



A Study on Impact of Digital Transformation on Banking Operations and Customer Service of Tamil Nadu State Apex Co-Operative Bank

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ABSTRACT

This study investigates the transformative effects of digital technologies on banking operations and customer service within TNSC Bank. With the advent of digitalization, the banking sector has witnessed a profound shift, altering traditional practices and reshaping customer interactions. Leveraging qualitative and quantitative methods, this research delves into TNSC Bank's journey towards digital transformation, exploring the adoption of various technologies such as mobile banking apps, online platforms, and AI-driven services. The findings reveal multifaceted implications for banking operations. Digitalization has streamlined internal processes, enhancing efficiency, reducing costs, and enabling real-time data analysis. Moreover, automation has minimized human errors and accelerated transaction processing, leading to improved operational performance. Concurrently, digital channels have revolutionized customer engagement and service delivery. Through personalized interfaces and round-the-clock accessibility, TNSC Bank has augmented customer satisfaction and loyalty.

INTRODUCTION:

The banking sector deals with money, credit, and other monetary exchanges. Extra credit and cash can be safely stored in a bank. Checking accounts, certificates of deposit, and savings accounts are available from them. These deposits are used by banks to lend money. Home mortgages, business loans, and auto loans are among these loans.

A shift towards digital banking does not indicate a downfall of the branch-based banking. Branch networks would continue to be pertinent, unless the various concerns that haunt customers are done away with. The major issue is security and safety of transacting using the internet. Instances of identity theft, loss of private information and misuse of sensitive data are not meagre- acting as a damper to use of technology- especially among risk-fearing customers. Use of electronic means to conduct transactions takes away the ability of customers to have a personal connect with bankers and seek advice on complicated products and services. At the same time, some believe that the online products in themselves are so complex that they ~ 30 ~ International Journal of Research in Finance and Management need someone to explain the usage to them- making manual banking seem more convenient and flexible. Many a times, these services may be difficult to access, for example, due to non-availability of ATMs in a certain area, or no internet connectivity, and the fees charges for the transactions are perceived by some customers as being unreasonable.

OBJECTIVES

- Assess the extent of digital transformation initiatives undertaken by TNSC Bank in recent years.
- Identify the key digital technologies implemented by TNSC Bank in its banking operations, such as mobile banking, internet banking, AI-driven chatbots, etc.
- Evaluate the impact of digital transformation on the efficiency and cost-effectiveness of banking operations at TNSC Bank, including transaction processing, risk management, and regulatory compliance.
- Analyze the changes in customer behavior and preferences following the adoption of digital banking services by TNSC Bank's customers.
- Assess the level of customer satisfaction with TNSC Bank's digital channels and services, compared to traditional banking channels.

SCOPE OF THE STUDY

The concept of digital transformation in banking, including its drivers, objectives, and significance in the current era of technology. Identify and analyze the specific digital technologies revolutionizing banking operations, such as mobile banking apps, online banking platforms, AI-driven chatbots,

blockchain, and biometric authentication. Evaluate the effects of digital transformation on improving customer experience, including convenience, accessibility, personalization, and self-service options. Discuss the challenges and solutions related to cybersecurity, data privacy, fraud prevention, and regulatory compliance in the context of digital banking.

NEED FOR THE STUDY

- This study helps to assess the proliferation of digital technologies, customers expect seamless and convenient banking services accessible anytime, anywhere.
- A study helps to assess the digital transformation streamlines banking operations, reducing manual processes and improving efficiency.
- A study can identify areas where banks can differentiate themselves through innovative digital solutions.
- A study can assess the effectiveness of digital strategies in improving customer satisfaction and loyalty.

REVIEW OF LITERATURE:

- **R Dratva (2020)** Over the last two years, there has been an exponentially increasing number of articles, tweets, interviews and specialist panels about open banking and how banks, fin techs, and the whole industry can profit from this fundamental, irreversible and revolutionary change. Experts have argued with increasing urgency that the market players have to step on the gas if they want to gain a good position in this new and unknown open banking world. The bottom line is that banks can profit strongly if they do it right.
- **NF Dufty, LK Savery, GN Soutar (1987)** The introduction of new technology has been of concern to banking unions but the chances of them effectively influencing such decisions are determined by the importance attached to the issue by members and their willingness to undertake industrial action. This paper reports a study which attempted to examine this issue by investigating union members' experiences with various types of new technology, their attitudes towards those technologies and various aspects of their work lives and also their willingness to undertake industrial action over the introduction of new technology into their workplace.
- **SK Sia, C Soh, P Weill (2016)** Business digitalization is changing the competitive landscape in many industries. Digitally savvy customers are demanding more while threats of digital disruptions from new entrants are rising. This article describes how DBS, a large Asian bank, responded to digital threats and opportunities by adopting a digital business strategy. It identifies the capabilities needed and provides lessons for organizations aspiring to pursue a successful digital business strategy.
- **Suresh Ramamurthy and Hari Govindan (2020)** Ramamurthy and Govindan propose a conceptual framework for understanding digital banking transformation and its impact on customer service. They examine the role of digital technologies in improving accessibility, convenience, and customization of banking services. The authors also discuss the challenges and opportunities associated with digital transformation, such as cybersecurity risks and regulatory compliance.
- **N Wulandari, AN Maharani (2018)** Service quality become a focus by all company, including banks, to maintain its customer. Improving service quality is crucial for banks to deliver an outstanding customer experience. It is believed that customer satisfaction can be achieved only if customer experienced service that meet or beyond their expectation. Nevertheless, it is uncertain which aspects of service quality that we need to focus on. This study examines service quality from four aspects such as operative aspect, physical aspect, new technologies and human.

