Journal of Harbin Engineering University
ISSN: 1006-7043

Vol 44 No. 7
July 2023

Do The Online Banking Services Affecting Adoption of E-Banking Products? Evaluating the Effects of Technological Acceptance Model on Online Banking Users

Dr. Suresh Chandra Das
Lecturer
PG Dept. of Commerce,
Kendrapara Autonomous College
Kendrapara, Odisha

Dr.G.Sowmiya
Associate professor
PPG Business School
Coimbatore
Tamil Nadu - 641035

Dr. Sneha Rajput
Associate Professor
Prestige Institute of Management and Research Gwalior

Dr. Padma Singhal
Assistant Professor
Durgadevi Saraf Global Business School, Mumbai

Dr. Alok Chandra
Professor
Lala Lajpat Rai Institute of Mgt
Mumbai

Dr. Anand Bethapudi
Professor and. Associate
Director School of Management Studies
Guru Nanak Institutions Technical Campus
Hyderabad, Telangana

Abstract-Online banking is the most popular voluntary adopted payment tool in the urban part of India. After demonetization, these payment tools became more acceptable, useful, and easy to use. Various services related to online banking is the biggest challenges for the various banks to grab the users. Understanding the impact of various dimensions of service quality is the biggest challenge. This study aims to derive the effectiveness of antecedents of TAM [Technology Acceptance Model] on online banking users. The antecedents TAM model was considered for formulating structured questionnaires, 509 responses of online consumers collected through the personal intercepts. The outcome of the study indicates that security is the most influencing factor for online banking services. While a majority of consumers have opinions of improvement in existing mobile banking applications.

Keywords-Easy to use, Privacy, Trust, Accessibility, Easy navigation

1. INTRODUCTION:

As the financial sector expands, so will the economy. In the 21st century, investigate this technology. This business is booming because to fast technological improvement, which will make conferences and services more efficient (Salimon, 2016). In the present financial situation, banks are focusing on smaller banks rather than implementing new technology (Liébana-Cabanillas, May 2013).

Digital banking resulted. "Digital Financial" is the provision of financial services using electronic devices and technology without reference to location or time or bank staff. It includes ATMs, POS, online banking, mobile banking, banking applications, phone banking, etc. Off banks provide rapid, convenient services that regular banks may not. This will keep clients satisfied and loyal and encourage them to utilize Off's research tools. Traditional banks are understudied; thus, experts are focusing on digital banks (Bhatt, 2021). Many individuals use computers and other electronics now.

1.1 FACTORS INFLUENCING SERVICE QUALITY

Callability:

Customers get their initial impression of electronic banking channels from their appearance. Banks must be extremely attentive while developing the physical features because, as the old people have stated, "First impression is the last impression." The "detectability" and "three buildings" coefficient are used to measure the content and information quality of the electronic banking channels (Aggrawal, 2014).

Accessibility:

Customers must have access to and availability of e-banking services. when they need to switch a growing number of their clients to e-banking systems using these services (Prajapati & Bhatt, 2019; Malek, Bhatt, & Patel, 2020). The availability and accessibility of e-banking services are being examined as one of the aspects of accessibility for building number 7.

Security:

The level of customer education and efficiency will vary for each customer, and banks will need to make sure that electronic transaction platforms are user-friendly and that there are no issues with how electronic transaction services operate (Omar & Ali, 2016; Malek & Gundaliya, Value for money factors in Indian public-private partnership road projects: An exploratory approach, 2020). The "secure" criteria for four combinations is the factor used to evaluate the level of assurance of electronic coding services.

Easy to use:

Researchers claim that what qualifies as being simple to use is the absence of a rigorous technique that must be followed at all costs by the user. He said that consumers thought new goods and services were superior to alternatives and were viewed as being simple to use (Bach, 1989).

Identification of usefulness:

Recognized usefulness' importance is well acknowledged in the area of electronic banking. According to their definition, utility is the arbitrary likelihood that using technology would cause a person to accomplish a certain task better (Poon, 2008). According to Tam, the accepted utility is the extent to which it is believed to improve the execution of the job using a certain technology.

A sense of trust:

In their study on confidence-building, Yusufzai et al. (2005) investigated confidence-building strategies and the use of the website attributes to create an online feeling of consumer confidence (Poon, 2008). It was considered a critical concern how security, privacy, and trust relate to the banking industry (both physical and virtual). The primary goal of the study was to determine how various website attributes impacted user confidence. It was found that the characteristics of the virtual environment were essential for promoting trust. The availability of security, privacy, legal declarations, and guarantees has considerably enhanced consumer trust, whereas other elements, including testimony, have had far less influence.

