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A Study on the Adoption of FinTech in SBI Banking Sector

Mr. B Sudhakar Reddy[1], K. Siddeshwari[2]
[1]*Associate Professor,* [2]*MBA II Year, Sri Devi Women's Engineering College, Hyderabad*

Abstract: ***Financial Technology (FinTech) has revolutionized conventional banking methods, bringing cutting-edge solutions that improve customer satisfaction and operational efficiency. This research centers on implementing FinTech within the State Bank of India (SBI), exploring its influence on service delivery and customer relations. A survey on the YONO app's awareness of its customers was conducted by analysing primary data. The research assesses the effect of FinTech on SBI's market standing and competitiveness in the Indian banking landscape, offering a comparison of performance before and after the adoption. Finally, the study presents strategic suggestions for maximizing FinTech utilization to keep pace with new trends and foster sustainable growth in the banking sector.***

Keywords: FinTech, YONO app, SBI Banking, Customer perception, Digital payments.

I. INTRODUCTION

The financial industry has experienced significant changes recently, largely due to the emergence of Financial Technology (FinTech). FinTech represents the incorporation of technology within financial services, fundamentally altering traditional banking practices by offering novel solutions like digital payments, peer-to-peer lending, blockchain applications, and AI-driven customer support. This digital shift has resulted in improved operational efficiency, greater customer satisfaction, and increased financial access, especially in developing nations like India. As one of the largest and fastest-growing FinTech markets worldwide, India serves as an important example for examining how financial institutions, especially public sector banks, are adapting to these technological developments.

The State Bank of India (SBI), the largest public sector bank in the country, is key to the financial landscape of India. Founded in 1955, SBI has often been a leader in India's banking industry, providing diverse financial services to individuals, businesses, and governmental entities. Nevertheless, with the emergence of private banks and FinTech firms offering more adaptable and user-friendly digital services, SBI faces mounting pressure to update its operations. In response, the bank has progressively adopted FinTech innovations to enhance its service offerings, boost customer interaction, and optimize internal workflows.

SBI's FinTech integration is part of a larger digital transformation plan designed to sustain its competitive advantage and meet the changing needs of its varied customer demographic. The bank has made substantial progress in incorporating FinTech, including mobile banking services, digital payment options, and leveraging artificial intelligence for personalized customer assistance. Initiatives such as YONO (You Only Need One), SBI's unified digital banking platform, showcase the bank's dedication to using technology to provide a seamless and user-focused banking experience. For example, YONO facilitates access to numerous services, including savings accounts, loans, insurance, and investment options, all available through a single application, simplifying customer banking. Despite these advancements, SBI's transition towards complete FinTech integration has encountered several challenges. Updating technology in a long-established institution like SBI presents significant obstacles, such as outdated systems, regulatory limitations, cybersecurity vulnerabilities, and staff and customer resistance to change. Additionally, public-sector banks like SBI traditionally move more slowly in adopting technological innovations than their private-sector peers, primarily due to bureaucratic procedures and the complexities inherent in large-scale operations. These obstacles demand a careful, incremental approach to implementing FinTech solutions to ensure they meet regulatory standards and are both secure and scalable.

II. OBJECTIVES

1) To explore how SBI uses FinTech in its services.
2) To understand the adoption of FinTech solutions in SBI.
3) To Analyse the digital payments of SBI's customers.

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III. RESEARCH METHODOLOGY

This study uses a mixed-methods approach, combining qualitative and quantitative data to understand FinTech adoption in SBI. Surveys of customers to measure satisfaction and usage patterns, focusing on the YONO platform as a case study. Secondary data comes from SBI's annual reports, RBI publications, and journal articles. This data helps contextualize SBI's FinTech adoption within industry trends and government policies, comprehensively analyzing its impact on operations and customer experience.

