CHAPTER 73

The Role of E-banking Services in Shaping Customer Satisfaction

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ABSTRACT

The rapid adoption of electronic banking, or "e-banking" has changed how financial services are provided and had a big impact on consumer experiences. With a focus on elements including accessibility, usability, service effectiveness, security, and trust, the goal of this study is to investigate how e-banking influences customer satisfaction. In order to assess attitudes and satisfaction levels, a mixed-method approach was used, combining survey-based research of banking clients with a secondary literature review. The results show that while security and dependability are still crucial for maintaining customer trust, accessibility and transaction convenience are the biggest factors influencing satisfaction. The findings also show that consumers' adoption and satisfaction with e-banking services are influenced by demographic characteristics, digital literacy, and past banking experiences. According to the study's findings, banks must implement customer-centric digital strategies by integrating cutting-edge technology with strong security and customised services. These findings highlight how important e-banking is in the digital financial age for redefining service quality, boosting competitiveness, and guaranteeing lifelong client loyalty.

Keywords: E-banking; Customer satisfaction; Service quality; Digital transformation; Security and trust.

1.0 Introduction

The financial services sector is undergoing a significant digital revolution that is drastically changing the way that consumers communicate with their institutions. With the introduction of e-banking, which includes mobile apps, online portals, and automated teller machines, banking has shifted from physical branches to the digital sphere, providing unmatched speed, convenience, and round-the-clock accessibility. Which precise aspects of E-Banking service quality—namely, cost effectiveness, customer assistance, speed of transaction, convenience of use, security, and availability of services-are the most important determinants of consumer satisfaction are still unknown. For banks looking to develop genuinely customer-centric digital platforms and go beyond a simple online presence, it is important that they understand these dynamics.

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2.0 Review of Literature

In India, electronic banking first appeared in the late 1990s. In 1996, ICICI became the first bank to use the Internet, offering its clients Internet banking. Online services are now more widely available worldwide. Online banking is expanding quickly.[4] Customers of web-based banking must confirm that the source is secure, trustworthy, and ensures the privacy of their personal information before using any services provided by an online source.[3] These days, people are depending more on technology, and because of advanced technological developments, some banks have even started using robots in their financial operations. E banking is rapidly becoming a "need to have" service since it allows for the handling of any query or transaction without ever having a trip to the branch. Net banking not only handles more transactions but also responds to consumer requirements more quickly, increasing customer satisfaction.[1]

Reliability is broadly defined as an organization's capacity to fulfil its commitments regarding pricing, delivery, problem-solving, and service providing. Reactivity is the readiness of service providers to assist customers and give prompt support. Staff members' knowledge, friendliness, and capacity to express assurance and certainty are all aspects of assurance. The concern for providing individualized care for its clients is empathy.[2] Compared to customers of public banks, private bank customers are happier with e-banking and banking services. [5]

3.0 Research Gaps

The effects of new technologies on user experience, such chatbots powered by AI and gamification elements, are frequently overlooked by researchers. Understanding the psychological and emotional facets of digital banking, particularly how the lack of human interaction impacts client loyalty and trust, is another significant knowledge gap. Last but not least, the majority of research extrapolates results to a broad audience while ignoring the particular requirements of certain groups, such as small company owners, elderly consumers, and rural clients.

4.0 Relevance of the Study

- **For Banking Institutions:** Banks can strengthen their position as market competitors by addressing the particular issues and advantages that consumers have recognized.
- **For Customers:** This study's emphasis on consumer values and problems can motivate banks to develop more dependable, safe, and user-friendly online banking systems.

5.0 Objectives of the Study

- To know the satisfaction level of customer towards e-banking services.
- To find about the major problems faced by the customers while using e-banking services.
- To Determine and examine how customers view the main components of e banking service quality, including cost-effectiveness, speed, availability, security, ease of use, and support. Examine the connection between these elements and general customer satisfaction.

6.0 Hypothesis

H_1: Ease of use of e-banking services results into customer satisfaction.

H_2: Security in using of e-banking services results into customer satisfaction.

H_3: Cost effectiveness in using of e-banking services results into customer satisfaction.

