



The Role of Emerging Banking Technologies for Risk Management and Mitigation to Reduce Non-Performing Assets and Bank Frauds in the Indian Banking System

Narinder Kumar Bhasin, Amity University, India

 <https://orcid.org/0000-0001-7167-8730>

Anupama Rajesh, Amity University, India

 <https://orcid.org/0000-0002-8421-473X>

ABSTRACT

The purpose of this study is to analyze the important risks being faced by the banks in India and the various reasons for increasing NPA and bank frauds. The paper further focuses on how the newly emerging digital banking tools can be applied with improved skills of lending/risk managers to control and mitigate risk to resolve the issue of NPA and frauds. Indian banks need to strengthen internal controls related to pre and post sanctioning of loans like credit appraisal and credit monitoring through the support of advance technology, data analytics, and MIS reports. Continuous training and skill development of bank employees is recommended as both lending and technology requires experts to handle decision making and risk management. Strong cybersecurity and firewalls to ensure the technology risk should be managed in a better way to ensure early warning signals.

KEYWORDS

Artificial Intelligence, Bank Frauds, Block, Chain, Credit Risk, Digital Banking, Non-Performing Assets, Risk Management, Risk Mitigation

INTRODUCTION

One of the most significant objectives of any bank is to grow their business and profits by increasing lending and investments vis-à-vis need to install an adequate risk mitigation process and measures. Risk has always been associated with banking, and banks have been able to manage their operations due to strict lending norms. Banks focus on the various stages of disbursement of loans, such as credit appraisals, viability of proposed projects, a promoter's experience, past financials statements, and credit monitoring and supervision. In the past decade, the Indian banking system has witnessed an increase in non-performing assets and bank frauds owing to the lack of adequate skills of lending officers, wilful defaults by borrowers, and poor credit monitoring by the banks post-disbursement of loans (Singh, 2016). Recent cases of non-performing assets (NPA) bank frauds, money laundering, conflict of interest, poor corporate governance, and ethical failure were observed in the Indian

DOI: 10.4018/IJeC.290293

banking system. As a result, banks became more cautious and risk averse, which led to a decline in credit growth up to the 5%-6% level. Speaking at a September 2020 webinar organised by the Indian Merchant's Chamber of Commerce and Industry, Mr Arijit Basu, Managing Director of the State Bank of India, stated that lenders need to balance growth with prudence, and while banks need to support businesses, they also need to have adequate risk-mitigation measures in place. He went on to say that all Indian banks must follow prudential lending procedures based on a good business model with a viable cash flow and due diligence in high-risk projects.

Bankers cannot avoid risk just by reducing lending; they must manage risk by meeting credit requirements for the banking industry. Banks are always focussed on building a smooth process of financial intermediation, but in the present day scenario, banks are confronted and concerned with various types of risks. Hence, the efficient management of financial and non-financial risks through the use of IT advancements has become inevitable in the banking industry. Further, at the international level, consolidation, globalization, and real-time information are three important factors that have transformed risk management in the modern world (Härle et al., 2016). In 1930, the Bank of International Settlement (BIS) was established to provide global central bank cooperation. It was founded through an intergovernmental agreement between Germany, Belgium, France, the United Kingdom, Italy, Japan, the United States, and Switzerland, and it began business in Basel, Switzerland, May 17, 1930. Today it is owned by 63 central banks worldwide that account for approximately 95% of the world's GDP. The BIS promotes international cooperation among financial supervisory officials and monetary authorities through a process known as the "Basel Process."

The Basel Committee on Banking Supervision (BCBS), the primary global standard setter for the prudential regulation of banks, has 45 members that comprise central banks and bank supervisors from 28 jurisdictions. Basel III was created as a set of reforms, developed by the Basel Committee on Banking Supervision in response to the global financial crisis of 2007-2009; the goal was to ensure a stress-tested quality of capital to mitigate liquidity and market risk. The 2007-2009 crisis taught a critical lesson to the banking industry to further strengthen their capital base to protect themselves from the dangers of bank frauds and scams.

The Basel III reforms were finalised December 2019 and targeted implementation, with lenders in India being required to comply with these reforms beginning January 1, 2022. However, due to the coronavirus pandemic, the Group of Central Bank Governors and Heads of Supervision (GHOS), the oversight body of the BCBS, deferred implementation of Basel III until January 2023.

Implementing efficient risk management policies in banks depends on various parameters such as centralized or decentralized organizational structure, having a comprehensive risk management approach, and possessing a strong management information system for reporting, controlling, and monitoring various risks. Understanding the qualitative distinction between the various types of risks that any institution faces is the first step in an effective risk management process (Kaplan & Mikes, 2012). Banks and financial institutions need technological support to identify the risks they face from the processing of customer payments and securities settlement systems to ensuring appropriate internal controls.

One recent case in an old public sector bank in India was the Punjab National Bank's Fraud of Rs. 11400 Crore, where short-term buyers' credit facility was offered to borrowers without any collateral or authorised formal line of credit. Letters of Undertakings (LOUs) were routed through Swift (Society for Worldwide Interbank Financial Telecommunication) without any integration with their Core Banking System (CBS), and on a stand-a-lone basis. This was a classic case of bank fraud, which highlighted various risks, such as credit, operations, reputation, exchange, and, most importantly, technology risk. Many overseas branches of Indian origin banks had sanctioned loans to the beneficiary of LOU who, in turn, used foreign currency to pay for the imports.

This study attempts to answer the major research question: "How can new emerging technologies or digital banking risk management software resolve NPA, frauds, and recovery problems in the Indian banking system?" The study also explains the history of increasing NPAs in Indian banking

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/the-role-of-emerging-banking-technologies-for-risk-management-and-mitigation-to-reduce-non-performing-assets-and-bank-frauds-in-the-indian-banking-system/290293

Related Content

Application Research of IICA Algorithm in a Limited-Buffer Scheduling Problem

Bin Duanand Yongqing Jiang (2022). *International Journal of e-Collaboration* (pp. 1-18).

www.irma-international.org/article/application-research-of-iica-algorithm-in-a-limited-buffer-scheduling-problem/307131

Digital Education and Teaching of Printmaking Based on Big Data and Intelligence

Ge Yiand Yuanyuan Tan (2023). *International Journal of e-Collaboration* (pp. 1-18).

www.irma-international.org/article/digital-education-and-teaching-of-printmaking-based-on-big-data-and-intelligence/316825

Understanding Consumer Intention Towards Blockchain-Based Mobile Payment Adoption Services in Pakistan

Zulfiqar Aliand Hasin Bano (2022). *International Journal of e-Collaboration* (pp. 1-21).

www.irma-international.org/article/understanding-consumer-intention-towards-blockchain-based-mobile-payment-adoption-services-in-pakistan/307136

CoPs & Organizational Identity: Five Case Studies of NTBFs

Eduardo Bueno Campos, Mónica Longo Somozaand M. Paz Salmador (2011). *Handbook of Research on Communities of Practice for Organizational Management and Networking: Methodologies for Competitive Advantage* (pp. 308-336).

www.irma-international.org/chapter/cops-organizational-identity/52907

E-Collaboration Systems: Identification of System Classes using Cluster Analysis

Kai Riemer (2009). *International Journal of e-Collaboration* (pp. 1-24).

www.irma-international.org/article/collaboration-systems-identification-system-classes/3931