Examining the Impact of Digital Banking Service Factors on Customer Satisfaction

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ABSTRACT:

The fast digital transformation of the banking segment has changed customer prospects and service delivery, prompting a closer look at the elements that influence satisfaction with digital banking services. Digital banking allows users to do financial transactions online instead of visiting a physical branch. Digital banking has moved banking activity from physical to digital. This study assesses the effect of four main dimensions transaction speed (TS), convenience and benefits (CB), customer support (CSu), and security and privacy (SP) towards customer satisfaction (CS) in the digital banking ecosystem. The primary goal of this study is to examine the association between consumer fulfilment and service quality aspects (TS, CB, CSu & SP) in digital banking. A systematic questionnaire was used to gather data from 300 digital banking operators in India, which were analysed using SPSS. The study involved reliability testing, multiple regression analysis and descriptive statistics. The outcomes showed that all four characteristics have a substantial influence on customer satisfaction, with security and privacy being the most influential, followed by convenience and perks, customer assistance, and transaction speed. These findings offer useful data for banks looking to progress customer experience and establish long-term loyalty through optimised digital banking services. The study adds to our sympathetic of consumer behaviour in digital financial settings and delivers a strategic foundation for strengthening customer-centric digital banking operations.

Keywords: Fintech; Digital Banking; Customer Satisfaction; Customer Experience.

1. Introduction:

The banking business has a new face as outcome of the digital uprising, which has altered the traditional process to a numerically systematised one (Baljinder Kaur, 2021). Competition is being fuelled by newly licensed domestic digital banks, global virtual-only banks, and digitalised traditional banks (Bramanthyo Andrian, 2022). Given the details of the post-crisis market climate, the digital transformation in the banking industry is perhaps going to endure and strengthen even more. In directive to continue viable in the digital age and familiarise to changing consumer difficulties and market conditions, banks must increasingly participate digital technologies (Abdelhedi, 2021). Digital Banking services, including loan applications, account opening, and home-grown and international financial transfers, are available 24/7. It can save significantly on costs by eliminating the essential for actual branch offices. Customers can benefit from superior interest rates and lower fund transfer fees compared to traditional bank accounts (Jae Woo Shin, 2019). COVID-19 has caused widespread company closures and impoverishment, but it has created opportunities for information technology, telemedicine care, and security organisations. During COVID-19, traditional banking dropped, leading to an expansion in e-banking platforms (Awan, 2020).

On the other side, fast advancements in mobile technology and smartphone use have introduced a innovative manner of finance: a branchless digital-only bank. Branchless digital banking adoption is increasing faster than overall digital banking (Suhaimi & Hassan, 2018). Advancements in banking technology have a big impact on marketing activities, particularly in digital banking and client interfaces. It has enabled banks to provide multi-channel services, transforming consumer interactions (Ezepue, 2018). Banks use technology to provide a variety of services that fulfil consumer expectations (Nhung Thi Hong Nguyen, 2021). Information technology is also vital in this type of digital transformation. It provides operational support in a variety of technological areas and serves as a foundation for substantial innovation in digital services (Amar Johri, 2023).

This transition to e-service has given numerous benefits to both banks and clients, comprising transaction security, personalised services, faster transaction processing, and overall enhanced facility quality (Samuel Godadaw Ayinaddis, 2023). Customers can now check transaction information, pay utility bills, allocation funds, and shop online, transforming the old "brick-and-mortar" method into a "click-and-mortar" model. ICICI Bank was the primary bank to launch internet finance in India, in 1996 (Singh, 2019). The banking sector is vital to the modern economy and reflects the country's economic health. Banks are the foundation of the financial scheme and play a crucial part in determining the victory or failure of the economy. Countries with well-developed banking sectors have quicker growth than those with weaker ones (Dr. Vijay Rathee, 2017). Reduced use of e-banking services may have a detrimental impact on bank performance. Banks can increase client loyalty by implementing a customer-oriented business strategy (Thabit Altobishi, 2018). As a outcome, the primary drive of this research is to investigate the relationship between service excellence aspects (such as transaction speed, convenience and benefits, customer support, security, and privacy) and consumer satisfaction in digital banking. The research identifies key elements of digital banking services that improve customer satisfaction. This study is significant because it provides intuitions into how digital banking may evolve while still prioritising customers. This empirical research can update future investigations into digital banking structures.