IV. LITERATURE REVIEWS

1) Arner, D. W., Barberis, J., & Buckley, R. P. (2015)
FinTech is a transformative force that has redefined financial services post-2008. Its adoption could help traditional banks like SBI become more resilient and innovative in an increasingly digital landscape.
2) Puschmann, T. (2017)
FinTech's innovations, such as digital payments and AI, have reshaped banking by improving efficiency and customer experiences. SBI could enhance its service offerings by integrating such technologies.
3) Gomber, P., Koch, J.-A., & Siering, M. (2017)
Digital finance research shows a trend toward more customer-centric banking models. For SBI, adopting a similar model could enhance customer engagement and retention.
4) Bapat, D. (2020)
Digital transformation is essential for banks to remain competitive in the age of FinTech. SBI can benefit from digital tools and strategies to modernize operations and stay relevant.
5) King, B. (2018)
Future banking will be embedded in everyday life, accessible anytime and anywhere. For SBI, creating digital services that are seamlessly integrated into customers' daily routines could significantly improve its market position.
6) Chuen, D. L. K., & Teo, E. G. S. (Eds.) (2015)
Digital currencies and blockchain offer revolutionary possibilities in finance. SBI could explore these technologies for applications in secure transactions and new financial products.
7) Philippon, T. (2016)
FinTech has the potential to reduce operational costs and improve financial access. By adopting FinTech, SBI could lower transaction costs and enhance financial inclusion, particularly in underserved areas.
8) Leong, K., & Sung, A. (2018)
Technology-driven approaches create substantial business value by streamlining operations and enhancing customer experience. SBI could leverage these insights to improve service delivery and drive value.

V. ANALYSIS & INTERPRETATION

Null hypothesis: There is no significant increase in the awareness of FinTech among SBI customers.
Alternative hypothesis: There is a significant in the awareness of FinTech among SBI customers.

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.877755
R Square	0.770454
Adjusted R Square	0.715648
Standard Error	1.386229
Observations	40

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	40	95	2.375	1.727564
Column 2	40	94	2.35	0.9
Column 3	40	109	2.725	1.383974
Column 4	40	91	2.275	0.460897
Column 5	40	60	1.5	0.923077
Column 6	40	152	3.8	0.625641

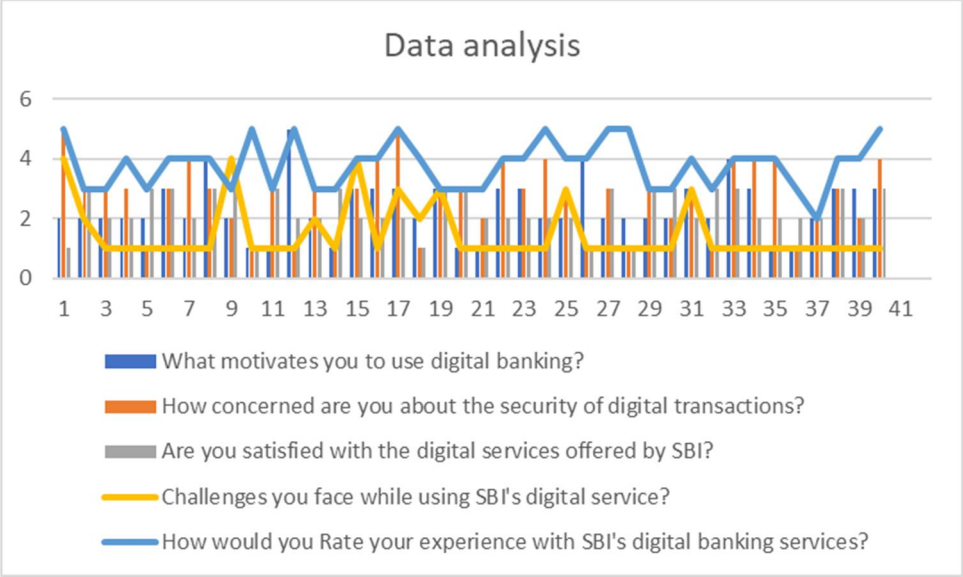
urce of Variation	*SS*	*df*	*MS*	*F*
Between Groups	113.1708	5	22.63417	22.55465
Within Groups	234.825	234	1.003526	
Total	347.9958	239		

This data analysis shows the results of a survey and a multi-correlation (analysis of variance) statistical test.
Response data: Below the questions, a table contains responses from 30 participants (one row per respondent). The respondents seem to be rated on a scale (e.g., 1 to 5).
Statistical analysis: The right-hand side contains the multi-correlation summary to analyze whether the means of the responses across the seven questions differ significantly.
Summary table:
Groups: correspond to the questions (Q1 to Q6).
Count: Number of responses per question (40 for all groups).
Hence, the Null hypothesis was rejected and the alternative hypothesis was accepted.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	00	0	0	0	0	0	0	
What motivates you to use digital banking?	-0.27747	0.256411	-1.08214	0.286591	-0.79801	0.24307	-0.79801	0.24307
How concerned are you about the security of digital transactions? Are you satisfied with the digital services	0.010849	0.210085	0.051641	0.959108	-0.41565	0.437344	-0.41565	0.437344

offered

by SBI?	0.598506	0.247785	2.415422	0.021076	0.095475	1.101537	0.095475	1.101537
What challenges you face while using SBI's digital service?	-0.02041	0.233121	-0.08756	0.930728	-0.49367	0.45285	-0.49367	0.45285
How would you Rate your experience with SBI's digital banking services?	0.429397	0.218122	1.968612	0.056957	-0.01341	0.872207	-0.01341	0.872207



