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CHALLENGES FACED BY RETAIL BANKING FROM FINTECH IN PRIVATE SECTOR BANKS IN INDIA

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Abstract: *The banking sector is undergoing a radical shift due to digitization, one of the most significant developments in the business. As a result of digitalization, financial institutions now have more ways to prioritize their customers' needs. The retail financial service value chain is seeing sustained disruption from new technologies entering and remaining in the industry. Both the current leaders and the newcomers have access to cutting-edge tools. Banking and finance have been reimagined as an "enabler" rather than a "supplier" of goods and services in response to the dynamics driving these shifts. According to the World Retail Banking Report 2022, 75% of consumers are interested in using FinTechs because of the low prices and convenient nature of the services they provide via their emphasis on financial automation. Because of this, they now have much higher standards for their online banking experience. Oracle's research shows that eighty-one percent of clients prefer digital channels over branch visits when communicating with financial institutions. Online and mobile banking services have been down for most retail banking users. This is due to the fact that most Indian banks are still not comfortable with cloud migration and the fact that all conventional Indian banks are based on security rather than scalability. In this respect, cutting-edge FinTech firms of the future generation are prevailing over their more established counterparts in India's conventional retail banking sector. To begin with, technology and Fintech have threatened the status quo of traditional retail banking, which has negatively affected their income. As Fintech in India grows, it is time for widespread adoption of financial automation throughout the country's banking system.*

Keywords: *Bank, blockchain, digital, finance, Fintech, investment, online, payment service, peer-to-peer, third-party integration.*

I. INTRODUCTION

There has been an upheaval in the global banking industry recently, with the introduction of new digital technologies and the development of FinTech. This change is a result of many factors, including the globalisation of finance, the development of new technologies, the need for innovative approaches in business, and the competition among service providers to fulfil rising customer expectations. As financial technology continues to advance at a fast pace, the banking industry is forced to innovate its operational processes to maintain a competitive edge [1].

Financial technology allows banks to update their outdated, physical business models to more efficient, digital ones. "Current banking practices are evolving due to the introduction of new technologies such as big data analytics, AI, machine learning, cloud computing, blockchain, fog computing, crowdfunding, and others." When applied to the financial services industry, these technical and digital breakthroughs have the potential to open up new avenues of profit. It is anticipated that the impact of FinTech advances in banks would extend well beyond the realm of internet banking. This chapter will add to the current body of research on how the mass collection of customer data is soon likely to alter the structure of the global banking industry. Stakeholders will benefit from a deeper understanding of the possible risks, opportunities, and problems associated with FinTech if and when such an examination is conducted. Further, it will provide new

opportunities for researchers to explore previously uncharted territory in the rapidly expanding field of financial technology.

A New York banker coined the phrase "FinTech" in 1972. "Even though the term FinTech does not have a universally agreed-upon definition, businesses that are generally included in that category offer services like online marketplace lending, mobile apps, financing, foreign exchange and remittances, investments, distributed ledger technology, digital currencies, mobile wallets, artificial intelligence and robotics in finance, crowdfunding, insurance, and wealth management (RegTech)." Thus, growing technology-enabled trends that promote innovation have had a considerable effect and influence on the financial services industry. Anikina [2] recently published a paper titled Capital Markets: Innovation and the FinTech Landscape, in which they highlighted nine technologies or technology-enabled trends that either individually or jointly make it possible for existing and future FinTech breakthroughs to existing:

1. The Internet as a storage medium
2. Contracting out processes and services
3. Mechanized Robotic Process Automation (RPA)
4. 4.0 Superior Analyses
5. Digital Revolution
6. Decentralized Ledger Technology (Block Chain)
7. Contracts, Number Seven
8. Synthetic Intelligence (AI)
9. The IoT

II. FINTECH IN BANKS: NEW CHALLENGES

There are positive outcomes from FinTech innovations, but concerns are also associated with this new field. There are two main categories of threats that FinTech companies must contend with: those that are intrinsic to the technology itself and those that are inherent to the financial service being offered. This shows that, due to their variety, these risks take work to manage. Banking institutions and FinTech firms must exercise extreme caution while developing strategies to counteract these dangers.