2. Review of Literature and Hypothesis Development:

2.1 Customer Satisfaction:

(Leninkumar, 2017) Defines, the customer satisfaction is grounded on their experience after purchasing a product or facility. Similar to this (Khairawati, 2020) describes Customer fulfilment with a product or service can be resolute by their feedback and assessments. Customers feel

satisfied when the product meets their expectations. Customer satisfaction refers to a client's boldness towards a product or service after using it. Customer happiness was a substantial effect of marketing activity, acting as a connection between the numerous stages of purchasing behaviour (Sao Mai DAM, 2021). In detail (Rizwan Ullah Khan, 2020) Satisfaction with a company's goods and services increases client confidence in its superiority. This type of consumer is likely to repurchase the goods from the same business. Previous study has shown a substantial association between loyalty and customer happiness across industries. (Douglas Chiguvi, 2015)Satisfaction is distinct as a post-choice assessment of a certain transaction. It stems from customers' perceptions of the value they received. In operation or relationship, value is determined by perceived service excellence, pricing, and client gaining expenses. (A, 2015) Stated that buyer satisfaction refers to how well a service encounters or exceeds the customer's expectations, as well as an assessment of a transaction based on perceived quality. Customer satisfaction is attractive one of the most important objective which any organisation seeking for long-term connection with customer regards as the top priority. Customer happiness is crucial for success in retail banking, as customer interactions are central to business operations described by (Ngo Vu Minh, 2016). According to (Gunawan, 2022) Customer satisfaction refers to a person's approaches after associating perceived performance or results to expectations. Consumers can have one of three levels of satisfaction. Consumers may be disappointed if a invention fails to meet their expectations. Second, if the product meets prospects, clients will be satisfied. If performance surpasses opportunities, clients will be extremely satisfied.

2.2 Hypotheses Development: Factors of Digital Banking Services

2.2.1.1 **Transaction Speed:** Customers choose mobile payments for their convenience and speed of transactions. Customers nowadays are predominantly sensitive since they expect their services delivered quickly (Dr. C.B.Pavithra, 2021). Transaction speed, defined as the average time necessary to complete a financial transaction, is an important factor influencing user satisfaction in the digital banking ecosystem (Neha Yadav, 2025). Based on the above discussion the hypothesis framed as;

H1: Transaction Speed has a positive effect on customer satisfaction

2.2.2 **Convenience and Benefits:** According to (Kaura, 2014) Service convenience reduces time and effort required to acquire and use a service, leading to higher satisfaction ratings. The author have proposed six Convenience categories include time efficiency, accessibility, portability, appropriateness, handiness, and avoidance of discomfort. Customers are more expected to accept and employ electronic payment systems due to the benefits of saving money, time, and energy. Digital banking offers major advantages in terms of suitability and benefits (Dr. M. Madana Mohan, 2021). Created on the above conversation the hypothesis framed as;

H2: Convenience and Benefits has a positive effect on customer satisfaction

2.2.3 **Customer Support:** The Customer Support Chimney is made up of three steps: human support, self-service computerization (such as an AI bot), and active response. This combination provides clients with a unique experience when seeking assistance (Ailleron, 2021). Based on the beyond discussion the hypothesis framed as;

H3: Customer Support has a positive effect on customer satisfaction

2.2.4 **Security and privacy:** Effectual electronic payment systems are hindered by security concerns (Dr. M. Madana Mohan, 2021). Advanced digital explanations offer powerful safety safeguards to protect client facts and connections. Features such as biometric authentication and real-time fraud detection provide assurance and increase client trust. Based on the above discussion the hypothesis framed as;

H4: Security and privacy has a positive effect on customer satisfaction

Model:

Digital Banking Services

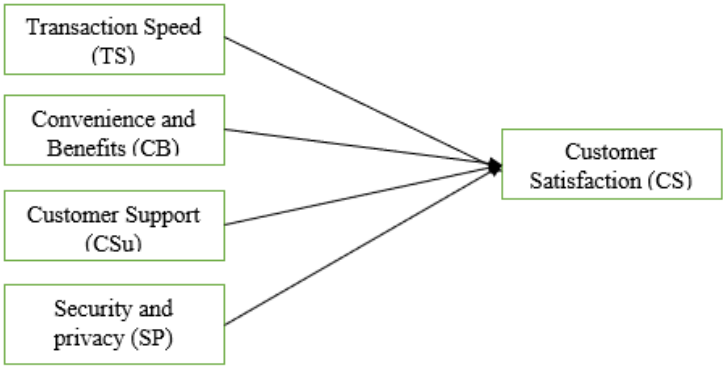

Figure 1. The Proposed Model Source: Created by Authors

3. Research Methodology

3.1 Method:

Scholars strongly recommend collecting data from a variety of samples to assure response variability and confirm the generalizability of conclusions. Thus, data for this research were gathered from a wide range of digital payment consumers while shopping online. The study included both descriptive and quantitative research approaches. Descriptive research discovers facts, but quantitative research produces statistics like frequencies and averages. For the study, both primary and secondary data were used. The core facts for this study was collected using a standardized questionnaire. In total, the survey was distributed to about 330 respondents, and the researcher received 300 (90%) genuine responses from respondents across India.

