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A Study on the Challenges faced by the Digitalisation of the Indian Financial[1] Sector

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ABSTRACT

In this digital era, there is no sphere of life that does not use technology. In our daily schedule, it's clear that the day begins with a machine and ends with a machine. In such a phase, the financial sector, too, has shifted to digital platforms, which can help the masses save time by avoiding long queues at banks waiting for their turn to withdraw cash. Digital inclusion offers many benefits, making it the need of the hour for the financial sector to adopt it. Along with the pros, everything has some cons. Therefore, the financial industry was digitised, but numerous challenges arose. This study aims to understand the role of digital technology in the financial industry and the issues arising from the digitalisation of the Indian financial sector. This study will focus on the reasons behind these issues by reviewing secondary data from the literature, so the financial industry can take appropriate measures to resolve them. The digitisation of payment methods enables the development of new products and services in a more efficient market. Along with this, users want to make secure payments in a simple, almost imperceptible manner.

Keywords: Digitalisation; Financial Inclusion; Indian Financial Sector; Regulatory challenges .

INTRODUCTION

Nowadays, everything is digitally stored, which means we can access any service from a mobile phone, computer, or tablet. The invention of computers and smartphones has dramatically impacted financial services. Computers and mobile phones today enable people to maintain their bank accounts, verify account information, transfer funds, deposit cash, renew deposits, pay bills, book tickets, and so on. ATMs have also sped up cash withdrawals from banks. Providing services through digital technologies saves time. Customers can manage their finances

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conveniently through E-banking. Additionally, the risk to customers' financial security and personal privacy has also risen along with this usage (Mahmoud, 2019). Given the availability of dozens of handset models supporting different technologies on the market, it was determined that knowledge of telephone use was of utmost importance for mobile banking. Furthermore, the digital banking transformation was also driven by the integration of social media components. Digital wallets have significantly impacted the financial services industry. The changes in banking technology also affect the economy. Their customers can get better service from them (Anagnostopoulos, 2018). The company's rapid growth makes it well accepted by the market. Given the benefits of digital banking, the market began to demand it, driven by overall success and development. Still, due to digitalisation, the financial sector has faced many issues, including loopholes. By providing the impoverished with simple, inexpensive financial services, ICT will improve MFIs' ability to deliver services, helping end poverty and advancing economic growth in developing countries (Ola et al., 2024).

Evolution of Digitalisation in the Indian Financial Sector

Traditionally, financial services could only be obtained via physical bank branches. As the financial sector becomes more digital, it will offer the same services and products previously available only at physical locations. Digital platforms are used for banking. Various devices, including smartphones and laptops, can access banking services. In the late 1980s, it was felt that the banking industry needed to be computerised. Thus, the Reserve Bank formed a committee headed by Dr C. Rangarajan for this purpose in 1988 (Shaji, 2020). For the protection of environmental degradation and towards green growth, digitalisation is more helpful (Aaghaz et al., 2024; Agrawal, 2025).

Banks initially used information technology with standalone personal computers and then moved to local area networks. Over time, banks adopted core banking platforms. Branches were turned into banks at the beginning of the century. In the early 1990s, as the economy was opening, banks implemented core banking solutions, raising clients' comfort levels (Parameswar et al., 2017). This was a landmark step towards meeting customer needs through "Anywhere and Anytime Banking." The process of computerisation then accelerated. The increasing competition from foreign and private banks was a major catalyst for this transformation. To stay competitive, banks began offering digital services to customers. Additionally, under "Atmanirbhar Bharat," the government has introduced several packages to revive the economy by targeting small and micro businesses and making financing more accessible (Ola et al., 2024).

