

## FINTECH SYMPHONY: HARMONIZING RISK MANAGEMENT IN THE BANKING SECTOR

**Deepti Berry**

Department of Management, Mangalayatan University, Beswan, Aligarh, UP, India

**Dr. Arsalan Ahmed**

Mangalayatan University, Beswan, Aligarh, UP, India

### ABSTRACT

For centuries, banks have held sway over the financial services market. However, the landscape of banking has undergone significant transformations due to rapid technological advancements. This shift not only enhances the security of financial transactions but also improves the overall experience for customers. The emergence of Financial Technology, or Fin-Tech, marks a new era in the financial services industry in India. The present research delves into the intricate interplay between financial technology (Fintech) and risk management. The researcher also highlighted the opportunities and challenges encountered by fin tech within the banking sector in Indian banking. A thorough analytical approach is employed, integrating combining both quantitative and qualitative techniques. A questionnaire for a survey is used to gather primary information and it is circulated to 50 bank representatives, emphasizing the effects of Fintech integration in banking operations and risk management. Furthermore, an extensive review of existing literature, including research papers and case studies, is conducted to gain a comprehensive insight into the introduction of Fintech in the banking sector and its impact on risk management. The findings of research offered valuable insights into the evolving landscape of risk management strategies in the banking sector in the era of Fintech innovation.

**Keywords:** *Financial technology, risk management, integration, banking, financial services*

### INTRODUCTION

As the Indian economy progresses, particularly with a focus on achieving sustainable development, there is a crucial need to ensure the inclusion of participants from every societal group. Economic development is hampered by the rural population's lack of knowledge and financial acumen since a sizable majority of them do not have a means of getting credit that is legitimate. This is a significant obstacle to the nation's economic progress. The banking industry has adjusted to these obstacles by introducing technical advances including debit and credit card technologies, online banking, machine payments (ATMs), etc. Even though these financial innovations have changed urban culture, a sizable section of the rural populace is not mindful of these advancements and is not able to use official bank facilities.

Since early 2015, the term "Fintech" is increasing popularity. Fintech, while often understood as a word reserved for the highly technical and tech-savvy, really refers to the combination of technology innovations and improvements with the banking services offered by different

customers. The fast advancement of technology and changes in the world of finance drove fintech's growing more so than the simple need for these services. The integration of gadgets and the banking sector necessitates the design of several platforms and apps to make financial services easier to use, particularly corporate loan applications as well as internet individual loan apps (Kandpal and Mehrotra, 2019).

## LITERATURE REVIEW

“The **Basel Committee on Banking Supervision (2003)**” highlighted the substantial nature of risks beyond credit, interest, and market risks. The increasing reliance on highly automated technology poses the risk of shifting from manual errors to system failures. Post the COVID-19 crisis, incidents of fraud, hacking events, and incompletely understood system security issues have risen. The expanding e-commerce landscape, with banks as significant service providers, demands continuous maintenance of robust internal controls and backup systems.

Private banks, in pursuit of robust credit risk management, demonstrate a higher commitment than state-owned banks. **Kuo & Enders' (2004)** survey on credit risk management policies for state banks in China revealed challenges in the face of the burgeoning financial market. State-owned commercial banks face difficulties competing with foreign counterparts, necessitating thoughtful changes for survival. A crucial element of this transformation is the reform of credit risk management. Despite criticisms of existing policies, the Basel New Capital Accord provides a comprehensive framework and detailed guidance, gaining widespread international adherence (Campbell, 2007).

## OBJECTIVES

The present paper is carried with the following objectives:

1. *To analyse the impact of integration of Fintech solutions on risk management and banking operations.*
2. *To highlight the opportunities and challenges encountered fin-tech in Indian banking.*

## MATERIAL METHOD

This article adopts an analytical research methodology, blending qualitative and quantitative approaches. The researcher utilized both primary and secondary data sources to enhance the research's comprehensiveness. Primary data, obtained through a survey/questionnaire involving 50 bank representatives, focused on the integration of fin tech solutions in banking operations. Secondary data sources include review of existing literature, research papers and case studies. The study is conducted to provide a holistic understanding of Fintech in the banking industry and its implications for risk management.