Innovation:

The model views the adoption of Internet banking as a social phenomenon that expands

over time among the populace (Raval & Bhatt, 2021). An innovation like Internet banking may be embraced in various ways and to variable degrees by different individuals. The adoption of Internet banking is influenced by five variables. The benefits of a trait depend on how effectively it interacts with other qualities, how challenging it is to test and observe, and how likely it is to be used in practice (Kureshi & Bhatt, 2018; Malek & Gundaliya, 2020). This paradigm is commonly used in information systems research to explain how people adopt new technologies. These elements significantly affect the acceptance and spread of internet-based technologies, according to past research.

Perceived Security:

E-banking services are often provided through technology and internet connections. Banks now keep all of their information online, which leaves it open to attack. A review of data security is conducted, and any necessary corrections are performed (Anouze & Alamro, 2019; Malek, Saiyed, & Bachwani, 2021). The security factor is evaluated using five components. The value of security and privacy when using internet banking has been highlighted in the research (Xiao, Sukumar, Tipi, & Edgar, 2017). It has been demonstrated that worries about security and privacy considerably hinder the adoption of online banking. Charles and Rob off found that although consumers are aware of the security risks connected to online banking, their understanding of these risks is limited (Mwiya, et al., 2017; Malek & Zala, 2021).

1.3 RESEARCH QUESTION:

The elements impacting the service quality of e-banking services may vary depending on the demographics of a customer's clients. Each aspect affects the quality of e-banking services in a different way.

The variables determining the quality of e-banking services may be significantly influenced by the demographic makeup of the client base.

What particular effects does each component have on the quality of e-banking services?

2. REVIEW OF LITERATURE:

1. Ease of use:

Usability is how easy a system is to use. Davis et al. developed the Technology Acceptance Model for this reason (TAM) (López-Nicolás, Molina-Castillo, & Bouwman, 2008). TAM was used to anticipate the adoption and usage of emerging ICTs such as the Internet, electronic commerce, mobile Internet, and Internet tourism. Trust positively affects perceived usability, according to e-commerce literature. When customers trust a retailer's website, it's simpler to make purchases and they have less control (Sentosa & Mat, 2012). Easy-to-use websites are more dependable, according to research. Some writers argue that simplicity of use decreases risk perceptions and increases confidence in electronic services (Al Nahian Riyadh, Akter, & Islam, 2009). A user-friendly website enhances user trust. So, we hypothesize.

H1: Trust in a service is positively correlated with how simple it is to utilise it.

H2: A financial institution's electronic banking service's usability is directly correlated with how simple it is to use.

2. **Accessibility:**

Some doubt the moon landing happened. Some doubt the moon landing happened. Accessibility relates to ease of use. Authors have varied ideas on what's vital in accessibility (Shah & Siddiqui, 2006). Accessibility includes equipment, information, system dependability, and language acquisition (Ismail & Osman, 1970). Accessibility covers a physical feature relating to the access terminal and usability of the system in other circumstances (such as the blind, deaf and disabled). Our study focuses on payment app accessibility and transaction simplicity. Some writers say product design accessibility influences dependability perception (Basias, Themistocleous, & Morabito, 2013). Usability boosts trust since it's associated with it. People trust useful things more. User behavior about e-banking accessibility. Accessibility improves user experience, which boosts satisfaction (Masoud & AbuTaqa, 2017). This may boost online banking intent and pleasure.

H3: Accessibility to the electronic banking service will boost consumers' confidence and pleasure with the service, as a result of greater accessibility.

H4: Accessibility to an institution's electronic banking service influences satisfaction with the service favourably.

3. Perceived usefulness:

The degree to which users see utilizing internet banking as helping them perform better at work is known as perceived usefulness (Silva, 1989). Davis et al. claim that the data offers convincing proof that PU significantly affects the uptake of e-banking (Vyas, 2012). Users' perceptions regarding online banking and their ultimate acceptance of the technology are greatly influenced by the perceived utility. E-banking consumer uptake is significantly influenced by PU (Larcker & Lessig, 1980). Before the introduction of PU, the E-Banking system was implemented (Yaseen & El Qirem, 2018). It is well acknowledged that people employ e-banking services because of their usefulness.

H5: Perceived Usefulness (PU) has a positive effect on the attitude toward E-banking use.

