Artificial Intelligence Is Boon or Bane for Finance Sector- A Study

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Abstract-In the evolution of modern society's financial life, banks are crucial. Due to its handling of cash, credit, and other financial transactions, it is regarded as the lifeblood of the modern global economy. Banks encourage consumers to save money and earn interest for a secure future by assisting them in keeping track of their spending relative to their savings. Large enterprises are able to thrive financially thanks in part to this support, which benefits the banks.

Artificial Intelligence is a Machine Intelligence. Human intelligence that is processed by machines through a computer system. The financial services sector is one of the most important economic sectors. Banks and non-bank lending institutions are both a part of the financial services sector. Companies that offer asset management and insurance are also included. A robust and tightly regulated financial services industry may be crucial for an economy to expand. The banking industry has historically been at the forefront of technological innovation, as evidenced by the creation of ATMs, electronic card payments, and online banking, to name just a few.

The financial sector is evolving as a result of the ability to collect vast amounts of data from the environment and process it using machine learning and artificial intelligence. Artificial intelligence and machine learning enable improved risk management and compliance as well as increased capacity to predict economic, financial, and risk events.

AI in the banking sector has increased recently, in part due to increased competition from FinTech lenders and other financial technology companies, but also as a result of the technology's ability to enhance customer relations through chatbots and AI-powered mobile banking, product placement through behavioral and personalized insights analytics, back-office support, risk management, credit underwriting, and, most importantly, cost savings. This article Highlights the AI is boon or bane for Financial sector in India- A Study.

Key words: AI, ML, ATMs. FS

1.INTRODUCTION

The banks typically use computers, where their databases contain detailed records, to accomplish this. ATMs, mail, phone banking, online banking, and mobile banking are just a few of the numerous channels that banks utilise to conduct business. The idea that every transaction in the banking system can be tracked and that any information may be exchanged from anywhere in the world by just connecting to these networks is astounding. Only because banks employ artificial intelligence is the seamless operation of the banking industry, which is conducted through computers and networks.

An Artificial intelligence takes a great deal of knowledge, a great deal of work, and a dedication to accuracy. Almost every industry has been significantly impacted by artificial intelligence, including finance and banking. The banking industry is now more customer-focused and technologically relevant thanks to the incorporation of AI into banking apps and services. By increasing efficiency and making decisions based on data that a human agent would find incomprehensible, AI-based solutions can help banks save money. Moreover, clever algorithms might be able to recognise bogus data with ease.

2.TYPES OF ARTIFICIAL INTELLIGENCE

According to Arena Hintze, Assistant professor of integrative biology and computer science and engineering at Michigan state university, AI can be divided into 4 types:

1.Reactive Machines: These AI systems are task-oriented and are not able to memorize, which makes them incapable of informing future ones about past experiences.

2.Limited Memory: self-driving cars are examples of this AI system. here it can memorize and can inform about the future.

3.Theory of mind: The theory of mind is so much related to human emotions. When it applies to AI the system will be able to understand emotions.

4.Self-awareness: In this type of AI system they have a sense of self, which makes the machine find out their state and this system does not yet exist.

3.OBJECTIVES

1. To know the concept of   Artificial Intelligence
2. To identify the causes of Boon or bane for Financial sector in India

4.ARTIFICIAL INTELLIGENCE IN FINANCIAL SECTOR

Artificial intelligence has been widely used by Indian banks, particularly the government-owned SBI and Bank of Baroda, to increase productivity, identify patterns in customer behaviour, and save operating expenses. The SBI Intelligent Assistant, developed from "cutting edge technology of artificial intelligence, efficiently resolves queries of NRI customers, similar to that of a bank representative," is available from State Bank of India, the country's largest lender.

Additionally, the bank is setting up a "Innovation Centre" to investigate how cutting-edge technology like artificial intelligence and robotic process automation might improve the efficiency of internal banking procedures. Another state lender, Bank of Baroda, has developed a creative idea by establishing a state-of-the-art digital branch with free Wi-Fi and cutting-edge technology, such as an AI robot named Baroda Brainy and a Digital Lab. Banks in the private sector are also utilising cutting-edge, creative technology to boost employee efficiency and improve consumer satisfaction..

According to Allahabad Bank, significant updates to its "emPower" app are planned, including chatbots and AI-based e-commerce payments. According to Supratim Chakraborty, Associate Partner at Khaitan & Co., many banks are choosing AI-powered technology due to the fierce competition in the banking industry, the need for process-driven services, and customer demand for more individualised solutions.

A multinational consulting organisation called PwC claims that businesses are under tremendous pressure to digitise processes in this age of technological disruption and that they envision a time when software robotics will be used to enhance human labour. According to the survey, these businesses are starting to see a digital workforce as a component of their digital transformation strategy, automating business operations with RPA, AI, and analytics.