Secondary data is compiled from various kinds of journals, periodicals, newspapers, and websites. Convenience sampling was used throughout the research process.

3.2 Measures:

For this study, the investigator employed a questionnaire, which is a structured collection of questions. This study used a survey-based approach. The survey form is separated into two sections: the initial section covers demographic questions, and the another section contains 17 questions that are responded by means of a five-point Likert scale, with "5" meaning "strongly agree" and "1" representing "strongly disagree".

Table 1: Measurement Items

Factors	Item code	Statements	Source
Transaction Speed (TS)	TS 1	Digital banking transmissions are finished quickly when related to traditional methods.	(Dr. C.B.Pavithra, 2021)
	TS 2	Digital banking saves portable time and energy as we need not to stand in line in banks or to pay utility bills.	
	TS 3	Digital banking improves the speed of transaction.	
Convenience and Benefits (CB)	CB 1	Digital Banking users can effortlessly do their various payments anywhere and anytime.	(Dr. C.B.Pavithra, 2021)
	CB 2	Digital banking saves time, energy and money.	(Dr. M. Madana Mohan, 2021)
	CB 3	Discounts, rewards cash-back offers received on Digital banking are considerable.	

Customer Support (CSu)	CSu 1	The digital bank is help clients and deliver fast answers to the requests	(Mahasweta Roy Dutta, 2018)
	CSu 2	The digital bank provides suitable and fast data to customers when a difficult occurs.	
	CSu 3	Digital Bank's has operational customer service representatives and conversant staff to solve the problem	
Security and privacy (SP)	SP 1	Digital Banks provide me financial security and Confidentiality	(Karthik, 2019)
	SP 2	Digital Banks will not ever misuse my financial information	
	SP 3	Digital Banks is safe for the fund transfer	
Customer Satisfaction (CS)	CS 1	I will recommend my bank's digital services to other customers	(Ghazi Zouari, 2021) (Sulemana Bankuoru Egala, 2021)
	CS 2	I am satisfied in the way digital banking services is brought by my bank	
	CS 3	I am satisfied in the quality of digital banking services received	

3.3 Data Analysis

This research used quantitative analysis to accomplish the objectives that data analysis was showed using SPSS software and descriptive statics were analyzed to summarize the evidence about the respondents regression was implemented to discover the relationship between Transaction Speed, Convenience and Benefits, Customer Support, Security and Privacy, and Customer Satisfaction.

4. Results

4.1 Statics of the Demographic Characteristics

Table 2. Profile of respondents (n = 300)

Variable	Description	Frequency	Percentage (%)
Gender	Male	137	45.67
	Female	163	54.33
Age	Below 20	16	5.33
	20-30	232	77.33
	31-40	38	12.67
	41-50	12	4
	Above 50	02	0.67
Qualification	SSLC	01	0.33
	PUC	06	2
	UG	66	22
	PG	215	71.67
	Ph.D	12	4

Table 2 summarizes the demographic features of the 300 respondents. In this study, 163 respondents were female (54.33%), and 137 were male (45.67%). This study originate that 232 (77.33%) respondents are between the ages of 20

- 30 years, and 215 (71.67%) have completed their postgraduate studies.

4.2 Evaluating Reliability

Table 3. Reliability Analysis

Scale	Cronbach's alpha	Items	Corrected Item – Total Correlation
TS	0.851	TS01	1.000
		TS02	0.664
		TS03	0.609
CB	0.704	CB01	1.000
		CB02	0.653
		CB03	0.320
CSu	0.828	CSu01	1.000
		CSu02	0.591
		CSu03	0.651
SP	0.880	SP01	1.000
		SP02	0.699
		SP03	0.668
CS	0.918	CS01	1.000
		CS02	0.775
		CS03	0.777

This study employs Cronbach's Alpha (CA) analysis to establish the reliability of the valid variables for the scales: Transaction Speed, Convenience and Benefits, Customer Support, Security and Privacy and Customer Satisfaction. Cronbach's alpha provides a bottom bound on dependability (r). Cronbach's alpha cutoffs of 0.7 or 0.75 are commonly employed to assess test reliability (A. Christmanna, 2005). The acceptable scale is identified when the experiential variables have a corrected element total correlation value of 0.3 or more. The results reported in Table 2 show that all scales have achieved dependability.