4. Perceived trust:

Perceived trust is a factor in client e-banking uptake. Customers' faith in the computerized system has reduced transaction risks, keeping the banking sector competitive. Some researchers emphasize trust (Borikar & Bhatt, 2021). Perceived trust (PT) helps users accept e-banking services. PT evaluates an individual's integrity, compassion, and how they practice these attributes. A service provider's capabilities are based on meeting consumer demands (Banker, Jadhav, & Bhatt, 2020). Integrity implies offering customers what they want without causing harm. Compassion organizes services better than selfishness (Bach, 1989). With high risks and cheap switching costs, clients may need to transfer providers and win user confidence. Suh & Han, (2002) found that trust boosts e-banking acceptability.

H6: Perceived trust (PT) has a positive influence intention to adopt E-Banking.

5. Perceived Security

Users' perceptions of transaction data vulnerabilities in online banking are referred to as cognitive security (Bhatt.V. & Prajapati, 2018). Since incidents of fraud continue to endanger consumers, a key obstacle to the adoption of electronic channels is seen to be a lack of security (Kureshi & Bhatt, 2018). Additionally, much research has shown an experimentally proven connection between online trust and feeling safe as well as between online pleasure and perceived safety (Larcker & Lessig, 1980). Therefore, security is a crucial factor in determining happiness and dependability in both offline and online contexts, as well as whether the services offered are valued and maintained (Al Nahian Riyadh, Akter, & Islam, 2009). conventional or not based on the debate above, the following theory is suggested.

H7: Perceived safety has a positive relationship with acceptance of electronic banking.

H8: Perceived safety has a positive relationship with hedonic motivation.

6. Tangibility

"Relationship between consumer happiness and the quality of e-banking in Jordanian commercial banks" Dec. 2016, Wan Ahmad Wan Omar. According to the findings, customer satisfaction in Jordan's commercial banking industry is positively impacted by the effectiveness and responsiveness of online services (Masoud & AbuTaqa, 2017). This finding demonstrates how the link between the impact of online service quality and how responsive it is to customer satisfaction may help commercial banks become more profitable (Masoud & AbuTaqa, 2017).

H9: Tangibility has a positive influence to intention of adopt to E-Banking service quality.

7. Service quality (SQ):

According to Pitt, Watson, & Kavan, (1995) quality of service (SQ) is vital in assessing user happiness and, by delivering excellent service, may enhance customer satisfaction. According to Diligonas et al. (2009), offering an excellent service at a competitive price encourages clients to use banks more often as their demands are addressed. Service quality is the supply of quality in banking operations and influences customer

happiness, claim (Venkatesh & Davis, 2000). Customers that are happy with the quality of banking services will be more receptive to e-banking services. According to Khan (2010), service quality is an external aspect that impacts how useful e-banking services are. According to Al Hawaii et al. (2006), the usability of the system affects service quality (SQ) (SQ).

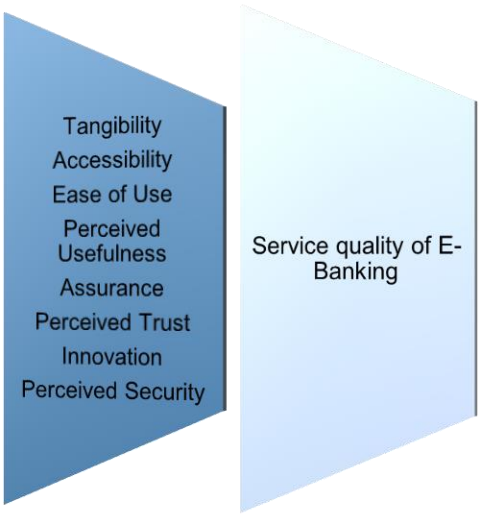
H10: Quality of service (SQ) has a positive influence to intention of adopt to E-Banking service Quality.

8. Innovation:

The appraisal of human conduct is referred to as having an attitude (Ajzen, 1988). Set criteria to apply when deciding whether to utilize e-banking services. Davis, F. (1993). ATU involvement in the development of electronic banking. Half of the differences, according to Curran and Meter (2005), have to do with how the technology will ultimately be used. According to Lee (2009), attitudes about using effect whether or not e-banking services are recommended. Utilization attitudes serve as a mediator between e-banking acceptability and other independent characteristics like PU and PEOU (Anouze & Alamro, 2019). There will be greater acceptance if everyone has a good attitude, and there will be less acceptable if everyone has a negative attitude (Ismail & Osman, 1970).

H11: Attitude mediates the relationship between precursors and the use of electronic banking.

STRUCTURED MODEL



2.1 RESEARCH GAP:

An extensive literature review on service quality assessment shows that SERVQUAL is a widely used model for approaching service quality for all types of services. There are several other established models for approaching service quality or customer satisfaction. However, we found that the model is effective for the type of service where the service provider provides the service directly. In such cases, there is human intervention by the service provider, which can affect the customer or change the way the service is provided. However, with e-banking, there is no human intervention when the service is delivered.