## RESULT AND DISCUSSION

### 5.1 IMPACT OF FIN-TECH ON RISK MANAGEMENT IN BANKING

*Table: 1.1 Response summary on integration of fin-tech in banking*

<i>S.no</i>	<i>Statements</i>	<i>Response</i>
-------------	-------------------	-----------------

		<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
1.	Fintech solutions are effectively integrated into our banking operations.	10	5	10	10	15
2.	The integration of Fintech solutions has positively impacted our risk management practices.	2	3	5	8	32
3.	Fintech solutions have enhanced our ability to identify and assess operational risks.	12	8	20	5	5
4.	The use of Fintech has improved the overall security and resilience of our operational processes.	12	5	5	8	20
5.	The integration of Fintech solutions has improved the efficiency of banking operations.	10	5	10	10	15

**Source:** Created by researcher from the responses collected through questionnaire

The table above shows the responses of banking representatives on integration of fin-tech and analysis of Survey Responses on Fintech Solutions in Banking Operations are explained below:

1. **Fintech Integration:** While there is a significant portion (25%) expressing disagreement or neutrality, a majority (50%) agrees or strongly agrees that Fintech solutions are effectively integrated into banking operations.
2. **Impact on Risk Management:** The majority (64%) strongly agrees that the integration of Fintech solutions has positively impacted risk management practices, indicating a high level of perceived positive influence.
3. **Enhancement of Operational Risk Identification:** There is a notable level of neutrality (40%) and disagreement (32%) regarding the enhancement of the ability to identify and assess operational risks through Fintech solutions.
4. **Improvement in Security and Resilience:** While 40% express strong disagreement or disagreement, 44% agree or strongly agree that Fintech has improved the overall security and resilience of operational processes.
5. **Efficiency Enhancement:** A balanced distribution of responses suggests mixed sentiments about whether the integration of Fintech solutions has improved the efficiency of banking operations.

Overall, the survey indicates a positive perception regarding the impact of Fintech solutions on risk management, security, and efficiency.

## OPPORTUNITY AND CHALLENGES ENCOUNTERED FIN TECH IN INDIAN BANKING

### OPPORTUNITIES FOR FIN TECH

As we've witnessed, Fintech has initiated a revolution, with entrepreneurs disrupting the financial services industry in various ways. Let's delve into the Fintech ecosystem and explore sectors within Fintech poised for the next wave of innovations (Vijai,2019).

1. **Blockchains:** Transactions used to need to be validated by a third party. Blockchains, also known provide security through cryptography by doing away with the requirement for third parties to reconcile data. Although Bitcoin, utilizing blockchain technology, has gained widespread popularity, blockchains are anticipated to extend beyond cryptocurrencies, impacting sectors such as media, telecom, travel, and hospitality.
2. **Alternate Lending:** Lending to small business owners was sometimes deemed unprofitable by conventional banks. By embracing the peer-to-peer (P2P) finance space and developing online platforms that link individuals with lenders at reduced rate of interest, biotech businesses took advantage of this possibility. This pattern is expected to persist, with emerging avenues like crowdfunding gaining prominence.
3. **Robo Advisory:** In the past, mediators were a vital link connecting customers and the financial market, resulting in opaque and ineffective transactions. Robo advising is simplifying stock exchange access, increasing transparency and traceability, and offering intelligent investors additional benefit.
4. **Digital Payments:** Startups in finance technology have improved pay speed and convenience. In many places, smartphones and tablets have taken the role of conventional wallets, and they're about to take off thanks to better and quicker payment choices, rendering ATMs potentially obsolete.
5. **Insurance Sector:** Presently, online marketplaces empower consumers to evaluate insurance plans and arrive at wise choices. Through data-driven automated processes, lower operating costs, and a wider selection of services, fintech will keep revolutionizing the insurance industry.
6. Overall, Fintech landscape is characterized by innovation and efficiency, the journey forward promises continued disruptions, ensuring financial services are more accessible, transparent, and tailored to the evolving needs of consumers. Fintech's role as a catalyst for change in the financial industry remains firmly established, and its future trajectory holds exciting possibilities.