H_4: Speed of transaction in using of e-banking services results into customer satisfaction.

H_5: Availability of timely services in using of e-banking services results into customer satisfaction.

H_6: Customer support in using of e-banking services results into customer satisfaction.

7.0 Research Methodology

This study employed a quantitative research approach to investigate the relationship between e-banking service quality and customer satisfaction. This method was chosen for its ability to systematically collect and analyse numerical data from a large sample, allowing for statistical analysis to identify patterns and test the research hypotheses. Once being gathered using Google Forms, the data was exported to Microsoft Excel for categorization, analysis, and cleaning. The demographic information and important factors were compiled using descriptive statistics, such as frequencies, means, and percentages. Analysis was made to ascertain the link between customer satisfaction and the e-banking service quality parameters in order to test the hypotheses.

- **Sampling Size** - 89 (18-Above 55)
- **Sampling Method** – Simple Random Sampling
- **Reliability & validity Test:** this is conducted to measure the reliability & internal consistency of the scale. Result of reliability tests shows the internal consistency based on collected data.

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.918	.919	6
.909	.902	6

The reliability and validity test results are Cronbach's alpha score; in case factors affecting satisfaction, it is 0.918 & in case of benefits associated with the use of e-banking it is 0.909 which is greater than 0.7 that shows a very high level of internal consistency in the data. Thus, it is concluded that this questionnaire is accepted for further research and statistical analysis with a satisfactory level of reliability.

Table 2: Demographic Profile of Respondent

Variables	Description	Frequency
Gender	Male	60
	Female	28
Age Group	18-25	73
	26-35	6
	36-45	5
	46-55	3
	Above 55	3
Occupation	Student	67
	Employed	14
	Self-Employed	2
	Retired	0
	Other	5
Highest level of Education	High School	14
	Undergraduate	57
	Postgraduate	17
	Doctorate	0
	Other	0

8.0 Hypothesis Testing

H_1: Ease of use of e-banking services results into customer satisfaction.

The below table no shows that the ANOVA value for Ease of use of e-banking services marking. P-value is 0.000 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Ease of use of e-banking services strongly influencing the customer

satisfaction. Therefore, the Null hypothesis is rejected and we accept that Ease of use of e-banking services results into customer satisfaction. F value is 9.644 which are greater than the table value of F (7.7086) indicates very good fit of the model.

Table 3: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Ease of use of e-banking services results into customer satisfaction	Between Groups	(Combined)	11.116	4	2.779	9.644	.000
		Linearity	10.687	1	10.687	21.706	.000
		Deviation from Linearity	.429	3	.143	.290	.832
	Within Groups		41.356	84	.492		
	Total		52.472	88			

Table 4: Measures of Association

	R	R Squared	Eta	Eta Squared
Ease of use of e-banking services results into customer satisfaction	.451	.204	.460	.212

R square values of the above table specify how much Ease of use of e-banking services causes the variation in customer satisfaction. The R square value for Ease of use of e-banking services is .204 which shows 20.40 per cent variation in customer satisfaction, which is good resulting action. Whereas, the Eta Square value is 0.212, indicates a moderate association between Ease of use of e-banking services and customer satisfaction.

H_2: *Security in using of e-banking services results into customer satisfaction*

Table 5: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Security in using of e-banking services results into customer satisfaction	Between Groups	(Combined)	12.455	4	3.114	10.536	.000
		Linearity	7.980	1	7.980	16.750	.000
		Deviation from Linearity	4.476	3	1.492	3.132	.030
	Within Groups		40.017	84	.476		
	Total		52.472	88			

Table 6: Measures of Association

	R	R Squared	Eta	Eta Squared
Security in using of e-banking services results into customer satisfaction	.390	.152	.487	.237

The above table no shows that the ANOVA value for Security in using of e-banking services. P-value is 0.000 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Security in using of e-banking services strongly influencing the customer satisfaction. Therefore, the Null hypothesis is rejected and we accept that Security in using of e-banking services results into customer satisfaction. F value is 10.536 which are greater than the table value of F (7.7086) indicates very good fit of the model.