4.3 Multiple Regression Analysis

Table 4: Model of Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.809[a]	.654	.648	.967598149904769	1.855

Table 4 illustrates the model's level of explanation, with an adjusted R2 value of 0.654, indicating that 65.4% of customer satisfaction (CS) is explained with the impact of four independent variables: Transaction Speed (TS), Convenience and Benefits (CB), Customer Support (CSu), Security and Privacy (SP).

Table 5: Regression Model Summary and hypothesis test result

Independent Variable	Standardized Coefficients	t	Sig.	Hypothesis result
Transaction Speed (TS)	0.529	10.782	0.000	H1 Accepted
Convenience and Benefits (CB)	0.681	16.073	0.000	H2 Accepted
Customer Support (CSu)	0.641	14.448	0.000	H3 Accepted
Security and Privacy (SP)	0.726	18.257	0.000	H4 Accepted

Table 5 shows standardised estimates of Transaction Speed ($\beta = 0.529$; p-value < 0.001), Convenience and Benefits ($\beta = 0.681$; p- value < 0.001), Customer Support ($\beta = 0.641$; p- value < 0.001), Security and privacy ($\beta = 0.726$; p- value < 0.001) have positive and significant effects on customer satisfaction at the 0.1% significance level. Therefore all the alternative hypothesis got accepted and null hypothesis got rejected.

5. Conclusion and Suggestions :

This study demonstrations that four major factors transaction speed, convenience and benefits, customer assistance, and privacy and security have a substantial impact on customer fulfilment when using digital banking services. Among them, security and privacy emerge as the most influential variable, implying that customers priorities the safety and confidentiality of their financial transactions above all else. Convenience and perks, such as cashback and 24/7 access, also have important impact on consumer happiness, emphasizing the prominence of functionality and rewards. Although customer support and transaction speed have a little lower influence, they are quiet statistically significant contributors to total satisfaction. The data confirm that digital banking pleasure is multidimensional, influenced by both technical functionality and emotional trust. The high adjusted R^2 value (0.654) confirms that the model accurately explains the difference in customer satisfaction using the identified variables.

This study brings up a few areas for additional investigation: Future research could compare public and private sector banks, as well as urban and rural client satisfaction with digital banking services. It might investigate how satisfaction translates into customer loyalty, retention, and advocacy, providing a more perspective on customers.

According to the research, banks should invest in advanced cybersecurity measures such as biometric authentication, real-time fraud detection, and data encryption to increase customer trust and lower perceived risk. Provide constant rewards, rebates, and cost-saving benefits while maintaining seamless and straightforward app use, which can boost adoption and satisfaction. Create cross support models that combine AI-powered chatbots with human agents to provide prompt, accurate, and sympathetic responses to client enquiries and complaints. Using targeted campaigns, educate clients about digital banking capabilities, safety practices, and benefits in order to lessen resistance and improve confidence among less tech-savvy users.

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References

A, A. (2015). The Effect of Service and Food Quality on Customer Satisfaction and hence customer retention. Asian Social Science.

A. Christmanna, S. V. (2005). Robust estimation of Cronbach's alpha. Journal of Multivariate Analysis.

Abdelhedi, G. Z. (2021). Customer satisfaction in the digital era:evidence from Islamic banking. Journal of Innovation and Entrepreneurship .

Ailleron. (2021, July 22). Customer support in the digital banking world. Retrieved from Bank Automation News: https://bankautomationnews.com/

Amar Johri, S. K. (2023). Exploring Customer Awareness towards Their Cyber Security in the Kingdom of Saudi Arabia: A Study in the Era of Banking Digital Transformation. Human Behavior and Emerging Technologies.

Awan, I. U. (2020). Impact of e-banking service quality on e-loyalty in pandemic times through interplay of e-satisfaction. Emerald Insight.

Baljinder Kaur, S. K.-A. (2021). Digital Banking in Northern India: The Risks on Customer Satisfaction. The Risk Landscape within FinTech and InsurTech Business Models.