3. RESEARCH METHODOLOGY:

The research isolates factors impacting the quality of E-Banking services and how those factors contribute to the overall quality and the level of customer satisfaction. The research attempts to build a model dependent on external factors. The purpose of this chapter is addressed in the next section. In this analysis, we look at how E-Banking service quality correlates to customer satisfaction overall. Recent technical advances have transformed bank and e-banking services. As Internet and cell phone usage rise, so do electronic banking services. Banks' success is largely based on their service quality. No service quality model is 100% trustworthy. Therefore, a credible methodology for evaluating electronic banking service quality is needed. Never-ending tech development It's impossible to know when to start researching these topics. Almost all banks are beginning to provide electronic banking services, clients are utilizing them in huge numbers, and the number of users is growing. It's time. Grow. The survey is from January-April. Gujarat has been chosen for the present research. In this poll, only consumers who have utilized the service can assess the variables accurately, hence only 18-year-olds or older are sought as respondents. Structured surveys gather data. The sample size is the number of survey items. 509 people who utilize online banking were surveyed. Our poll used the right statistical method. Frequency distribution and graph

analysis are used to examine data. Crosstab; T-test, ANOVA, Chi-square; ANOVA-coefficient Pearson's correlation, stepwise regression.

3.1 RESEARCH OBJECTIVES:

Determine the elements that influence the quality of service provided by different electronic banking systems.

An evaluation of the effect of demographic variables on parameters influencing e-banking service quality.

Determining the influence of specific elements on electronic banking service quality

4. DATA ANALYSIS

4.1 DEMOGRAPHIC:

Age		Frequency	Percent
	18-30	201	39.5
	31-45	163	32.0
	Above 46	145	28.5
	Total	509	100.0
Gender		Frequency	Percent
	Male	235	46.2
	Female	274	53.8
	Total	509	100.0
Marital Status		Frequency	Percent
	Unmarried	211	41.5
	Married	298	58.5
	Total	509	100.0
Income Group		Frequency	Percent
	0-25,000	155	30.5
	25,001-50,000	141	27.7
	50,000-1,00,000	117	23.0
	1,00,000 or above	96	18.9
	Total	509	100.0
Occupation		Frequency	Percent
	Job	254	49.9
	Business	151	29.7

	Student	61	12.0
	Others	43	8.4
	Total	509	100.0
Education		Frequency	Percent
	UG	60	11.8
Graduate	235	46.2	
Post Graduate	137	26.9	
Professional	77	15.1	
Total	509	100.0	

According to the sample characteristics, the bulk of respondents (53.8%) were male and in the 1830 age group (39.5%). In terms of employment, over 49.9% of respondents were employed. Educational qualifications revealed that the majority (46.2%) finished their schooling, while income levels revealed that the majority (30.5%) earned up to Rs.25000. Another majority of respondents (50.9%) have a private bank account and utilise a digital platform at least twice a week (23.3%)

4.2 CHI-SQUARE TEST:

Income Group * Age * Gender:

Chi-Square Tests

Gender		Value	do	Asymptotic Significance (2-sided)
Female	Pearson Chi-Square	94.533[b]	6	.000
	Likelihood Ratio	99.859	6	.000
	Linear-by-Linear Association	72.845	1	.000
	N of Valid Cases	235		
Male	Pearson Chi-Square	162.465[c]	6	.000
	Likelihood Ratio	167.233	6	.000
	Linear-by-Linear Association	122.430	1	.000
	N of Valid Cases	274		
Total	Pearson Chi-Square	246.319[a]	6	.000
	Likelihood Ratio	255.071	6	.000
	Linear-by-Linear Association	192.231	1	.000
	N of Valid Cases	509		

H0: There is no significant association in terms of age group and income group concerning females.

H1: There is a significant association in terms of age group and income group concerning females.

According to the Chi-rectangular desk of the lady, the important price is 0.000 which is much less than 0.05 this means that there's important affiliation among exceptional age organization and exceptional profits organization for the lady in phrases of carrier pleasant of E-banking services, so (H1) opportunity speculation is accepted.

H0: There is no significant association in terms of age group and income group concerning males.

H1: There is a significant association in terms of age group and income group concerning males.

According to the Chi-rectangular desk of males, the importance fee is 0.000 which is much less than 0.05 because of this there may be important affiliation among one-of-a-kind age institutions and profits institutions for males in phrases of provider pleasant of E-banking services, so (H1) opportunity speculation is accepted.