R square values of the above table specify how much Security in using of e-banking services causes the variation in customer satisfaction. The R square value for Security in using of e-banking services is .152which shows 15.20 per cent variation in customer satisfaction, which is good resulting action. Whereas, the Eta Square value is 0.237, indicates a moderate association between Security in using of e-banking services and customer satisfaction.

H_3: *Cost effectiveness in using of e-banking services results into customer satisfaction*

Table 7: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Cost effectiveness in using of e-banking services results into customer satisfaction	Between Groups	(Combined)	13.566	4	3.391	8.322	.000
		Linearity	6.316	1	6.316	13.636	.000
		Deviation from Linearity	7.250	3	2.417	5.218	.002
	Within Groups		38.906	84	.463		
	Total		52.472	88			

Table 8: Measures of Association

	R	R Squared	Eta	Eta Squared
Cost effectiveness in using of e-banking services results into customer satisfaction	.347	.120	.508	.259

The above table no shows that the ANOVA value for Cost effectiveness in using of e-banking services. P-value is 0.000 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Cost effectiveness in using of e-banking services strongly

influencing the customer satisfaction. Therefore, the Null hypothesis is rejected and we accept that Cost effectiveness in using of e-banking services results into customer satisfaction. F value is 8.322 which are greater than the table value of F (7.7086) indicates very good fit of the model.

R square values of the above table specify how much Cost effectiveness in using of e-banking services causes the variation in customer satisfaction. The R square value for Cost effectiveness in using of e-banking services is .120 which shows 12 per cent variation in customer satisfaction, which is good resulting action. Whereas, the Eta Square value is 0.259, indicates a moderate association between Cost effectiveness in using of e-banking services and customer satisfaction.

H₄: Speed of transaction in using of e-banking services results into customer satisfaction

Table 9: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Speed of transaction in using of e-banking services results into customer satisfaction	Between Groups	(Combined)	7.797	4	1.949	11.665	.008
		Linearity	2.874	1	2.874	5.404	.023
		Deviation from Linearity	4.923	3	1.641	3.085	.032
	Within Groups		44.675	84	.532		
	Total		52.472	88			

Table 10: Measures of Association

	R	R Squared	Eta	Eta Squared
Speed of transaction in using of e-banking services results into customer satisfaction	.234	.055	.385	.149

The above table no shows that the ANOVA value for Speed of transaction in using of e-banking. P-value is 0.008 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Speed of transaction in using of e-banking strongly influencing the customer satisfaction. Therefore, the Null hypothesis is rejected and we accept that Speed of transaction in using of e-banking results into customer satisfaction. F value is 11.665 which are greater than the table value of F (7.7086) indicates very good fit of the model.

R square values of the above table specify how much Speed of transaction in using of e-banking causes the variation in customer satisfaction. The R square value for Speed of transaction in using of e-banking is .055 which shows 5 per cent variation in customer

satisfaction, which is good resulting action. Whereas, the Eta Square value is 0.149, indicates a weak association between Speed of transaction in using of e-banking and customer satisfaction.

H₅. Availability of timely services in using of e-banking services results into customer satisfaction

Table 11 shows that the ANOVA value for Availability of timely services in e-banking. P-value is 0.050 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Availability of timely services in e-banking strongly influencing the customer satisfaction. Therefore, the Null hypothesis is rejected and we accept that Availability of timely services in e-banking results into customer satisfaction. F value is 12.123which are greater than the table value of F (7.7086) indicates very good fit of the model.

Table 11: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Availability of timely services in using of e-banking services results into customer satisfaction	Between Groups	(Combined)	2.664	4	.666	12.123	.050
		Linearity	2.418	1	2.418	4.078	.047
		Deviation from Linearity	.246	3	.082	.138	.937
	Within Groups		49.808	84	.593		
	Total		52.472	88			

Table 12: Measures of Association

	R	R Squared	Eta	Eta Squared
Availability of timely services in using of e-banking services results into customer satisfaction	.215	.046	.225	.051

R square values of the above table specify how much Availability of timely services in e-banking causes the variation in customer satisfaction. The R square value for Availability of timely services in e-banking is .046 which shows 4.6 per cent variation in customer satisfaction, which is good resulting action. Whereas, the Eta Square value is 0.051, indicates a weak association between Availability of timely services in e-banking and customer satisfaction.