Interpretation

The survey indicates a high level of awareness of SBI's digital banking services, with 97.5% of respondents familiar with platforms like YONO and UPI payments. UPI payments emerge as the most popular feature (80%), reflecting their effective service to users, while YONO (37.5%) and Internet Banking (32.5%) show moderate adoption. However, Mobile Wallets (10%) and Contactless Cards (5%) have much lower uptake, suggesting a need for greater promotion. Most users engage with SBI's digital services regularly, with 82.5% using them daily, weekly, or monthly, while the YONO app (35%) and ATMs (27.5%) are the preferred channels over physical branches or phone banking. Convenience (42.5%) and timesaving (30%) are the primary reasons for choosing digital banking, with security and access to a variety of services being secondary.

Despite this, 60% of users express moderate to high concerns about the security of digital transactions. Customer satisfaction is generally positive, with 60% of users either very satisfied or satisfied, although 40% remain neutral, pointing to potential areas for improvement. A significant portion (75%) faces technical issues like slow transactions and app crashes, and while 47.5% feel SBI provides adequate support, 50% are uncertain about the quality of customer service. Overall, SBI's digital services are viewed favorably, but there is room for improvement in security, support, and technical reliability to further enhance user experience and satisfaction.

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VI. FINDINGS

1) 97.5% of respondents know SBI's digital initiatives like YONO and UPI, with UPI payments being the most popular.
2) Adopting the YONO App and Internet Banking shows growth potential, while Mobile Wallets and Contactless Cards require promotional efforts.
3) 32.5% of users access SBI's digital services daily, but 17.5% are rare users, indicating opportunities to increase engagement.
4) Mobile banking via the YONO App is the most preferred channel, followed by ATMs, reflecting a shift from traditional banking methods.
5) Convenience and time-saving are the main reasons for using SBI's digital services.
6) Security concerns remain significant, with users moderately to highly concerned about safety.
7) The users report technical issues like slow transactions and app crashes, highlighting the need for technical improvements.
8) They are the users satisfied with the services, but remain neutral, with inconsistent support and technical challenges impacting satisfaction.

VII. SUGGESTION'S

1) Increase awareness and promote usage of Mobile Wallets and Contactless Cards through targeted marketing campaigns.
2) Highlight underutilized services' convenience and security benefits to attract more users.
3) Introduce incentives such as cashback or rewards to encourage daily or weekly usage of digital services.
4) Provide tutorials or webinars to educate rare users (17.5%) about the ease and benefits of digital banking platforms.
5) Address technical issues like slow transactions and app crashes to enhance the reliability of digital services.
6) Invest in robust infrastructure to deliver smoother and faster digital banking experiences.
7) Increase transparency about security measures to reduce user concerns and build confidence in digital banking.
8) Launch educational campaigns or app notifications to promote safe digital banking practices.
9) Gather feedback from neutral users to identify pain points and implement intuitive design and features to boost satisfaction.

VIII. CONCLUSION

SBI's digital banking initiatives are well-received, with strong awareness and consistent engagement. Addressing technical challenges, promoting underutilized services, and improving customer support could enhance user satisfaction. By focusing on these areas, SBI can solidify its leadership in digital banking and meet evolving customer expectations effectively. SBI's digital banking services demonstrate strong awareness and regular engagement, with UPI being the most popular platform, reflecting its effectiveness. However, moderate usage of the YONO app and underutilization of mobile wallets and contactless cards suggest the need for enhanced promotion and user education. While convenience and timesaving drive adoption, technical issues like app crashes, security concerns, and inconsistent customer support remain key challenges. Addressing these areas and enhancing the usability and reliability of digital platforms can convert neutral users into satisfied ones, further solidifying SBI's leadership in the digital banking space.