Steps taken by the Government of India to promote digital banking

UPI is a government-introduced system introduced in 2016 that enables banks to transfer money quickly to and from bank accounts. This type of digital money transfer was available before 2016, but was not accessible to everyone because it relied on desktop systems. UPI launched a digital revolution in India and enabled mobile banking. A mobile phone can now open a bank account and make payments. The government also encourages people to link their bank accounts to their Aadhaar numbers (Rudresha, 2019). The owner must be authorised to

access a bank account. Through digital banking, an individual in India can open a bank account quickly and easily without visiting an actual bank branch.

India's current position in the digital set-up

The Indian government is promoting digital transactions like never before. The National Payments Corporation of India launched UPI and BHIM as innovations in payment systems. Digitalisation is one of the top priorities for banks in India today, as they aim to provide customers with an accurate, fast, and high-quality banking experience. More than 25 lakh Point of Sale (POS) devices and more than 2 lakh ATMs are in existence, according to an RBI report. Electronic payments such as NEFT, RTGS, Cheque Truncation Systems, and Mobile Banking have been widely accepted by Indian banks and other financial institutions. In this country, these landmarks have marked the evolution and growth of digital banking.

Literature Review

None of our sectors or industries can reach their potential without technology. Globally, the banking sector has been ravaged by information technology (computerisation, internet and digitisation). Technology is consideredone of the most essential tools for making enterprises more efficient and productive in a modern context. As withother countries, technology is now used to render banking services in India (Kant & Jaiswal, 2017).

Today, banks are transforming their services to improve customer experience. Almost every branch or office of a bank uses computers and the Internet nowadays. This is especially true for scheduled commercial banks in the service industry. It is primarily the banking industry employees who use technology, followed by the customers at the other end of the channel. Consequently, technology-assisted services can directly influence productivity and the banking business. By digitising banking, we get the best of both worlds: a new process for delivering banking services to customers on the outside and a more efficient, effective operating model inside, facilitated by technology, methods, and structures (Klus et al., 2019).

The study utilized a total of 60 colleges, comprising 30 institutions from 2019 to 2022. The research employed both the input and output methods within the frameworks of constant returns to scale and variable returns to scale. Data Envelopment Analysis and Independent t-test are used to look at the data. The results clearly show that Islamic microfinance institutions are more efficient on average than their traditional counterparts, and that there is no big difference between the efficiency scores of the two types of institutions (Farooque & Ranjan, 2025).

Role of digitalisation in finance

Consumer data is a goldmine for the financial industry since it was one of the first to collect it. However, data alone has little value unless it is analysed and interpreted to transform it into a valuable business asset. From business strategy to customer relationship improvement, digitalisation connects raw data and intelligence (Henisz et al., 2014). The banking sector is called this because it contributes to the development of other sectors by

providing financial assistance. Thus, it acts as an accelerator of capital formation. Digital Banking is one of the new paradigms in India, offering multiple benefits for the banking sector. The banking sector benefits from it by increasing its productivity and profitability. In this age of technological development, this is a necessary step. This is primarily done to improve the 4Cs: Cost, Controls, Convenience, and Customer Satisfaction. In creating the digital banking framework, a group of bankers, IT professionals, consultants and researchers worked collaboratively. Digital signals enable data storage. It simplifies the process of banking.

Transactions using digital banking are straightforward & easy. An example is SMS banking. Now, each customer is free to act as they see fit. As part of the introduction of online banking, digital banking is part of a broader picture. In addition to the various digital banking services the banks provide their customers, some are "National Electronic Fund Transfer, Real Time Gross Settlement, Debit and Credit Cards, Mobile Banking, and Interbank Mobile Payment System". Before implementing these services, the banking sector in rural India faces many obstacles, challenges, and issues (Hasan et al., 2010). According to a study by Vishal, customers are always interested in safety and security during cash transactions. This paper examines the perceptions and opinions of urban mobile banking users. His focus is on mobile banking practices and challenges in India. Quota sampling is the method he uses. A primary source of data is used to collect the data. 100 respondents were surveyed, divided into two groups: 50 who use mobile banking and 50 who do not. Samples were collected from Ghaziabad city. Given the availability of different handset models supporting various technologies in the market, knowledge of mobile phone use was determined to be the most crucial factor in mobile banking.