4.3 MULTIPLE REGRESSIONS

Regression analysis offers information and an approximation of the relationships between variables. It is useful to comprehend how the unique value of the dependent variable changes when one of the independent factors changes while the other independent variables do not. Given that there is a linear relationship between the dependent and independent variables, we wish to predict how much the independent variable's change will affect the dependent variable's value.

H0: The multiple regression model developed in this study is not significant.

H1: The multiple regression model developed in this study is significant.

Descriptive data analysis			
	Mean	Std. Deviation	N
OI	5.6350	1.08930	509
OTAN	5.6861	1.10817	509
OACE	5.5613	1.05069	509
OEOU	5.5825	1.09821	509
OPU	5.7886	1.03336	509
OPT	5.4730	1.25839	509
OPS	5.4090	1.25510	509

Coefficient of determination										
					Change Statistics					Durbin Watson
Modal	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.859[a]	.739	.735	.56034	.739	236.299	6	502	.000	1.652
a. Predictors: (Constant), OPS, OPT, OACE, OTAN, OPU, OEOU										
b. Dependent Variable: OI										

According to the first model, "Perceived Security" has the largest influence on service quality. The correlation coefficient (R), which has a value of 0.859, shows that the dependent and independent variables are tightly connected. The coefficient of determination (R2) has a value of 0.739, which suggests that the factors impacting perceived security account for roughly 74% of differences in service quality. We are examining the value of R2 rather than the adjusted R2 because the sample size (509) is acceptable. We should accept the alternative hypothesis and reject the null hypothesis, according to the significant value of 0.000 (0.05). (0.05). This validates the first multiple regression model's significance (Joshi & Bhatt, 2021).

Y=a+βx+€

[Y= Service Quality (Dependent variable), a = intercept/constant, β= the regressions coefficient of y on x, influence on dependent variable because of independent variable, X = independent variable (Perceived security), € = the error term]

Y=a+β01x1+ β02x2+ β03x3+ β04x4+ β05x5+ β06x6+€

Where Y means overall results, a denotes a constant, 01, 02, 03, 04, 05, 06, 07, 08, 09, 010 11 are the equivalent regression coefficients on overall perceptual outcomes, x1, x2, x3, x4, x5, x6, x7, x8, x9, x10, x11 signify independent components such in the model summary, sig value is.000, which is less than 0.05, suggesting that all independent variables explain dependent variable variance (Bach, 1989; Malek & Bhatt, 2022). R summaries are.859 and R2 is.739. All independent variables impact Innovations by 73.9%. In the second column, adjusted R2 is close to the determination coefficient because all six independent variables impact the dependent variable. The Durbin-Watson test result is 1.652, which is close to the criteria for serial autocorrelations. The coefficient of determination reveals that six independent variables explain more variation than an unexplained variance.

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	445.160	6	74.193	236.299	.000[b]
	Residual	157.618	502	.314		
	Total	602.778	508			
a. Exogenous: OI						
b. Endogenous: (Constant), OPS, OPT, OACE, OTAN, OPU, OEOU						

According to the first model, the most important characteristics that affect service quality are perceived security, perceived trust, accessibility, tangible utility, and ease of use. Therefore, we will determine whether or not these factors have a substantial influence on service quality.

H0: Overall changes in Perceived security, Perceived trust, Accessibility, Tangibility, Perceived usefulness, and Ease of use have no significant impact on the overall service quality.

H1: Overall changes in Perceived security, Perceived trust, Accessibility, Tangibility, Perceived usefulness, and Ease of use have a significant impact on the overall service quality

Taking into account the data from the ANOVA table, we discover that the mean square is 74.193, and the F ratio is 236.299, with a significant value of 0.000 (0.05), indicating that we must accept the alternative hypothesis rather than the null hypothesis. The entire service

quality is thus significantly impacted by changes in perceived security, perceived trust, accessibility, tangibleness, perceived utility, and ease of use.

Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.237	.153		1.544	.123	-.064	.538		
	OTAN	.247	.036	.251	6.887	.000	.176	.317	.392	2.551
	OACE	.072	.036	.069	2.001	.046	.001	.142	.434	2.306
	OEOU	.189	.041	.191	4.590	.000	.108	.270	.301	3.320
	OPU	.092	.044	.087	2.098	.036	.006	.177	.304	3.293
	OPT	.115	.029	.133	3.934	.000	.057	.172	.458	2.183
	OPS	.255	.027	.294	9.336	.000	.201	.309	.526	1.903
a. Dependent Variable: OI										

Y= a + β1X1 + β2X2 + β3X3 + β4X4 + β5X5 + β6X6 + €

[Y = Service Quality (Dependent Variable), a = Intercept/Constant, = Regression Coefficient of Y on X, Effect of Independent Variable on Dependent Variable, Tangibility, accessibility, usability, perceived utility, perceived trust, and perceived security are all represented by the letters X1 through X6. € = the mistaken phrase]

Tangibility is 0.251, Accessibility is 0.069, Usability is 0.191, Perceived Usefulness is 0.087, Perceived Trust is 0.133, and Perceived Security is 0.294, according to Model-1 Beta (). This indicates that if the other five criteria stay the same, a one-unit change in Tangibility will result in a 0.251-unit change in service quality. With the exception of Accessibility and Perceived Usefulness, which are 0.046 and 0.036 (1), T values for Tangibility, Accessibility, Ease of Use, Perceived Usefulness, Perceived Trust, and Perceived Security are 6.887, 2.001, 4.590, 2.098, 3.934, and 9.336 with sig. = 0.000 (.05) for all and VIF is 2.551, 2.306, 3.320, 3.293 The example is,

Service Quality = 0.237 + 0.251 (Tangibility) + 0.069 (Accessibility) + 0.191 (Ease of use) + 0.087 (Perceived usefulness) + 0.133 (Perceived trust) + 0.294 (Perceived security) + €

5.2 THEORETICAL CONTRIBUTIONS

Service excellence is determined by 36 factors. E-banking service quality is determined by eight (8) key factors. Considerations include tangibility, accessibility, assurance, usability, perceived security, and trust. The research enhances the quality of E-banking services by demonstrating that bank customers between the ages of 18 and 30 have embraced digitalization. Banks are good at digitising. Researchers have diverse definitions of service quality. Customer expectations are compared to the service obtained as part of an assessment process to determine service quality (Basias, Themistocleous, & Morabito, 2013). Service quality is "the consumer's overall perception of

the relative inferiority/superiority of the organisation and its services," according to Bitner et al. (1994). By removing the constraints of the pre-existing models of Service quality assessment, which were created for services supplied to clients in person, a model has been designed to assess the quality of E-Banking services offered by nationalised and private banks (Larcker & Lessig, 1980). E-banking services are provided via a system or technology without the physical presence of the service provider or his personnel.

5.3 PRACTICAL IMPLICATIONS

This research will aid in comprehending the crucial facets of service quality in online banking. The ability of strategy creators to articulate their plans in a way that benefits consumers and keeps them on board will increase their happiness and loyalty. This will assist in determining how to frame a campaign to raise awareness and what elements should be included to boost the use of an e-banking platform. All of the variables considered in the correlation analysis—innovation, perceived trust, perceived usefulness, perceived security, assurance, and tangibleness—are strongly positively correlated, except for perceived trust, whose correlation coefficient is 0.493. As a result, we can use these variables to further analyze the service quality of e-banking services.

5.4 RECOMMENDATION

For Bankers: We live in a nation where English is not the major language, thus banks should provide E-banking consumers a language choice. Banks should employ AI to watch consumer transactions, spot suspicious ones, and alert customers quickly. During server maintenance, no transactions are handled. If customers know about server outages in advance, they may make alternative plans. Banks must notify consumers of downtime. Banks should hold seminars and conferences to educate customers on e-banking, security, and privacy. Bank employees should get e-banking training so they can urge clients to adopt it. Banks must stress the ease and cost-savings of online banking, such as avoiding long lines and reducing transaction costs.

For Customers: Before accepting services, customers must read and understand all terms and conditions. It explains their rights and obligations. Banks supply passwords and PINs for Digital Banking security. Customers must guard their passwords and PINs. Sharing your password and/or PIN allows fraudsters to access your account. Customers must regularly monitor their accounts for erroneous, suspicious, or fraudulent activity. Customers must promptly notify the bank of any errors, suspicious, or fraudulent transactions. Customers must report any calls or emails requesting account information. To safeguard their account and personal information, consumers must give just the information essential for account creation or transaction. Customers usually block or ignore nuisance calls from banks. If a bank discovers a fraud attempt, they will try to call the consumer. If the person refuses or ignores the call, the bank will lose money.

For Society: According to our research, persons between the ages of 18 and 30 use online banking often. As a result, we encourage the rest of the population to start using online banking as well since it is convenient, time-saving, and doesn't need standing in line.