H₆. Customer support in using of e-banking services results into customer satisfaction

The below table no shows that the ANOVA value for Customer support in using of e-banking services. P-value is 0.000 which is higher than 0.05 at 95 per cent confidence level. It indicates that the Customer support in using of e-banking services strongly influencing the customer satisfaction. Therefore, the Null hypothesis is rejected and we

accept that Customer support in using of e-banking services results into customer satisfaction. F value is 15.939 which are greater than the table value of F (7.7086) indicates very good fit of the model.

Table 13: ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Customer support in using of e-banking services results into customer satisfaction	Between Groups	(Combined)	11.568	4	2.892	15.939	.000
		Linearity	6.616	1	6.616	13.587	.000
		Deviation from Linearity	4.952	3	1.651	3.390	.022
	Within Groups		40.904	84	.487		
	Total		52.472	88			

Table 14: Measures of Association

	R	R Squared	Eta	Eta Squared
Customer support in using of e-banking services results into customer satisfaction	.355	.126	.470	.220

R square values of the above table specify how much Customer support in using of e-banking services causes the variation in customer satisfaction. The R square value for Customer support in using of e-banking services is .126 which shows 12.6 per cent variation in customer satisfaction, which is good resulting action. Whereas, the Eta Square value is .220, indicates a moderate association between Customer support in using of e-banking services and customer satisfaction.

Table 15: Summary of Hypothesis Testing

Hypothesis statement	F	Sig	R^2	η^2	ANOVA	Result
H_1: Ease of use of e-banking services results into customer satisfaction	9.644	.000	.204	.212	.000	Accepted
H_2: Security in using of e-banking services results into customer satisfaction	10.536	.000	.152	.237	.000	Accepted
H_3: Cost effectiveness in using of e-banking services results into customer satisfaction	8.322	.000	.120	.259	.000	Accepted
H_4: Speed of transaction in using of e-banking services results into customer satisfaction	11.665	.008	.055	.149	.000	Accepted
H_5: Availability of timely services in e-banking results into customer satisfaction	12.123	.050	.046	.051	.047	Accepted
H_6: Customer support in using of e-banking services results into customer satisfaction	15.939	.000	.126	.220	.000	Accepted

9.0 Key Findings

- The vast majority of customers stated that ease of use was the most significant element that contributed to their satisfaction.
- The majority of responders emphasized that transaction speed was a significant consideration as well.
- A sizable majority of users cited security as being essential to their level of pleasure.
- A significant pain point, technical issues were reported by the vast majority of consumers, notwithstanding the high satisfaction levels.
- On the plus side, consumers listed convenience, time savings, and continuous accessibility as the primary benefits of online banking.

10.0 Implications of the Study

The results of this investigation have major implications in both theory and practice. The study adds a thorough empirical analysis to the body of knowledge by confirming that the most important factors influencing e-banking customer satisfaction are basic service quality qualities including transaction speed and ease of use. Practically speaking, the report provides banks with specific advice. To solve common technological problems, they should give top priority to enhancing the user experience (UX) and general stability of their systems. Additionally, banks must improve their digital support systems to offer more efficient assistance and communicate their security measures more effectively in order to gain the trust of their customers.

11.0 Conclusion

- According to the study's findings, e- banking services significantly increase consumer satisfaction, mainly due to their speed, security, and convenience of use.
- Although consumers place a high value on the ease and round- the- clock accessibility, the study shows that frequent technical problems and dealing with security concerns require significant improvement.
- Banks must put a high priority on strengthening their digital infrastructure and outlining their security procedures in order to preserve high satisfaction and guarantee long-term confidence.

12.0 Suggestions

- Enhance their ability to manage complex requests, offer human like assistance, and carry out banking duties.

- Increase the usage of advanced biometrics for safer and easier logins.
- Real-time fraud detection and prevention can be achieved with AI.
- Reduce complexity and enhance navigation by implementing more user-friendly designs.

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