### CHALLENGES ENCOUNTERED BY FIN TECH

Despite making progress in Fintech, faces challenges hindering its development compared to other nations. Despite significant growth potential, factors impede its progress, preventing it from keeping pace with more advanced markets and economies. Some of these challenges include (Kandpal and Mehrotra, 2019):

1. ***Low Internet Penetration:*** Achieving Fintech growth in a vast country like India requires robust connectivity. However, India faces challenges as a significant portion of the population is still unfamiliar with smartphones and other devices, keeping internet connectivity in a developmental stage.
2. ***Limited Bank Accounts:*** Despite its large population and economic potential, a considerable portion of India's residents resides in rural areas or falls below the poverty line. Additionally, many individuals lack bank accounts, posing a hurdle for Fintech to flourish in the Indian economy.
3. ***Absence of Adequate Infrastructure and Expertise:*** The absence of appropriate infrastructure and knowledge poses challenges to the growth of the Fintech sector. Success in this sector hinges on effective communication and implementation of new technologies, and the lack of a language that resonates with the local population complicates matters. This not only results in a scarcity of skilled professionals for the sector but also limits the understanding of Fintech operations among the populace.
4. ***Insufficient Funding:*** Most Fintech applications emerge from start-ups, and start-ups commonly struggle to secure sufficient funding for their projects. The scarcity of resources, coupled with challenges in obtaining business loans, presents a significant obstacle. While India holds the potential to become a thriving Fintech market, the current financial landscape constrains the sector from reaching its full potential.

Addressing these challenges is crucial for India to unlock the full potential of its Fintech sector and bridge the gap with more advanced markets. Collaborative efforts from stakeholders, policymakers, and financial institutions are needed to overcome these obstacles and foster a conducive environment for Fintech innovation and growth in the country.

## CONCLUSION

In conclusion, the analysis conveys an overall positive perception of the impact of Fintech solutions on risk management, security, and efficiency within the banking sector. However, the concerns expressed about their effectiveness in enhancing operational risk identification underscore the need for further exploration and refinement in this specific area. The banking industry must carefully navigate these perceptions and concerns to harness the full potential of Fintech solutions in achieving comprehensive and effective operational outcomes.

As Fintech continues to innovate, the future promises continued disruptions, ensuring financial services are more accessible, transparent, and tailored to evolving consumer needs. Fintech remains a catalyst for transformative change in the financial industry, offering exciting possibilities on its ongoing journey.

Fintech faces substantial challenges in India, including low internet penetration, limited bank accounts, inadequate infrastructure, and insufficient funding. Overcoming these hurdles is crucial for the sector to realize its full potential and compete with more advanced markets. Collaborative efforts are needed from stakeholders and policymakers to create an environment conducive to Fintech innovation and growth in the country.

## REFERENCES

- Basel Committee on Banking Supervision, (2003). Consultative Document on Operational Risk. Supporting Document to the New Basel Accord, Bank for International Settlements, January.
- Campbell, A. (2007). Bank insolvency and the problem of nonperforming loans. *Journal of Banking Regulation*, 9(1), 25-45.
- Kandpal, V., & Mehrotra, R. (2019). Financial inclusion: The role of fintech and digital financial services in India. *Indian Journal of Economics & Business*, 19(1), 85-93.
- Kuo, S. H., & Enders, W. (2004). The Term Structure of Japanese Interest Rate: The equilibrium spread with asymmetric dynamics. *The Japanese and International Economics*, 18, 84-98.
- Naresh, C., & Rao, B. R. (2015). Credit risk management practices of Indian commercial banks. *International Journal in Management & Social Science*, 3(1), 89-94.
- Singh, R., Malik, G., & Jain, V. (2021). FinTech effect: measuring impact of FinTech adoption on banks' profitability. *International Journal of Management Practice*, 14(4), 411-427.
- Vijai, C. (2019). FinTech in India—opportunities and challenges. *SAARJ Journal on Banking & Insurance Research (SJBIR) Vol*, 8.