1. Security risk

Security and privacy concerns are always present in FinTech, just as they are with any other IT product, but they are more important given the monetary nature of the transactions being made. "The Consumer Financial Protection Bureau (CFPB) resolved its first data security enforcement action in March 2016 against Dwolla, an online payment processing firm that was found to offer false cyber-security." This is only one example of many instances involving data security. In addition to paying a \$100,000 fine, the corporation must improve its data security procedures over the following five years [3]. The use of digital financial services is met with growing scepticism due to security risks such as credit card theft.

2. Technical risk

Complete digitization of the financial sector has challenges, including the potential incompatibility of certain old banking activities with new technologies. Furthermore, there is always a chance of technological failure with any IT-based approach.

3. Regulation risk

Since many FinTech technologies, including blockchain, crowdfunding, cryptocurrencies, etc., are novel to the banking sector, central banks across the globe have been striving to adapt by providing them with the

appropriate rules; nonetheless, there is a danger in the absence or delay of such a regulation. For instance, a FinTech business that engages in P2P lending may not be subject to laws governing traditional banks since P2P lending is not considered "lending" under these rules. One example of a financial service that facilitates connections between individuals online is peer-to-peer lending [4].

4. Financial risk

There will always be financial hazards so long as FinTech is employed to perform financial transactions. However, the specific nature of the financial risk involved will be transaction-specific [4]. An example would be the recent fad of using robot advisors in wealth management, which exposed clients to some level of financial risk due to the possibility of an algorithmic failure. A recent trend in litigation against robot advisors may be traced back to their erroneous investment recommendations, as reported by Lee & Shin [4]. Another kind of financial risk that a Fintech company may encounter is counterparty risk, which occurs when the company provides financial services to another company, such as a lender for a mortgage or student loan.

5. Reputation risk

The reputation of a bank's employees for friendliness is a significant factor in determining which bank a client chooses. Businesses in Kuwait value a bank's reliability, efficiency, and helpfulness in times of financial crisis [5]. "To a similar extent, Al-Mossawi [6] explains that students in Bahrain choose their banks based on factors including reputation, staff friendliness, and convenience." Since the advent of FinTech, many once in-person banking services are now handled digitally or by robots, eliminating the human aspect and emotions but also increasing the danger of reputational damage. Customized digital services might be expensive to supply. "According to Lee and Shin (2018), for FinTech businesses to thrive, they need to prioritize their customers' needs above all else and provide them with more accessibility, convenience, and personalized goods."

III. REVIEW OF LITERATURE

According to the KPMG 2016 research, India is rapidly emerging as a centre of innovation where financial technology companies have a good chance of growing into multibillion dollar enterprises. New market penetration and the exploration of underserved subsets of the industry are only two of the many aims of India's emerging fintech startup scene. It is projected by NASSCOM that by 2020, India's financial software market would have expanded from \$1.2 billion to \$2.4 billion. India is a cash-based economy, but the rise of e-commerce and smartphone use has created favourable conditions for the expansion of financial technology. There were around USD 33 billion in transactions in the Indian fintech industry in 2016, and that number is expected to climb to USD 73 billion by 2020, a CAGR of 22%.

In 2015, venture capitalists poured a total of USD 57 million into eleven transactions across Bengaluru, Mumbai, and Gurgaon's hi-tech sectors. In the same way, Bengaluru, India's startup hub, has benefited from this and is now rated 15th among the world's top startup cities.

While India's economic expansion has yet to reach global superpower levels, it is well positioned to become so because of its abundant supply of cheap, skilled IT workers. Fintech services, such as digital wallets, online loans, and insurance, have revolutionized conventional financial transactions. India is becoming a more appealing market internationally due to its rapid adoption of these practices.

Some publications have recently investigated how banks are using FinTech. According to Mulyani et al. [7], Fintech poses a competitive risk to traditional banks. On the other hand, Sangwan et al. [8] note that clients may reap several advantages thanks to FinTech in the areas of convenience, cost, agency, and customization. However, there are a few obstacles to implementing FinTech, including concerns about privacy and safety.

According to Priya and Anusha [9], there is a big opportunity for successful fintech businesses in developing countries like India because of the large number of people living there who do not have bank accounts. "The survey found that despite the high rate of fintech acceptance in the Indian market (52 per cent), there are still obstacles to overcome in the areas of regulation, infrastructure, financial literacy, and the like." Practical implications for other nations in enhancing their regulatory environment for the effective deployment of Fintech are discussed by Lin [10], who describes how Singapore countered the increased dangers of Fintech through institutional changes and regulatory reforms.