Bramanthyo Andrian, T. S. (2022). Sentiment Analysis on Customer Satisfaction of Digital Banking in Indonesia. (IJACSA) International Journal of Advanced Computer Science and Applications, 466-473.

Douglas Chiguvi, P. T. (2015). Impact of Customer Satisfaction on Customer Loyalty in the Banking Sector . International Journal of Scientific Engineering and Research (IJSER).

Dr. C.B.Pavithra, D. K. (2021). FACTORS AFFECTING CUSTOMERS' PERCEPTION TOWARDS DIGITAL BANKING SERVICES. Turkish Journal of Computer and Mathematics Education.

Dr. M. Madana Mohan, D. T. (2021). Factors Influencing Customers To Use Digital Banking Services In Twin Cities Of Telangana State. Natural Volatiles & Essent Oils.

Dr. Vijay Rathee, R. (2017). PERCEPTION OF CUSTOMERS TOWARDS SERVICE QUALITY: A STUDY OF DIGITAL BANKING PRACTICES . International Journal of Management, IT & Engineering.

Ezepue, C. I. (2018). Digital banking, customer experience and bank financial performance. Emerald .

Ghazi Zouari, M. A. (2021). Customer satisfaction in the digital era: evidence from Islamic banking. Journal of Innovation and Entrepreneurship .

Gunawan, I. (2022). CUSTOMER LOYALTY: The Effect Customer Satisfaction, Experiential Marketing and Product Quality . Jurnal Manajemen Organisasi dan Industri.

Jae Woo Shin, J. Y. (2019). Customer perceptions of Korean digital and traditional banks. Emerald.

Karthik, K. R. (2019). AStudy on Digital Bankings System with Reference to Karnataka. Retrieved from Shodhganga : a reservoir of Indian theses @ INFLIBNET: http://hdl.handle.net/10603/467360

Kaura, V. (2014). Service Convenience, Customer Satisfaction, and Customer Loyalty: Study of Indian Commercial Banks. Journal of Global Marketing.

Khairawati, S. (2020). Effect of customer loyalty program on customer satisfaction and its impact on customer loyalty. INTERNATIONAL JOURNAL OF RESEARCH IN BUSINESS AND SOCIAL SCIENCE.

Leninkumar, V. (2017). The Relationship between Customer Satisfaction and Customer Trust on Customer Loyalty. International Journal of Academic Research in Business and Social Sciences.

Mahasweta Roy Dutta, A. D. (2018). Service quality analysis of digital banking services in India: A SERVQUAL approach. Indian Journal of Economics and Development.

Neha Yadav, D. S. (2025). ASSESSING THE IMPACT OF DIGITAL BANKING INNOVATIONS ON TRANSACTION SPEED AND FINANCIAL SERVICE ACCESSIBILITY FOR ENTREPRENEURS: CHALLENGES AND PERSPECTIVES IN DELHI NCR, INDIA . International Journal of Innovation studies.

Ngo Vu Minh, N. H. (2016). The Relationship between Service Quality, Customer Satisfaction and Customer Loyalty: An Investigation in Vietnamese Retail Banking sector. Journal of Competitiveness .

Nhung Thi Hong Nguyen, N. K.-D. (2021). Effect of digital banking-related customer experience on banks' financial performance during Covid-19: a perspective from Vietnam. emerald.

Rizwan Ullah Khan, Y. S. (2020). The Impact of Customer Relationship Management and Company Reputation on Customer Loyalty: The Mediating Role of Customer Satisfaction. Journal of Relationship Marketing.

Samuel Godadaw Ayinaddis, B. A. (2023). Examining the effect of electronic banking service quality on customer satisfaction and loyalty: an implication for technological innovation. Journal of Innovation and Entrepreneurship.

Sao Mai DAM, T. C. (2021). Relationships between Service Quality, Brand Image, Customer Satisfaction, and Customer Loyalty. Journal of Asian Finance, Economics and Business .

Singh, S. (2019). Measuring E-Service Quality and Customer Satisfaction with Internet Banking in India. Theoretical Economics Letters.

Suhaimi, A. I., & Hassan, M. S. (2018). Determinants of Branchless Digital Banking Acceptance Among Generation Y in Malaysia. IEEE Xplore.

Sulemana Bankuoru Egala, D. B. (2021). To leave or retain? An interplay between quality digital banking services and customer satisfaction. Emerald.

Thabit Altobishi, G. E. (2018). E-Banking Effects on Customer Satisfaction: The Survey on Clients in Jordan Banking Sector. International Journal of Marketing Studies.