# The Impact of Digital Transformation on the Performance of Banks in Sri Lanka

# INTRODUCTION

Sri Lankan Bank Performance Affected by Digital transformation. Digital transformation has emerged as a critical engine of innovation and competitiveness within the banking industry in today's rapidly changing financial world. Rapid technological breakthroughs have led banks all over the world to use digital technologies to boost efficiency, enhance client experiences, and simplify operations. Like many emerging countries, Sri Lanka is going through this transition because of its banks utilizing digital platforms and technology more and more to remain competitive. The nation's financial environment is being redefined in large part by blockchain, big data analytics, artificial intelligence (AI), and mobile banking. (Vial, 2019)

The banking industry in Sri Lanka, which was formerly dependent on physical branches and manual procedures, is increasingly adopting digital efforts to satisfy changing client needs. The ease of use and accessibility of digital services, such as mobile applications and online banking, have become indispensable to the banking process (Baptista & Oliveira, 2017). For banks to continue being profitable and maintaining their client base, these technologies are crucial. Banks in Sri Lanka are looking for methods to improve operational efficiency, save costs, and minimize risks while simultaneously increasing client engagement and retention as digital transformation becomes a priority (Fernando, 2020).

By creating legal frameworks that encourage digital innovations while maintaining financial stability, the Central Bank of Sri Lanka has been instrumental in facilitating this shift (Central Bank of Sri Lanka, 2021).

The foundation for a digitally driven banking environment has been established by the government through programs that support fintech solutions, digital payment systems, and safe online banking. But obstacles including the price of adopting new technology, cybersecurity threats, and the lack of digital skills, particularly in smaller banks, continue to be major roadblocks to complete transformation (Ranaweera, 2019).

The purpose of this study is to investigate how Sri Lankan banks' performance is affected by digital transformation. It specifically looks at how digital efforts impact overall financial success, customer happiness, and operational efficiency. The report offers insights into the differing degrees of digital adoption throughout the industry and its implications for future growth by analyzing both major and small banks. In addition, the study discusses important issues and looks at how digital technologies could improve Sri Lankan banks' competitiveness and resilience in the digital era. (Perera & Wickramasinghe,2020) The capacity of banks to adopt and incorporate new developments in digital technology will be essential to their long-term performance and to their ability to support Sri Lanka's overall economic growth.

#### LITERATURE REVIEW

Digital transformation is the integration of digital technologies into all business areas, profoundly changing how companies operate and deliver value. In the banking sector, this transformation involves the use of technologies like mobile banking, artificial intelligence (AI), blockchain, and big data analytics to improve operational efficiency and customer experience.

Globally, banks are leveraging these technologies to stay competitive and meet evolving customer expectations. According to Schallmo, Williams, and Boardman (2017), digital transformation is a key factor in ensuring the sustainability and competitiveness of businesses, including banks. Similarly, a study by Deloitte (2018) highlighted the growing importance of digital banking, particularly in emerging markets where it enhances customer reach and reduces operational costs. The Sri Lankan banking sector, while slower to adopt digital technologies compared to other regions, has seen a significant increase in digital adoption, particularly in recent years. The COVID-19 pandemic acted as a catalyst for digital banking as more customers sought remote financial services.

Senarathna and Wickramasuriya (2020) found that factors such as customer trust, perceived ease of use, and security played a pivotal role in the adoption of mobile banking in Sri Lanka. Furthermore, the Central Bank of Sri Lanka (2021) reported that there has been a noticeable shift towards digital payments, reflecting growing consumer preference for convenience and efficiency over traditional banking channels. Digital transformation has had a notable impact on the performance of banks by improving operational efficiency, reducing costs, and enhancing customer satisfaction. According to a study by Velu (2019), banks that invest in digital infrastructure tend to see improved financial performance due to reduced transaction costs and increased customer engagement.

In Sri Lanka, banks that have adopted digital channels report higher levels of customer satisfaction and retention, as digital banking provides greater accessibility and convenience for users (Central Bank of Sri Lanka, 2021). Digital technologies also streamline internal operations, allowing banks to process transactions faster and reduce operational bottlenecks (Weerasinghe & Jayawardena, 2020). Looking ahead, the future of digital banking in Sri Lanka appears promising as banks continue to invest in technology to improve service delivery. The Central Bank of Sri Lanka has introduced initiatives aimed at promoting digital financial inclusion, including the expansion of mobile banking services to underserved rural areas (Central Bank of Sri Lanka, 2021). Furthermore, with the rise of fintech companies, traditional banks are likely to face increased competition, driving further innovation in the sector. According to Jayasuriya (2021), banks that fail to innovate and adopt digital solutions risk losing market share to more agile, technology-driven competitors.