5.5 LIMITATIONS & FUTURE SCOPE OF THE STUDY:

As nationalized and private banks had a bigger market share, the analysis verified the approach. Foreign, co-op, and rural banks might be studied further. The study included Indian banks and inhabitants. Other banks and populations might be studied. Due to the epidemic, Smartphone GOOGLE FORMS were used to distribute the questionnaire. Due to time and money constraints, the research was conducted in Ahmedabad, Gujarat. Other consumers may have different perspectives on E-Banking service quality and satisfaction. The study excludes rural customers. India's rural regions are distinct from cities. Rural literacy is lower. Thus, service quality or customer satisfaction factors may vary.

The bank of the future must embrace developing technologies, adapt to changing business models, and put clients first. Blockchain: More banks will embrace blockchain technology, which will keep client account data in real-time across institutions and eliminate hacking risks.

Financial transactions are encrypted and added to a chain, like an email chain. The model was evaluated in Gujarat cities. The model may be validated from multiple locations and banks.

Bibliography

Aggrawal, A. (2014). INTERNATIONAL CONFERENCE ON Management of Globalized Business. *Emerging Perspectives. Lulu. com.*

Al Nahian Riyadh, M., Akter, S., & Islam, N. (2009). The adoption of e-banking in developing countries: A theoretical model for SMEs. . *International review of business research papers, 5(6)*, 212-230.

Anouze, A. L., & Alamro, A. S. (2019). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing.*

Bach, B. W. (1989). The effect of multiplex relationships upon innovation adoption: A reconsideration of Rogers' model. . *Communications Monographs, 56(2)*, 133-155.

Banker, A., Jadhav, D., & Bhatt, V. (2020). A CLASSIFICATION OF E-BANKING USERS BASED ON IMPACT OF SERVICE QUALITY PARAMETERS IN BANKING INDUSTRY. *PalArch's Journal of Archaeology of Egypt/Egyptology, 17(12), 2020*, 1746-1758.

Basias, N., Themistocleous, M., & Morabito, V. (2013). SOA adoption in e-banking. *Journal of Enterprise Information Management.*

Bhatt, V. (2021). An Empirical Study On Analyzing A User's Intention Towards Using Mobile Wallets; Measuring The Mediating Effect Of Perceived Attitude And Perceived Trust. *Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(10),*, 5332-5353.

Bhatt.V., & Prajapati, M. (2018). An Empirical study on Consumer's Securitization and faith on online payment in Gujarat. Int. *J. Rev. and Res. Social Sci, 6(3),* , 291-296.

Borikar, H., & Bhatt, V. (2021). AN EMPIRICAL STUDY T AT WORKPLACE STRES. *GUJARAT TECHNOLOGICAL UNIVERSITY AHMEDABAD*, 225.

Ismail, M. A., & Osman, M. A. (1970). Factors influencing the adoption of e-banking in Sudan: Perceptions of retail banking clients. *The Journal of Internet Banking and Commerce, 17(3)*, 1-12.

Joshi, D., & Bhatt, V. (2021). DOES THE ADVERTISEMENT AND SALES PROMOTION HAVE IMPACT ON BEHAVIORAL INTENTIONS OF ONLINE FOOD DELIVERY APPLICATION USERS?. *PalArch's Journal of Archaeology of Egypt/Egyptology,*, 1398-1418.

Kureshi, & Bhatt. (2018). Impact of various factors towards the Service Quality of Digital Banking. Int. *J. Rev. and Res. Social Sci, 6(4)*, 479-485.

Larcker, D. F., & Lessig, V. P. (1980). Perceived usefulness of information: a psychometric examination. . *Decision Sciences, 11(1)*, 121-134.

Liébana-Cabanillas, F. (May 2013). The determinants of satisfaction with e-banking. *ww.emeraldinsight.com/0263-5577.htm*, 756.

López-Nicolás, C., Molina-Castillo, F. J., & Bouwman, H. (2008). An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models. *Information & management, 45(6)*, 359-364.

Malek, M. S., & Bhatt, V. (2022). Examine the comparision of CSFs for public and private sector's stakeholders: a SEM approach towards PPP in Indian road sector. *International Journal of Construction Management*. doi:10.1080/15623599.2022.2049490

Malek, M. S., & Gundaliya, P. (2020). Value for money factors in Indian public-private partnership road projects: An exploratory approach. *Journal of Project Management, 6*(1), 23-32. doi:10.5267/j.jpm.2020.10.002

Malek, M. S., & Gundaliya, P. J. (2020). Negative Factors in implementing Public-Private Partnership in Indian Road Projects. *International Journal of Construction Management*. doi:10.1080/15623599.2020.1857672

Malek, M. S., & Zala, L. (2021). The attractiveness of public-private partnership for road projects in India. *Journal of Project Management, 7*(2), 111-120. doi:10.5267/j.jpm.2021.10.001

Malek, M. S., Bhatt, V., & Patel, A. (2020). Global, National and Local Growth of road projects through PPP. *TEST Engineering and Management, 83*(March-April), 25837-25860.