Importance of digital platforms

In the decades since independence, India's economy has struggled to grow. The growth of the economy and integration of the social sector have been twin challenges addressed by public authorities and policymakers alike. Increasing adoption of ICTs can improve productivity and economic efficiency, increase transparency in the delivery of public services and welfare programs, reduce corruption, and bring remote areas closer to cities.

Digitalisation has enormous benefits for financial services products. Additionally, digital products are appealing because of their efficiency and process efficiencies. Millennials, the market's most crucial demographic right now, expect easy access to flexible, low-priced products - all attributes that digitalisation can help businesses in the financial industry develop. Banks can enhance customer service by embracing digitalisation (González-Páramo, 2017). The customer benefits from convenience and can save time. As a result of digitisation, customers become loyal. With the advent of online banking, people now have 24/7 access to their bank accounts. Additionally, managing large sums of cash is now easier. Customers have also benefited from digitalisation because it has facilitated cashless transactions. The customer no longer needs to keep any money and can conduct transactions anytime and anywhere.

OBJECTIVES

- To know the role played by digital technology in the financial sector.

- To understand the challenges faced through the digitalisation of the Indian financial industry.
- To know the reasons behind the issues faced in the digitalisation of the Indian financial sector.

Methodology

Most of the information in this study comes from secondary sources. Data from current literature studies on financial sector digitalisation have been gathered. Documents, books, diaries, websites, and other archive materials can be used similarly. The data from various sources is examined using descriptive and analytical approaches based on these classifications.

Discussion

Digital payments, as well as the use of new technology in the financial industry more broadly, have clear benefits. On the one hand, costs are cheaper, and access to the financial sector is simpler. As a result, in addition to lowering the cost of lending, which helps both individuals and businesses, it may also help alleviate financial exclusion issues in many nations, particularly in emerging economies (Santos & Kvangraven, 2017).

Furthermore, it enhances “customer experience," an essential part of any business relationship. Furthermore, digitising payment methods enables the development of new products and services in a more efficient market. Users want to make secure payments in a simple, almost imperceptible manner. They also want them to be quick and inexpensive. They want payment methods that are simple to use, constantly available, and accessible online. Payment is a part of the business process. In commercial enterprises, there is a trend toward dilution of payments (Geerling, 2018). On the other hand, payment is and will continue to be a complicated procedure in which many different operators, clearing and settlement institutions are involved.

Though these digital modes of transaction in the financial sector provide much ease for both banks and customers, they present many challenges. These challenges are as follows:

1. **Privacy Issues:** This is the most significant problem in digital banking. Everyone is concerned about the privacy and security of digital banking. They are sceptics of digitalisation. They want to conduct business with cash. Most clients' attitudes toward banking did not alter. They believe that as technology advances, issues will arise. Customers do not want to take any chances with the money they have worked hard to achieve. With digitalisation comes antivirus software, which may wreck your life (Stone, 2021).
2. **Internal Barriers:** Banks' internal cash management operations are frequently manual and time-consuming. End-to-end digitisation is required to improve the efficiency of cash centralisation, reconciliation, and fraud detection operations. Enhancing application integration enables customers to link real-time services and data, thereby optimising service offerings.

3. **Digitalised Banking System:** The need for digitalisation is increasing rapidly. However, most banks lack the courage to implement this method swiftly. For this, the most significant and professional management

will be necessary to ensure that the organisation benefits from its policies and plans. Some people prefer a ready-made system, while others prefer to design and execute their own. Making a decision that benefits the organisation takes a long time. This makes choosing which system to employ a problem for the organisation because each option has benefits and drawbacks (Kalsan, 2020).

4. **Time-Consuming:** Payment processes are still time-consuming, with numerous parties involved, resulting in increasing inefficiencies. In addition to complying with regulatory requirements such as ISO 20022, banks are increasingly required to deliver greater security to their customers through payment and authorisation procedures.