## RESEARCH METHODOLOGY

This study adopts a mixed-methods approach, integrating both quantitative and qualitative data to provide a comprehensive understanding of the impact of digital transformation on bank performance. A cross-sectional design is used, gathering data from a set of banks operating in Sri Lanka within a specific period. This allows for the examination of the relationship between digital transformation initiatives and their impact on performance indicators across multiple banks.24 banks that are major participants in Sri Lanka's banking industry and are both domestic and foreign entities make up the sample.

Among these banks are Amana Bank Plc,Bank Of Ceylon, Bank Of China Ltd,Cargills Bank Plc,Citibank, Commercial Bank Of Ceylon Plc,Deutsche Bank Ag, Colombo Branch,Dfcc Bank Plc,Habib Bank Ltd,Hatton National Bank Plc,Indian Bank,Indian Overseas Bank,Mcb Bank Ltd,National Development Bank Plc,Nations Trust Bank Plc,Pan Asia Banking Corporation Plc,People's Bank,Public Bank Berhad,Sampath Bank Plc,Seylan Bank Plc,Standard Chartered Bank,State Bank Of India,The Hongkong & Shanghai(Hsbc) and Union Bank Of Colombo Plc.The banks were chosen based on their position in the Sri Lankan banking sector and their embrace of digital transformation technology.

Secondary information is gathered from Annual reports from banks. These reports include information on digital transformation initiatives, such as the proportion of transactions handled through digital platforms, adoption rates for mobile banking, degrees of automation, and the use of AI and big data. revenue growth, operating expenses, and profit margins.

Publications and reports from the industry: The Central Bank of Sri Lanka's reports are used to monitor regulatory compliance and the uptake of digital banking. An examination of both local and worldwide developments in digital banking is supported by the review of pertinent research papers, journal articles, and case studies.

We get primary data using the following techniques are Surveys: Information on customer satisfaction, retention rates, and opinions on digital services is gathered by distributing a standardized questionnaire to bank staff members and clients. A Likert scale (1–5) is used in the poll to gauge respondents' satisfaction with a range of digital banking services, customer support, and response times. To evaluate the connection between digital transformation and bank performance, the study combines quantitative and qualitative data analysis methods.

Descriptive statistics: Mean, median, and standard deviation are used to analyze data that has been gathered on the adoption rates of mobile banking, transaction processing times, customer satisfaction ratings, and other pertinent metrics. The correlation between digital transformation indicators automation, adoption of AI, mobile banking, and bank performance indicators operational efficiency and profitability, customer happiness may be ascertained using correlation and regression analysis.

Comparative analysis: Data from before and after the digital transformation are compared to see how digital technologies affect performance indicators like revenue growth and operational cost reduction.

# **RESULT AND ANALYSIS**

Analysis of data provides insights into the adoption rates of mobile banking, online banking, and AI & big data across 24 banks. On average, mobile banking has an adoption rate of 39.17%, with rates ranging from as low as 15% to a maximum of 67.5%. This indicates that while some banks have made significant strides in getting their customers to use mobile platforms, many still experience lower engagement. The middle 50% of banks show adoption rates between 25% and 52.5%, suggesting that a significant number of banks are seeing moderate uptake of mobile banking services.

Online banking, on the other hand, shows slightly higher adoption, with an average rate of 42.5%. The adoption range spans from 25% to 70%, reflecting that online platform are somewhat more established and widely used than mobile services. The middle 50% of banks report online banking adoption rates between 25% and 55%, further highlighting that while a few banks have seen strong customer engagement, a substantial portion of banks are still working to boost their online banking adoption.

When it comes to AI and big data, the average adoption rate across the banks is 40%. Adoption rates in this area vary from 20% to 70%, indicating that while some banks are early adopters of these advanced technologies, others are lagging. Most banks fall within the 25% to 55% range for AI and big data adoption, reflecting the emerging nature of these technologies in the banking sector. Although there is interest and gradual adoption, it appears that AI and big data have not yet reached widespread implementation across most banks. Online banking adoption leads the way, followed by AI & big data and mobile banking. While some banks are at the forefront of technology adoption, many others are still in the process of improving their digital offerings to customers.