Malek, M. S., Saiyed, F. M., & Bachwani, D. (2021). Identification, evaluation and allotment of critical risk factors (CRFs) in real estate projects: India as a case study. *Journal of Project Management, 6*(2), 83-92. doi:10.5267/j.jpm.2021.1.002

Masoud, E., & AbuTaqa, H. (2017). Factors affecting customers' adoption of e-banking services in Jordan. . *Information Resources Management Journal (IRMJ), 30(2)*, 44-60.

Mwiya, B., Chikumbi, F., Shikaputo, C., Kabala, E., Kaulung'ombe, B., & Siachinji, B. (2017). Mwiya, B., Chikumbi, F., Shikaputo, C., Kabala, E., Kaulung'ombe, B., & Siachinji, B. (2017). Examining Factors influencing e-banking adoption: evidence from bank customers in Zambia. *Available at SSRN 2987982.*

Omar, W. A., & Ali, b. J. (2016). Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. *american Based Research Journal*, 34-35.

Pitt, L. F., Watson, R. T., & Kavan, C. B. (1995). Service quality: a measure of information systems effectiveness. . *MIS quarterly*, 173-187.

Poon, W. C. (2008). Users' adoption of e-banking services: the Malaysian perspective. *Journal of business & industrial marketing.*

Prajapati, K., & Bhatt, V. (2019). A Study of an Influencing Factor in the Expansion of Brand in the Road Machine Market: An Impassive Study on the Heavy Machinery Production Company (HEPCO). *Research Journal of Humanities and Social Sciences, 10(3),*, 813-821.

Raval, H. P., & Bhatt, V. (2021). ASSESSMENT OF SERVICE QUALITY OF SELECTED ONLINE SHOPPING PLATFORMS.

Salimon, a. G. (2016). The influence of E-Satisfaction, E-Trust and Hedonic Motivation on the Adoption of E-banking and Its Determinants in Nigeria: A Pilot Study. *Mediterranean Journal of Social Sciences mCSER Publishing, Rome-Italy*, 56.

Sentosa, I., & Mat, N. K. (2012). Examining a theory of planned behavior (TPB) and technology acceptance model (TAM) in internetpurchasing using structural equation modeling. *Researchers World, 3(2 Part 2)*, 62.

Shah, M. H., & Siddiqui, F. A. (2006). Organisational critical success factors in adoption of e-banking at the Woolwich bank. . *International Journal of information management, 26(6)*, 442-456.

Shah, P. H. (2019). Effect Of Antimicrobial Activity Of Herbal Medicines On Streptococcus Mutans. *National Journal of Integrated Research in Medicine, 10(6).*

Shastri, S. (2018). Microfinance: A study of the Effectiveness of Fund Flows among Women in Rural Gujarat.

Sheth, J. D., & Bhatt, V. (2019). A Study on Factors Affecting Distribution Channels of Indian

Mutual Fund Industry with Special Reference to No-Entry Load Regime-Post 2009. *Research Journal of Humanities and Social Sciences, 10(2),*, 691-696.

Silva, P. (1989). Davis' technology acceptance model (TAM)(1989). . *Information seeking behavior and technology adoption: Theories and trends*, 205-219.

Suh, B., & Han, I. (2002). Effect of trust on customer acceptance of Internet banking. . *Electronic Commerce research and applications, 1(3-4)*, 247-263.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. . *Management science, 46(2)*, 186-204.

Vora, H., Jadhav, D., & Bhatt, V. (2020). . AN EMPIRICAL STUDY ON EVALUATING AND VALIDATE THE FACTORS AFFECTING TO SATISFACTION OF HIGHER EDUCATION. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(12),.

Vyas, S. D. (2012). Impact of e-banking on traditional banking services. . *arXiv preprint arXiv:1209.2368.*

Xiao, Y., Sukumar, A., Tipi, L., & Edgar, D. (2017). Factors Influencing Peopleâ€™ s Intention to Adopt E-Banking: An Empirical Study of Consumers in Shandong Province, China. . *Asian Journal of Computer and Information Systems, 5(3).*

Yaseen, S. G., & El Qirem, I. A. (2018). Intention to use e-banking services in the Jordanian commercial banks. *International Journal of Bank Marketing.*