IV. FINTECH CHANGES THE FINANCIAL WORLD

Fintech's most notable impact on the economy may be seen in its transformation of the lending industry [11]. Historically, only financial institutions (banks) could provide credit to private persons or businesses [12]. Consequently, to borrow money from banks, people and organizations would need to execute all the prerequisites required for the loans, such as business paperwork, mortgaging property, evidence of future capacity to pay the loans, and other associated documents. The banks profited from lending money to customers by charging them interest on their monthly loans [12], with the lending interest rate often being lower than the interest rate on deposits.

Although most people and businesses needed access to bank loans, doing so was a complicated and time-consuming procedure. It was exceedingly unlikely that individuals or small businesses with poor credit histories or no collateral could get a loan from a financial institution [11]. Therefore, this has made it difficult for businesses and people to get funds for investment and operation. The financial technology (Fintech) industry has released many technological applications and financial support services to combat these issues, with the ultimate goal of establishing a new lending market that will solve all existing problems and provide for most consumers' needs, and attract new customers.

The P2P model's introduction to the financial sector has irrevocably altered the conventional approach to lending. Fintech firms will not be content with such a solution and will instead work to refine and broaden the model's applicability. Student debt finance and consolidation are only two of the many financial services other firms, including SoFi and Earnest, have entered the market to provide [13].

In addition, with over \$5 billion in refinances under its belt, SoFi is undoubtedly the largest lender in the student loan refinancing sector. Refinancing student loans with Sofi can save you money compared to using a traditional bank and help you get a better job. According to Clements [14], SoFi is the only lender providing "fixed APRs ranging from 3.50% to 7.74% and variable APRs ranging from 2.23% to 6.03%" for refinancing student loans. No fees are associated with the loan's origination, prepayment, or transfer with this lender. While Earnest does not prioritize a borrower's credit history or income, SoFi is primarily interested in providing loans to those with stable employment, a high income, and a solid credit score. In addition, to qualify for refinancing via SoFi, the borrower must have a bachelor's degree or above, which is not the case with Earnest. In addition, SoFi employs a sizable number of people trained in career counselling and are happy to work with clients on honing their job-hunting abilities, perfecting their applications, or formulating a strategy to negotiate better compensation with their current employers. Sofi also provides student refinancing loans, personal loans, mortgages, and parent PLUS loans [15] for those who need additional financial assistance with education costs.

One unique aspect that gives Fintech firms an edge over conventional banks is the speed with which they process loan applications, make decisions, and disburse funds to consumers. Several services, such as OnDeck Capital, Kabbage, and PayPal Working Capital [13], allow consumers and businesses to borrow short-term capital in a straightforward, quick, and paperless manner.

First, small and medium-sized firms may borrow up to USD 500,000 from OnDeck for a period of 3 to 36 months, making it one of the top short-term loan providers, as stated by Prakash [16]. A borrower may apply for a loan from OnDeck in as little as 10 minutes via the company's website or a mobile device. The application needs the usual suspects: a social security number, a business tax ID, and three months of bank or credit card bills. A unique feature of OnDeck's loans is that they do not need collateral [17]. Borrowers may expect to know the outcome of their loan applications within minutes, and if granted, they might get their funds in as little as 24 hours [17]. Although OnDeck does not have strict requirements for obtaining a loan, the firm must be at least a year old and have an annual revenue of more than \$100,000, or the owner's credit score must be at least 500 in order to qualify for a loan [16].

But nowadays, Fintech companies have integrated dozens of sources, such as UPS data, Amazon, QuickBooks, Yodlee, Yelp, and Facebook, to maximise the customer's available data source to help them analyse more thoroughly and efficiently the creditworthiness and the repayment capacity of the borrower [18]. Although Kabbage is not a P2P lender, it has outperformed traditional financial institutions by providing consumers with access to credit more quickly by making better use of a variety of accessible data [19]. Small internet enterprises that lack the capital to satisfy the stringent loan standards of other lenders might benefit from this alternative. Businesses may acquire loans of up to USD 100,000 from Kabbage virtually instantly after filling out a short online loan application [19]. Kabbage uses information from the borrower's usage of various online marketplaces and accounting software to assess the likelihood of the borrower's ability to repay the loan [19].