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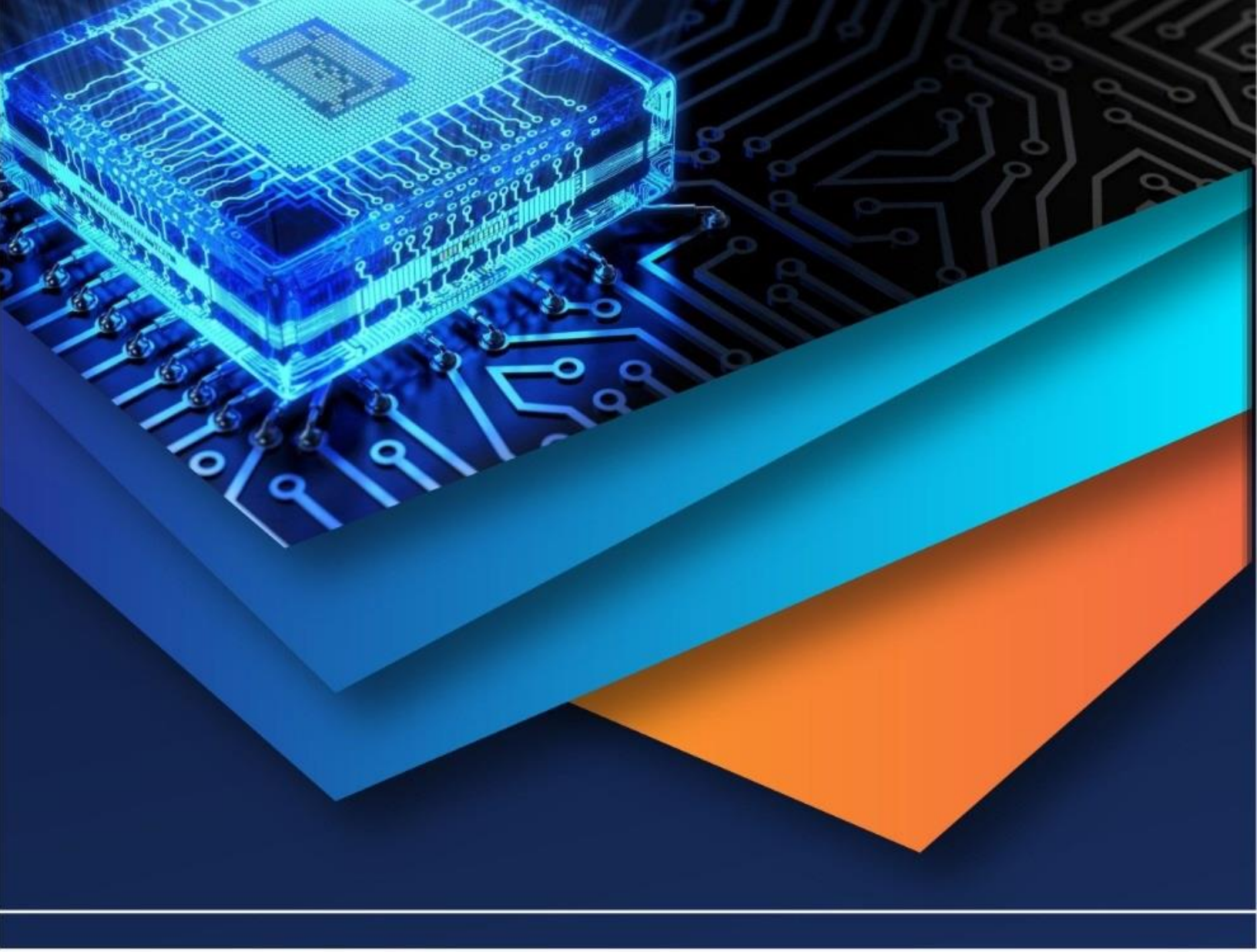
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What motivates you to use digital banking?	How concerned are you about the security of digital transactions?	Are you satisfied with the digital services offered by SBI?	Challenges you face while using SBI's digital service?	How would you Rate your experience with SBI's digital banking services?
2	5	1	4	5
2	3	3	2	3
2	3	2	1	3
2	3	2	1	4
2	1	3	1	3
3	3	3	1	4
2	4	2	1	4
4	3	3	1	4
2	2	3	4	3
1	1	1	1	5
1	3	3	1	3
5	1	2	1	5
2	3	2	2	3
1	1	3	1	3
3	3	2	4	4
3	4	2	1	4
3	5	2	3	5
2	1	1	2	4
3	3	3	3	3
1	3	3	1	3
1	2	2	1	3
3	4	2	1	4
3	3	2	1	4
2	4	2	1	5
2	3	2	3	4
4	1	1	1	4
2	3	3	1	5
2	1	1	1	5
2	3	3	1	3
2	2	3	1	3
3	3	2	3	4
2	1	3	1	3
4	4	3	1	4
3	4	2	1	4

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1	4	2	1	4
1	1	2	1	3
2	2	2	1	2
3	3	3	1	4
3	2	2	1	4
3	4	3	1	5

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