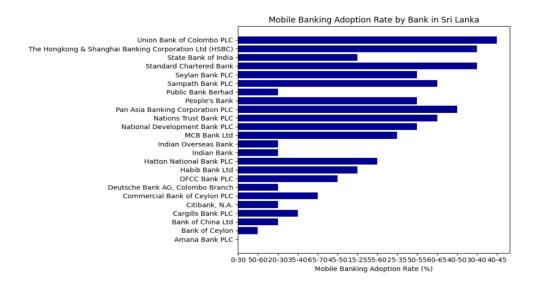


Fig.1.Mobile banking adoption rate by bank Sri Lanka

(Source: Research Data)

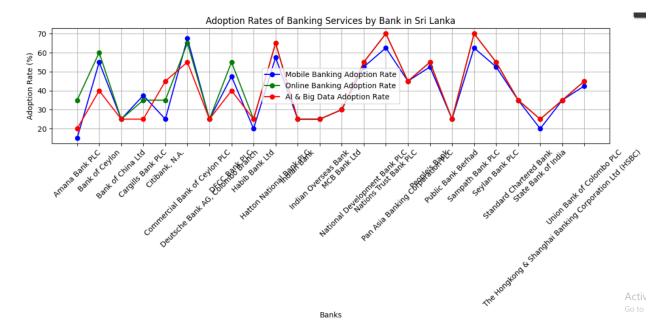


Fig.2.Adoption Rates of banking service by bank in Sri Lanka. (Source: Research Data)

	Average Score	Standard Deviation
Metric		
<b>Overall Satisfaction</b>	2.96	1.41
Ease of Use	3.06	1.50
<b>Transaction Speed</b>	3.02	1.54
<b>Customer Service</b>	3.04	1.52
Experience		
Accessibility	2.62	1.45
Likelihood to	2.84	1.46
Recommend		

The findings underscore the importance of customer experience in digital banking. With an overall satisfaction score of 2.96 and a low likelihood to recommend score of 2.84, it is evident that many customers feel that their needs are not being fully met. The moderate ratings for ease of use (3.06) and transaction speed (3.02) suggest that while some aspects of the digital experience are satisfactory, there are still significant pain points that banks need to address. For instance, improving the accessibility rating of 2.62 should be a priority, as it directly impacts customer engagement and retention. Banks should consider conducting usability studies and gathering feedback from customers to identify specific barriers they encounter while using digital platforms.

## DISCUSSION

The integration of advanced technologies like AI and big data analytics has the potential to significantly enhance operational efficiency and customer satisfaction. The analysis indicates that banks leveraging these technologies tend to perform better, particularly in terms of customer service. For example, the adoption of AI-powered chatbots can streamline customer inquiries and provide timely assistance, which could directly improve satisfaction levels. This highlights the need for banks, especially smaller institutions, to prioritize technological investments that facilitate automation and improve customer interactions. Furthermore, banks should explore opportunities to collaborate with technology providers to enhance their digital capabilities without incurring substantial costs.

The disparities in digital adoption between larger and smaller banks reveal a critical need for smaller banks to rethink their strategies in a digital-first environment. Smaller banks often lack the resources to compete effectively with larger institutions, but they can carve out a niche by focusing on personalized service and targeted digital solutions. For instance, offering tailored financial products that address specific customer segments or local community needs could enhance customer loyalty and satisfaction. Additionally, investing in employee training programs focused on digital literacy and customer service can empower staff to better assist customers in navigating digital platforms.

Despite the advantages that digital transformation offers, several barriers remain, including high implementation costs and cybersecurity threats. The reluctance of smaller banks to invest in new technologies due to budget constraints could hinder their ability to compete effectively. Banks must find ways to mitigate these challenges by adopting a phased approach to digital transformation, prioritizing high-impact initiatives, and exploring partnerships or alliances that can provide shared resources or expertise. Furthermore, as cybersecurity threats escalate, banks must proactively invest in robust security measures to protect customer data and maintain trust.

#### **CONCLUSION**

In conclusion, the study reveals that while Sri Lankan banks are actively engaging in digital transformation efforts, there are critical areas requiring attention to enhance customer satisfaction and operational performance. The moderate levels of user satisfaction, alongside notable disparities in digital adoption between larger and smaller institutions, highlight the need for targeted strategies that prioritize accessibility, customer engagement, and the integration of advanced technologies. As banks navigate the challenges of implementation costs and cybersecurity threats, a phased approach to digital transformation, combined with a commitment to continuous improvement, will be essential for fostering customer loyalty and ensuring long-term competitiveness in an increasingly digital banking landscape. Ultimately, the successful adoption of digital initiatives will not only benefit individual banks but also contribute to the broader economic growth of Sri Lanka.

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