RESEARCH DESIGN:

The study is descriptive in nature. This research is basically fact finding with adequate interpretation using simple analysis of data and by developing thinking and elaborating of patterns and obtaining tentative generalizations as hypothesis.

SOURCES OF DATA:

Primary Data – Questionnaire given to 110 respondents

Secondary Data - Websites and, Published reports & Review of literature from published articles.

HYPOTHESIS:

• HYPOTHESIS

Null Hypothesis (H₀): There is no significant difference between the Qualification and Awareness on digital banking transformation.

Alternative Hypothesis (H₁): There is a significant difference between the Qualification and Awareness on digital banking transformation

• HYPOTHESIS 2

Null Hypothesis (H₀): There is no significant correlation between 'Security measures' and 'Reducing risk of frauds'

Alternative Hypothesis (H1): There is no significant correlation between ‘Security measures’ and ‘Reducing risk of frauds’

PERCENTAGE ANALYSIS:

Research questions are always answered with a descriptive statistic generally either percentage or mean. Percentage is appropriate when it is important to know how many of the participants gave a particular answer. Generally, percentage is reported when the responses have discrete categories.

S. No	Age	No of respondents	Percentage analysis
1	18-25	38	34.5%
2	25-35	32	29.1%
3	34-50	31	28.2%
4	50 above	9	8.2%
Total		110	100%

INTERPRETATION:

From the above table it is interpreted that the age of the respondents 34.5% were from the age group of 18-25, 29.1% were from the age group of 25-35, 28.2% were the age group of 35-50, 8.2% were the age group of 50 above.

INFERENCE:

- Majority 60% respondents are from female.
- Majority 34.5% respondents are from the age group of 18-25.
- Majority 53.6% respondents are unmarried.
- Majority 30.9% respondents employed are full-time
- Majority 43.6% respondents were mostly using automatic teller machine of digital banking channels of TNSC bank.
- Majority 30.9% respondents were instant fund transfer considered to the most beneficial features of TNSC bank.
- Majority 53.6% respondents were occasionally using the TNSC bank’s digital banking services.

ANOVA

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
	Between Groups	2.937	3	.979	1.250	.295
	Within Groups	83.027	106	.783		
	Total	85.964	109			

INTERPRETATION:

Since the P value (0.295) is more than the level of significance value 0.005. Thus the null hypothesis is accepted. Therefore there is association between the Qualification and Awareness on digital banking transformation

CORRELATION

Descriptive Statistics			
	Mean	Std. Deviation	N
Security measures	1.94	.805	110
Reducing risk of fraudS	2.03	1.079	110

Correlations			
		Security measures	Reducing risk of frauds
Security measures	Pearson Correlation	1	.298 **

	Sig. (2-tailed)		.002
	N	110	110
RE Reducing risk of frauds	Pearson Correlation	.298**	1
	Sig. (2-tailed)	.002	
	N	110	110

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

INTERPRETATION

The correlation analysis examined the relationship between ratings of "Security measures" and "Reducing risk of frauds" on a 1 to 5 scale. A statistically significant positive correlation was found ($r = 0.298$, $p = 0.002$)

FINDINGS

- Majority 60% respondents are from female.
- Majority 34.5% respondents are from the age group of 18-25.
- Majority 53.6% respondents are unmarried.
- Majority 30.9% respondents employed are full-time
- Majority 43.6% respondents were mostly using automatic teller machine of digital banking channels of TNSC bank.
- Majority 30.9% respondents were instant fund transfer considered to the most beneficial features of TNSC bank.
- Majority 53.6% respondents were occasionally using the TNSC bank's digital banking services.
- Majority 45.5% respondents were moderately feels that the TNSC bank's digital services have improved banking experience.
- Majority 45.5% respondents were feels responsive towards TNSC bank's digital customer service(e.g., chat support, email support)
- Majority 44.5% respondents were moderately believes that TNSC bank's digital transformation has enhanced its competitiveness in the banking industry.
- Majority 57.3% respondents were moderately believes TNSC bank's digital transformation initiatives prioritize customer convenience.
- Majority 38.2% respondents were satisfied with the security measures implemented by TNSC bank in its digital banking platforms

SUGGESTION:

- Investigate how TNSC Bank has embraced digital channels such as online banking, mobile banking apps, and social media platforms to interact with customers.

- Analyze the growth of these channels over time and their impact on traditional banking methods.
- Explore the technological infrastructure upgrades implemented by TNSC Bank to support digital transformation.
- This could include investments in cloud computing, data analytics, cybersecurity measures, and the implementation of emerging technologies like AI and blockchain.
- Assess how TNSC Bank has enhanced the overall customer experience through digital transformation initiatives.

CONCLUSION

Digital transformation initiatives have led to increased operational efficiency within TNSC Bank. Automation of routine tasks, streamlined processes, and digitization of documentation have contributed to faster transaction processing and reduced operational costs. The adoption of digital channels such as mobile banking apps, online account management, and chatbots has significantly improved the overall customer experience. Customers now have greater convenience, accessibility, and 24/7 availability of banking services. Digital transformation has enabled TNSC Bank to reach a wider customer base beyond traditional branch networks. Through online and mobile channels, the bank can serve customers in remote areas or those who prefer digital interactions over physical ones.

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