

A Systematic Literature Review on Applications of Artificial Intelligence in the Indian Banking and Financial Sector

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Abstract: AI is revolutionizing the banking and financial services industry by providing greater operational efficiency, customer service, risk management, and data-driven decision making. AI technologies, such as machine learning, predictive analysis, robotic process automation (RPA), and chatbots, have revolutionized the banking landscape and its service offerings. This study rigorously examines the current literature on the use, advantages and barriers of AI in the banking and financial services sector. A systematic literature review (SLR) method was used and data from peer-reviewed articles in top academic databases were retrieved from 2015 to 2025. A qualitative analysis of selected studies was conducted to determine the major themes and trends in AI usage in the financial industry, as well as any gaps in research. The results indicate that AI plays a crucial role in fraud detection, credit risk assessment, process automation, personalized banking services, and operational productivity. But there are still obstacles to overcome, including issues with data privacy, cybersecurity dangers, algorithmic bias, regulatory compliance, and employee adaptation. The review underscores also the role of technological infrastructure, good governance, and organisational preparedness for successful integration of AI. The study adds to the existing body of knowledge on digital transformation in banking and offers useful insights for researchers, practitioners, and policy makers wanting to capitalize on the potential of innovations based on artificial intelligence but facing its challenges.

Keywords: Artificial Intelligence, Banking, Financial Services, Machine Learning, Digital Transformation, FinTech

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