When fintech firms began releasing a slew of apps and online financial services supporting several payment methods, it was clear that the industry had reached a new level of innovation [20]. With the advent of Fintech products, consumers no longer need to visit a bank to complete any financial transaction; instead, they can use a wide variety of convenient online banking and payment options whenever and wherever they like.

V. FINTECH FIRMS AND TRADITIONAL BANKS

Fast gaining popularity after its inception, Fintech had about \$10 billion invested by 2015 [21]. The innovations made possible by Fintech have presented formidable challenges to the established banking system. By providing high-quality, cutting-edge services at a cheap cost, fintech solutions have been aggressively filling the voids left by traditional banking systems [22]. This means clients may complete their financial transactions rapidly without using little resources. Fintech solutions can sometimes give the same services for a fraction of the cost [23]. Even for established companies with budget-friendly offerings, new market entrants may provide the biggest threats [24].

More than that, they are improving the quality of the user experience. Because their services are quicker and more user-friendly, they have rapidly expanded into new areas, particularly among younger consumers [25]. They appeal to even the most conventional clients due to features like the ability to manage several electronic financial products in one location [26]. For example, if we look at the retail banking scenario, it would take more than a day to complete the documentation necessary to acquire a loan and another six weeks for the procedure to be complete. Especially since the financial crisis, final judgements have often been negative to clients despite the lengthy processing period. Conventional banks will need help to help. However, a new loan model from a Fintech company called FundThrough might significantly streamline the application process and boost the odds of a successful close. They built an online hub where prospective borrowers and lenders could meet with little hassle for both parties [27].

However, banks must use antiquated technology to run their sluggishly degrading system. Banks have also established a robust infrastructure for their operations, with substantial daily traffic, making innovation a

challenging task. Banks sometimes have to create new contemporary services when integrating third-party solutions on top of the historical infrastructure. The cultural shift is arguably more of a challenge than the deteriorating infrastructure. There has always been, as there is with every invention, internal opposition to changes that have hampered the innovation process. Changes in the financial industry often lead to fines from regulators and losses for businesses. Most business procedures at big banks have been standardized, limiting their ability to adapt and making innovation costly [28].

Banks have improved their worldwide performance, but this has yet to translate into more business from potential customers. Over sixteen thousand clients from thirty-two countries have provided input on their retail banking experiences for the 2016 World Retail Banking Report. According to the study, banks only missed out on a third point on Global Capgemini's Customer Experience Index; nonetheless, only around a sixth of the people surveyed said they would choose a different service offered by the bank in the future. "Instead, approximately 65% of the studied consumers already use Fintech solutions and are more likely to refer new users to Fintech services than their banks." Moreover, Fintech companies have almost hit 90% of client trusts across all locations, passing the banks in the process [29].

The Banker [30] has conducted research showing that bank executives are well aware of the Fintech threats that are slowly altering the financial sector. Over 80% of respondents, 95% from the banking and payment sector, were said to be aware of the hazards that Fintech posed to their firm by PwC (2016) [29]. Client choices of service providers have been driven by the user experience, further eroding the loyal customer advantage enjoyed by conventional banks. As 2016 has progressed, it has been abundantly clear that consumers have been actively searching for novel financial service providers that are both user-friendly and technologically advanced [30, 31].

Electronic payments, mobile services, and blockchains are gradually taking the lead in the market and facilitating the digitalization of all key financial activities. Despite turning to large consulting firms and suffering heavy losses due to the Fintech revolution, most banks still needed help with a critical lack of understanding about how to respond to the situation. Banks need to be wary of new competitors in the Fintech industry and the other digital giants, who are fast transforming the financial sector in their own image. With the advent of services like Android Pay and Mobile Payments Wild Card, companies like Google and Amazon have helped to establish a more streamlined payment process for their customers. In contrast, Google is well-known for aggressively investing in tiny Fintech firms to expand their digital service offering. As a result, financial institutions must exert significant effort to innovate or risk being left behind.

