Correlation	-0.216**	-0.475**	-0.477**	-0.504**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	132	132	132	132	132

** . Correlation is significant at the 0.01 level (2tailed).

Table 3.16 shows the correlation values between the dependent and independent variables. On accessibility ($r=0.865$, $p< 0.01$) thus there is a positive strong correlation between customer satisfaction and accessibility. As accessibility increases customer satisfaction also increases. On adaptability, it was established that a positive strong correlation existed between adaptability and customer satisfaction where ($r=0.789$, $p<0.01$) thus the relationship was deduced to be significant. Adaption of uses of digital banking by customers leads to an increase in their satisfaction. The study additionally established that a strong positive correlation existed between the speed of transactions and customer satisfaction($r=0.749$, $p<0.01$) thus as the process of transacting increases customers become satisfied. On affordability it was established that there was a negative minimal correlation between affordability and customer satisfaction. This relationship however was significant as indicated by ($r= -.216$, $p<0.01$) which implied that affordability did not influence on customers satisfaction. It was therefore deduced that the most important factors that lead to customer satisfaction included accessibility, adaptability, speed of transactions and affordability respectively.

4. Conclusions

The researcher performs the co- relation analysis, to determine the relationship between customer satisfaction with speed of transactions, accessibility, adaptability and affordability. Also, certain analysis based on implemented statistical methods show that, mobile banking was the most used digital banking channel. Availability of internet could be one of the limitations in rural geographical pockets where Urban Co-operative Banks have their presence felt.

The prominent factor to use digital banking was the **speed of transactions**. To utilize the banking service a customer spends more time to physical reach the brick and mortar bank and then consume the desired service. This includes the travel, queue and actual transaction time. On the other hand when any customer utilizes any digital banking channel, the speed of transaction is way faster. The study concludes that speed of transactions has an influence of customer's satisfaction as the speed of transacting increases customers become satisfied. There comes another aspect of technology which is out of scope for a banking industry, that being the quality and effectiveness of internet providers (G technology and digital infrastructure).

On **accessibility**, it was concluded that bank customers were aware of what entailed accessibility. The most accessible digital platform was mobile banking with a feeling that digital banking could be accessed on a moderate extent. Other transactions through Net Banking, RTGS/NEFT, UPI, BHIM and other payment platforms such as Rupay, Paytm etc. that have been integrated with your bank accounts. Additionally, having the ability to bank anytime and anywhere and further check balances and access statements could be interpreted as accessibility. Use of technology was the major barrier towards accessibility as technology was changing very fast without the bank customers embracing the needed skills to cope with this new phenomenon. The study thus concludes that increase in accessibility leads to an increase in customer satisfaction.

On **adaptability**, mobile money was the most adaptable digital channel due to the personal touch it offers to the bank customers. Digital banking was seen as fast and efficient hence adapting to their use was easy. Further from the customer's daily transactions, it was concluded that the adaptability to the given digital banking channels was very high as presented by the daily number of transaction and years that the customers had used digital banking. Bank customers used different digital banking channels which was an indicator of their adaptability. Within adaptability is the reliability component. Reliability issues occur because of unfortunate instances of cyber-attacks. This puts the fear of loss of data and vital financial information with money siphoning. The huge investments in cyber security walls are a matter of concern. With an increase in adaption in terms of technology and cyber security, then customer satisfaction also increases.

Lastly, on **affordability** of digital channels, the study concludes that digital banking channels are affordable. Affordability while transacting using digital banking is important however there are other considerations to be put in place apart from affordability. The negative minimal correlation implied that that affordability did not influence on customers satisfaction. It is therefore concluded affordability is not one of the key factors that is looked at while carrying a digital banking transactions. Customers will transact using any other channel that is fast, accessible and easily adaptable. Other physical costs are not added hence, the overall cost to benefit ratio goes positive for digital banking vis a vis customer satisfaction.

Recommendations:

1. In order to have faster processes in digital banking, there is need by banks to invest more on robust reliable systems to reduce incidents of failed transactions and transactional errors in ATMs, Mobile banking and POS terminals. Cyber security must be taken seriously.
2. There is further need to facilitate ICT skills so that technology can be embraced. Through a joined venture with education institutions ICT skills can be impacted through banks teaching individuals and cooperates on the changing world of banking technologies.
3. The strategies for banking industry should consider technology, security, customer satisfaction and market research as key components.

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About the Author (s):

Ms. Isha Apte is a research scholar at the Maharashtra Institute of Technology- World Peace University, Pune. Prior to pursuing PhD Ms. Isha has her graduation in Engineering and Masters in Finance and IT. Being a Business Finance Manager, with a multinational company her varied interests include technology banking, strategic financial modeling and techno- financial perspective for environment and urban planning for sustainable and smart financial instruments. Ms. Isha Apte can be contacted at: ishapte@gmail.com

Dr. Varsha Nerlekar is an Associate Professor at Maharashtra Institute of Technology- World Peace University, Pune. Dr. Varsha has done her PhD in the distinct subject of PPP model (Public Private Partnership) in infrastructure development. Her varied interests include giving financial perspective to different models. Dr. Varsha Nerlekar can be contacted at: varsha.nerlekar@mitsob.net

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