



## AI based banking system: A strategic customer centric approach

Namita Shivlal Mane

SET Asst. Professor of Commerce Jayawantrao Sawant College of Commerce and Science Hadapsar, Pune, Maharashtra, India

### Abstract

The present paper is an attempt to focus on the implementation of Artificial Intelligence (AI) in the banking sector. Banking sector has achieved tremendous significance in the economy of the nation as well as the world. It works on the basis of financial transactions of various types. Due to its emergence as the part and parcel of everyone's life, it has been facing many security issues. Compliance, Fraud, Cyber security, integrating new technologies and Identity Theft are some issues before banking sector. The solution for making the banking sector customer centric and customer friendly is Artificial Intelligence. AI is a computer based machines replication of human intellect. It is the gifted innovation of technology. It includes the theory and development of computer systems able to carry out tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

**Keywords:** artificial intelligence, security, customer centric, technology, computer system, etc

### 1. Introduction

Digitization has become inevitable in all the sectors. It makes our life easy as well as smooth. Technology has gifted many innovations that can ease our lives. Banking sector has also been modified and influenced by digitization. Enormous changes have been made in the banking system to make it easy to access at the level of the administrators as well as the customers. Customers demand to have an easy way to do all the transactions. In the past it was really hectic to complete the transactions manually. As a result every sector is being upgraded to provide smooth handling at every stage. Artificial intelligence is the advanced instructional programs set in virtual reality to make banking sector error free and to the point.

### 2. Banking and artificial intelligence

Banking industry handles cash, credit, and other financial transactions in legal way. Banks are the safe places to store extra cash and credit. They offer savings accounts, certificates of deposit, fixed deposits, letter of credits, loan facilities, etc. Banks use these deposits to make loans. These loans include home mortgages, business loans, and car loans. All these transactions are vast and huge in numbers therefore need a system that can tackle the data errorless.

Artificial Intelligence is machine based intelligence incorporating the computer system. It is a set of instructional program that allows performing a number of tasks on certain clicks. It works in the consideration of humanized intelligence as well as speech and face recognition. Such technology is surely helpful to access and handle vast data, information and transactions easily. AI based softwares are error free as well as accurate in all calculations. These instructional programs are personalized so others cannot make use of it. Robots can be placed virtually to assist in all types of financial transactions.

According to Accenture's recent Accenture Banking Technology Vision 2018 report, "83% of Indian bankers believe that AI will work alongside humans in the next two

years — a higher than the global average of 79%. "93% bankers in India said they increasingly use data to drive critical and automated decision-making..."

### 3. Areas where AI works effectively

- a. **Customer Friendly:** AI based system helps to improve the relationships between banks and customer. It can be used at the ease. Customization of financial products and services with additional features enhance mutual understanding of customers. This was not done in the past hence AI is the best solution to avoid such problems in future.
- b. **Calculative Upcoming Outcomes and Trends:** With its power to predict future scenarios by analyzing past behaviors, AI helps banks predict future outcomes and trends. This helps banks to identify fraud, detect anti-money laundering pattern and make customer recommendations. Money launderers, through a series of actions, portray that the source of their illegal money is legal. With its power of Machine Learning and Cognition, AI identifies these hidden actions and helps save millions for banks. Similarly, AI is able to detect suspicious data patterns among humungous volumes of data to carry out fraud management. Further, with its key recommendation engines, AI studies past to predict future behavior of data points, which helps banks to successfully up-sell and cross-sell.
- c. **Cognitive process automation:** This feature enables automation of a variety of information-intensive, costly and error-prone banking services like claims management. This secures ROI, reduces costs and ensures accurate and quick processing of services at each step. Cognitive process automation fundamentally automates a set of tasks that improvises upon their previous iterations through constant machine learning.
- d. **Realistic interactive interfaces:** Chatbots identify the context and emotions in the text chat and respond to it in the most appropriate way. These cognitive machines enable banks to save not only time and improve

efficiency, but also help banks to save millions of dollars as a result of cumulative cost savings.

- e. **Effective decision-making:** Cognitive systems that think and respond like human experts, provide optimal solutions based on available data in real-time. These systems keep a depository of expert information in its database called knowledge database. Bankers use these cognitive systems to make strategic decisions. Such stored database can be easily referred to as per the need in the banking sector.
- f. **Robotic automation of processes:** AI reviews and transforms processes by applying Robotic Process Automation (RPA). This enables automation of about 80% of repetitive work processes, allowing knowledge workers to dedicate their time in value-add operations that require high level of human intervention. In short, this automation can be an aid in the smooth running of the banking sector at the higher as well as lower level too.
- g. **Cyber Fraud Detection:** Difference detection can be made to enhance the accuracy of credit card, debit card, fraud detection and anti-money laundering. AI will make the banking process automated and stops the cyber risks. It will identify the culprit easily. The banking sector will need less manual intervention. Suspicious behaviour, logs analysis, and fake emails can be tracked down to prevent and possibly predict security breaches. Image or face recognition using real-time camera images and advanced AI techniques with a deep learning can be used at Automated Tailor Machines (ATMs) to detect and avoid frauds and crimes.

#### 4. Conclusion

Artificial Intelligence is, thus, an innovative as well as automated instructional programs. AI will enable banks to control human and machine capabilities optimally to drive operational and cost efficiencies, time-saving and provide the personalized services. To avail all of these benefits the banking sector needs incorporate Artificial Intelligence. By adapting AI banking sector is becoming advanced as well as easy to access. In fact, banking sector already started incorporation of AI based set ups to make the entire process error free, automated, and user friendly. Besides, incorporation of these AI based programs has a lot of challenges to be overcome. But surely it will bring the tremendous changes in the banking sector.

#### 5. References

1. Anita Rosen, E-Learning 2.0: Proven Practices and Emerging Technologies to Achieve Real Results, AMCOM, New York, 2009, Print.
2. Applications of Artificial Intelligence in Banking, Financial Services and Economics, Technical University Denmark, 1989, Print.
3. Bernard Marr and Matt Ward, Artificial Intelligence in Practice, UK, 2019, Print.
4. Henri Arslanian and Fabrice Fischer, The Future of Finance, The Impact of FinTech, AI and Crypto on Financial Services, Palgrave Macmillan, 2019. Print.
5. <https://www.wipro.com/en-IN/business-process/why-banks-need-artificial-intelligence/>
6. <https://www.livemint.com/AI/v0Nd6Xkv0nINDG4wQ2JOvK/Artificial-Intelligence-in-Indian-banking->

Challenges-and-op.html

7. <https://www.enterpriseedges.com/artificial-intelligence-banking-industry>
8. <https://www.forbes.com/sites/forbeslacouncil/2019/06/18/four-ways-artificial-intelligence-will-transform-banking/>