Since Fintech has been at the forefront of technological innovation, the financial services industry must undergo comparable changes. By the end of 2016, more than 30 per cent of British consumers had tried out Fintech services at least once. More widespread adoption of Fintech is expected, putting significant pressure on the banking industry as we know it. They were so far behind the Fintech curve that the industry almost wrote them off. Therefore, banks must take a more proactive stance in the wake of the Fintech revolution if they want to prevent dire repercussions in the decades to come. Banks have made some proactive moves in response to Fintech competitors. These have taken the shape of economic alliances or collaborative ventures in the marketplace lending space.

The banks' intellectual property, which comprises their primary competitive advantage, has to be consolidated and improved upon first. Most startup accelerator and business incubator events are organized by banks, making the institutions' internal workings available to their external Fintech rivals. As a result, the Fintech sector has seen explosive expansion, which has allowed it to gradually catch up to the industry's pioneers. Changes in the economy have paired traditional banking with Fintech. That is why banks must accommodate

Fintech without helping it to grow at the expense of their traditional banking customers. On the other hand, the banks might use their significant advantages over Fintech rivals, such as their established client base, access to financing, and well-known brand. This would allow banks to protect their proprietary knowledge while capitalizing on their market advantages to race ahead of the Fintech curve.

To stay ahead of the competition, the banks need to do more than plug the leaks into their information systems. If they tried something new that did not work, they would lose a lot more money than other Fintech companies since their firm was already established. For instance, if banks try to digitize their services fully, they risk losing a significant section of their clientele who are more comfortable with traditional banking procedures. Financial institutions should not be in haste to make significant changes to how they operate. Instead, they may catch up to their younger rivals by studying client preferences and optimizing internal procedures to reduce the likelihood of missteps. Banks should mandate internal innovation by fostering an innovative culture inside their staff. This change might boost both the bank's competitiveness and the quality of the workplace, making it less likely that talented workers would leave for a rival institution. Traditional banks also have a track record of success that helps them swiftly cement their corporate principles, mitigating some of the dangers of trying something new. Fintech startups, on the other hand, move at a considerably slower pace in this regard, and they are more vulnerable than established businesses due to their smaller size and less dedicated customer base. Most Fintech startups rely heavily on outside investment, making them more vulnerable to the consequences of failed innovation.

On the other hand, traditional banks have to think about their smaller challenger retail bank competitors. These financial institutions have been around longer than most Fintech firms but need more resources and clientele than conventional banks. Because of the high likelihood of information dispersion due to frequent job changes, they serve as an intermediary between the two more prominent actors.

Collaboration between the two sectors is growing [32]. Sixty-five per cent or more of bank executives agreed that traditional banking institutions must create partnerships with Fintech startups via cooperation, investment, or acquisition. By working together to enhance the financial client experience, banks and Fintech businesses might provide reciprocal advantages for both parties. To ride the wave of Fintech, Western Union has invested in the Digital Currency Group to increase awareness of its services related to digital currency and blockchain technology.

There is little doubt that the partnership models open up possibilities for the banking sector. However, several problems exist in actually putting the models into practice. Most of these issues stem from the fact that traditional financial institutions and Fintech startups operate differently. As a growing sector, legal laws sometimes need to be clarified or improved, which may lead to practical difficulties in the partnership process. Most banks and credit unions, in a recent PwC research, were optimistic that most of their consumers would adopt mobile financial services, despite the obstacles. "Financial institutions must pay close attention to actively adapting the novel Fintech products with the well-formed conventional banking systems since the industry will focus on the user experience based on applied digital technology, communication, and tailored services."

VI. CONCLUSION AND DISCUSSION

The advancement of digital technology over the last several decades has had a profound effect on society. The proliferation of digital services has displaced conventional methods of doing business and altered consumers' habits over time. The trend has been felt throughout several sectors, particularly in the financial world. Since the advent of Fintech, there has been a corresponding trend toward digital service delivery. Fintech has enabled a wide range of financial services to provide improved customer experiences at reduced costs by capitalizing

on technological developments. Even though this technology field has only just emerged, it has already established a stable foundation upon which to construct future financial products. Because of Fintech's rapid development, a new, interdisciplinary business has emerged, completely altering the financial services industry. Clearly, this has posed serious problems for the conventional banking and payment system, but it has also improved financial services in meaningful ways. The following contests have pushed the financial industry in a new direction.

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