Many banks are confused about upgrading or adapting to new methods. Because they are standardized with fixed processes in traditional methods, some locations in tier two and three cities across the country face this challenge. These companies also lack the commitment to upskilling their personnel and human resources. Experts with expertise in domains like data science and machine learning are necessary to provide credibility to the data at hand. Following is the essential for Finance services

1.Banks have started uniting the Ai based systems as they are profoundly safer and profitable in loan and credit decision-making. Many banks are bounded to utilize the credit history, score, and consumer choice of preference for their trustworthiness for their organization. Moreover, one can never deny the old credit reporting systems are brainteasers with many errors, missing real-world transactions, and also miscategorizing the credits

2.The detection of misbehavior that may lead to an increase in default. Chatbots is to communicate with a bank,Natural language processing is used by this AI to provide pertinent responses to the many questions that clients have. In essence, chatbots are automated conversation programmes that run on autopilot or adhere to a preset path.

3..Customer expects the bank to offer them prompt, individualised services, but how? In addition to helping the bank generate more income, artificial intelligence also speeds up decision-making and preserves strong customer relationships.

4. Fraud Detection is one of the topics that the public fears the most. However, the financial sector can greatly use artificial intelligence to lower the likelihood of such acts.

5.ADVANTAGES OF AI IN FINANCE

1. AI performs. By doing this, operational effectiveness is increased and human resources are

freed up to concentrate on more intricate and strategic tasks.

2.Financial institutions may more accurately anticipate market movements, spot trading opportunities, and control risks. Artificial intelligence models may generate precise forecasts by examining historical data and current market indicators, supporting financial planning and investing strategies.

3.AI systems are able to examine huge datasets and find important insights that human analysts might miss. This aids in the better decision-making of financial institutions with reference to portfolio management, investments, and risk assessment.

4. Artificial intelligence systems are able to identify suspicious patterns and abnormalities in a timely manner. AI assists the financial sector in identifying possible hazards, preventing fraud, and bolstering security measures by analysing enormous volumes of transactional data.

5.AI offer individualised client service, respond to inquiries, and provide financial guidance. These solutions improve client happiness by providing 24/7 accessibility, quick response times, and customised advice.

6.DISADVANTAGES OF AI IN FINANCE

1. AI systems manage, there is a chance of data breaches and illegal access. To reduce these dangers, maintaining strong cyber security defences and following data protection laws are essential.

2.AI systems lack human intuition and subjective judgment, despite their efficient data processing and analysis capabilities. Relying too much on AI systems could cause one to miss out on special market circumstances or unforeseen situations that call for human knowledge.

3. The application of AI in finance brings up ethical and regulatory issues. To guarantee equitable and ethical AI adoption, it is important to closely examine the transparency of AI algorithms, accountability for automated judgements, and any biases in training data.

7.AI APPLICATIONS IN FINANCIAL SERVICES

1. AI algorithms examine news, market patterns, and historical data. These algorithms have the ability to maximise investing methods, take advantage of market inefficiencies, and execute trades quickly.

2.AI-driven Robo-advisors use market conditions, user goals, and risk tolerance to automatically suggest investments. They provide accessible and reasonably priced investment advice, especially for small-scale clients.

3.AI systems examine a variety of data sets, including social media activity, income, and credit history, to determine a person's creditworthiness. Both lenders and borrowers gain from the ability to approve loans more quickly and accurately.

4. Using AI algorithms, financial institutions may more successfully fight fraud and adhere to AML requirements by identifying suspicious patterns and abnormalities in financial transactions.

5. Digital Wallets have revolutionised the digital money space. One special advantage of digital wallets is that customers can purchase anything online by only providing their phone number or a one-time password

6.An interactive voice response system is used to contact customers This application's primary goal is to provide users with an excellent banking experience by accurately answering their questions**.**

8.CONCLUSION

Banks that use artificial intelligence on a larger scale are required to follow government regulations. Increased services such as net banking and online transactions are subject to privacy regulations requiring the bank to follow them.3- In addition, there is a significant lack of training among the current workforce in terms of advanced technologies and the usage of artificial intelligence in banking. As artificial intelligence becomes more popular, there are a strong number of qualified workers. Artificial Intelligence has had a big impact on the finance sector, providing a lot of benefits and expansion potential. Artificial Intelligence in finance has resulted in increased productivity, better decision-making, customised consumer experiences, and sophisticated fraud detection and risk reduction. Algorithmic trading, robo-advisory services, fraud detection, credit scoring, and other AI applications have completely changed the way financial services are provided.

Artificial Intelligence can be good or bad depending on how we use it. The purpose of the Fire is to lit it light. In pooja may use to lit light, whereas a can use to burn all assets. The use of AI is therefore entirely dependent upon how we use it.

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