Study on Artificial Intelligence (AI) in Indian Banking Sector with Special Reference to Punjab National Bank

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Abstract

The meaning of intelligence is the capacity to absorb and learn from experience which can be used as a tool to handle problems and fit into a new situation (Jhangiani et al., 2014). Artificial Intelligence (AI) is the technology that tries to copy logical functions which are prepared by human beings (D'Monte, 2018). In the past two decades, India's digital banking sector has grown rapidly. The growing number of internet banking, mobile banking and payment app users, are the main catalysts behind the growth of digital banking. The rising demand for online banking has created opportunities for the implementation of AI in the Indian banking sector (Vijai, 2018). The main objectives of the present study are: (i) to discuss the concept of Artificial Intelligence (AI), (ii) to study the implication of AI in the Banking sector and (iii) to state the different aspects of AI in Indian Banking sector with special reference to Punjab National Bank (PNB). AI has played an important role in determining fraudulent accounts and reducing the gross NPA of Banks. The banking operations of PNB had been paralyzed in February 2018 due to fraud carried out by Nirav Modi and Mehul Choksi. After this incident, PNB introduced an AI-enabled audit system to eliminate the loopholes in their banking operations. The Gross NPA of PNB and the total number of frauds reported have decreased by 11.47% and 39% respectively, in the financial year 2021-2022 in comparison to the last year. The present study reveals that day by day banks are adopting AI for personalized customer services and reducing errors in banking operations. Furthermore, AI can handle NPA Management through Big Data Analytics, which will help in strengthening the balance sheets of banks.

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any time without waiting in long queues at the bank. Hence, the aim of Artificial Intelligence is to provide personalized and high-quality customer satisfaction along with efficient and time-saving services.

PNB has not yet recovered from the problem of rising Non-Performing Assets (NPA). NPAs beyond a certain level are a cause for everyone involved because credit is essential for economic growth and NPAs affect the easy flow of credit. Artificial Intelligence (AI) technologies have presently matured and are ready to be implemented. AI establish new operational models and can provide scope to identify gaps in current financial factor function uncovering opportunities and advantage that can be helpful to identify and solve the problem of rising NPAs.

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