5. **Fewer people using smartphones**: The number of smartphone users in rural areas is relatively low, which impedes the adoption of rural banking digitisation.

6. **Liquidity access:** Liquidity availability, poor visibility in real-time cash situations, and cash forecasting remain key client problems. In addition, there is a lack of connectivity to corporate ERP systems, which is required to increase the accuracy of liquidity metrics. Another issue is the decentralisation of cash management solutions, which has the unintended consequence of reducing the global concentration of subsidiary roles (Futures, 2021).

7. **Rural India has a lower literacy rate than urban India**: It is self-evident that knowledge of how to use digital financial services is required. According to the survey, the most significant barrier to digitalisation in rural banking is illiteracy, which affects 29% of the rural population. The information was gathered as part of a survey on 'Social Consumption: Education' conducted by the National Sample Survey Office (NSSO) under the Ministry of Statistics and Programme Implementation during the 71st National Sample Survey (NSS) Round, which took place from January to June 2014.

8. **Lack of infrastructural facilities**: Infrastructure facilities like electricity and communication networks must be available to support the digitalisation of rural banking. According to a World Bank estimate, approximately 96 per cent of Indian villages are electrified, but only 69 per cent of households have access to electricity. Because of limited infrastructure and low transaction volume, providing financial services in rural areas is costly.

9. **Rural people lack banking habits:** Most individuals in rural areas lack access to banking due to a lack of banking awareness and financial literacy. Rural India relies on cash rather than digital cash to meet daily needs, since most transactions involve money or barter. Rural people have low levels of financial literacy, meaning they are unaware of the many types of payments that may be made. Rural people resist technological change due to a lack of understanding of digital banking services (Nayak, 2018).

10. **Network issue**: Communications networks in rural areas are experiencing difficulties, preventing digital payments. This must be solved.

In this technological era, digitalisation is essential, but for secure and safe utilisation of digital techniques in the financial sector, a few measures, such as spreading awareness among the people, related to the usage of this online transaction software and many other steps for overcoming the issues faced by the financial sector due to digitalisation. It might be challenging to shift from outdated, disjointed legacy banking systems to a contemporary, digitally connected environment. The essential software, bespoke procedures, interfaces with external systems, security, and upkeep will necessitate a significant upfront expenditure. Furthermore, if the financial sector wants to optimise its investments and get the most out of them, personnel will need to be educated and regularly updated. The digital transformation in banking is fueled by the need for customised security and compliance solutions that can scale with demand. In today's market, some solutions can scale to nearly any size, leveraging automation and complete cloud scalability to secure anything - from WhatsApp conversations to Facebook status updates - no matter how extensive a bank's digital asset portfolio may be. Banks must transform to keep up with digital technology. If they don't, they will be left behind. On the other hand, banks should see opportunities to provide better services and develop stronger client relationships, where most see problems because customer happiness and trust are the most crucial factors.

CONCLUSION

Despite being one of the world's fastest-developing countries, India is falling behind in the adoption of digitisation in the banking sector. True, banking digitisation will revolutionise the economy; nevertheless, specific critical measures must be taken to digitise rural banking. It offers many advantages but also has drawbacks. The various benefits of digital banking can sometimes lead to an overestimation of the hazards associated with digital financial inclusion. Individuals without formal bank accounts have been criticised for failing to benefit from the adoption of digital financial services. Those who do not use digital devices for financial transactions or decisions do not receive the benefits. Furthermore, even if everyone has access to digital banking products, low-income people will only benefit if they are more convenient than going to a bank. Despite the high cost of digital finance, fintech service providers should not hesitate to charge their consumers a fee. Digital financial services must be efficient in delivery and utilisation, and be offered ethically at a reasonable, sustainable price to digital finance clients. The essential measures must be taken to achieve the objective for which this approach has been developed, so that everyone can safely and without fear.

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