A REVIEW ABOUT THE IMPACT OF ARTIFICIAL INTELLIGENCE IN BANKING SECTOR

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ABSTRACT

Since the invention of computers or machines, their capability to perform various tasks went on growing exponentially. Humans have developed the power of computer systems in terms of their diverse working domains, their increasing speed, and reducing size with respect to time A branch of Computer Science named Artificial Intelligence pursues creating the computers or machines as intelligent as human beings the development of AI started with the intention of creating similar intelligence in machines that we find and regard high in humans. The emergence of AI in the banking industry range from the topic of automation and its potential to cut countless jobs to startup acquisitions. AI-driven startup ventures are looking to redefine banking and progressive banks have launched AI based pilots, be it in the space of customer services, fraud management, or credit scoring, among others.

KEYWORDS: Computer Systems in Terms, Working Domains, Increasing Speed, Reducing Size, Artificial Intelligence

INTRODUCTION

We are living in the midst of a surge of interest and research into Artificial Intelligence (hereby A.I.). It can seem like every week there is a new breakthrough in the field and a new record set in some task previously done by humans. Not too long ago, A.I. seemed a distant dream for specially interested researchers. Today it is all around us. We carry it in our pockets; it's in our cars and in many of the web services we use throughout the day.

According to the father of Artificial Intelligence, John McCarthy, it is "The science and engineering of making intelligent machines, especially intelligent computer programs". Artificial Intelligence is a way of making a computer, a computer-controlled robot, or a software think intelligently, in a similar manner the intelligent humans think. A major thrust of AI is in the development of computer functions associated with human intelligence, such as reasoning, learning, and problem-solving. The ability of a system to calculate, reason, perceive relationships and analogies, learn from experience, store and retrieve information from memory, solve problems, comprehend complex ideas, use natural language fluently, classify, generalize, and adapt new situations

Artificial Intelligence is an area of computer science that emphasizes the creation of intelligent machines that sense, comprehend, reason and act to emulate human behavior. Some of the activities that computers with AI are designed for include image and speech recognition, learning, planning and problem-solving. Changes in the banking industry directly

impact businesses and commerce. The technology has proven successful in Equity Capital Markets and is currently being expanded to other areas including Debt Capital Markets. Artificial Intelligence applications in the banking sector create a stronger system to work on, by making banking processes problem-free. Artificial intelligence technologies are aiming to further revolutionize the way banking is done and to improve the relationships between banks and their customers.

SCOPE OF AI IN BANKING SECTOR

With the proliferation of data, the ability to effectively leverage insight and improve customer satisfaction is huge using Artificial Intelligence. Few of the use cases are:

Process Automation

High degree of manual processing is costly and it can lead to inconsistent result and errors. Various processes within the bank can be fully automated and some can be modified with lean human intervention depending on the complexity of the process.

Enhanced Customer Support

Chatbots backed by AI and integrated with banks existing digital solution can help in responding to customer queries faster and effectively. With all the learning about the bank's process, schemes, offering, etc. chatbot can be utilized to response with pre-programmed questions or information to help guide the customer to a solution and can be available 24X7

Predictive Analysis

When customers are interacting with their financial institution through multiple channels, the explosion in consumer data can help banks and credit unions generate key insights that can respond to new market trends and changing consumer behaviors. This can help organizations create better products and personalized experiences which can increase revenues and decrease costs.

ADVANTAGES OF ARTIFICIAL INTELLIGENCE

Error Reduction

We use artificial intelligence in most of the cases. This helps us in reducing the risk. Also, increases the chance of reaching accuracy with the greater degree of precision. Intelligent robots are fed with information and are sent to explore space. Since they are machines with metal bodies, they are more resistant and have a greater ability to endure the space and hostile atmosphere. They are created and acclimatized in such a way that they cannot be modified or get disfigured or breakdown in a hostile environment.

Difficult Exploration

In mining, we use artificial intelligence and science of robotics. Also, other fuel exploration processes. Moreover, we use complex machines for exploring the ocean. Hence, overcoming the ocean limitation. Artificial intelligence and the science of robotics can be put to use in mining and other fuel exploration processes. Not only that, these complex machines can be used for exploring the ocean floor and hence overcome the human limitations. Due to the programming of the robots, they can perform more laborious and hard work with greater responsibility. Moreover, they do not wear out easily.

Daily Application

As we know that computed methods and learning have become commonplace in daily life. Financial institutions and banking institutions are widely using AI. That is to organize and manage data. Also, AI is used in the detection of fraud users in a smart card based system. Artificial Intelligence is widely employed by financial institutions and banking institutions to organize and manage data. Detection of fraud uses artificial intelligence in a smart card based system

Digital Assistants

"Avatars" are used by highly advanced organizations. That are digital assistants. Also, they can interact with users. Hence. They are saving the human needs of resources. As we can say that the emotions are associated with mood. That they can cloud judgment and affect human efficiency. Moreover, completely ruled out for machine intelligence. For artificial thinkers, emotions come in the way of rational thinking and are not a distraction at all. The complete absence of the emotional side, makes the robots think logically and take the right program decisions. Emotions are associated with moods that can cloud judgment and affect human efficiency. This is completely ruled out for machine intelligence.

No Breaks

Machines do not require frequent breaks and refreshments for humans. As machines is programmed for long hours. Also, they can continuously perform without getting bored. Repetitive jobs which are monotonous in nature can be carried out with the help of machine intelligence. Machines think faster than humans and can be put to multi-tasking. Machine intelligence can be employed to carry out dangerous tasks. Their parameters, unlike humans, can be adjusted. Their speed and time are calculation based parameters only.

Increase Work Efficiency

For a particular repetitive task, AI-powered machines are great with amazing efficiency. Best is they remove human errors from their tasks to achieve accurate results. Machines, unlike humans, do not require frequent breaks and refreshments. They are programmed for long hours and can continuously perform without getting bored or distracted or even tired.

Reduce the Cost of Training and Operation

Deep Learning and neural networks algorithms used in AI to learn new things like humans do. Also, this way they eliminate the need to write new code every time.

RISKS OF ARTIFICIAL INTELLIGENCE

High Cost

Creation of artificial intelligence requires huge costs as they are very complex machines. Their repair and maintenance require huge costs. They have software programs which need frequent up gradation to cater to the needs of the changing environment and the need for the machines to be smarter by the day. In the case of severe breakdowns, the procedure to recover lost codes and reinstating the system might require huge time and cost.

No Replicating Humans

Intelligence is believed to be a gift of nature. An ethical argument continues, whether human intelligence is to be replicated or not. Machines do not have any emotions and moral values. They perform what is programmed and cannot make the judgment of right or wrong. Even cannot take decisions if they encounter a situation unfamiliar to them. They either perform incorrectly or breakdown in such situations.

Lesser Jobs

As we are aware that machines do routine and repeatable tasks much better than humans. Moreover, machines are used instead of humans. As to increase their profitability in businesses. Humans can unnecessarily be highly dependent on the machines if the use of artificial intelligence becomes rampant. They will lose their creative power and will become lazy. Also, if humans start thinking in a destructive way, they can create havoc with these machines. Artificial intelligence in wrong hands is a serious threat to mankind in general. It may lead to mass destruction. Also, there is a constant fear of machines taking over or superseding the humans.

Lack of Personal Connections

We can't rely too much on these machines for educational oversights. That hurt learners more than help. While smart machines improve the education experience, they should not be considered a substitute for personal interaction. Relying too much on these machines to grade or tutor may lead to educational oversights that hurt learners more than help.

Addiction

As we rely on machines to make everyday tasks more efficient we use machines.

Efficient Decision Making

As we know computers are getting smarter every day. Also, they are demonstrating not only the ability to learn but to teach other computers.

APPLICATIONS OF AI IN BANKING AND FINANCE

There are a number of AI applications available in the market which will bless the banking sector. The growing use of Artificial Intelligence in the banking and financial sector has so far assured stability with growth aspects

AML Pattern Detection

Anti-money laundering (AML) refers to a set of procedures, laws or regulations designed to stop the practice of generating income through illegal actions. Most of the major banks across the globe are shifting from rule-based software systems to artificial intelligence based systems which are more robust and intelligent to the anti-money laundering patterns. Large financial companies capitalize the data acquired from AML and use the same to understand the market impact of trading a significant amount and commodity. On the other side, both public and private sector use these technologies for regulatory compliance, assessment, gathering data, analysis and fraud detection.

Fraud Detection

Fraud detection is one of the fields which has received a massive boost in providing accurate and superior results with the intervention of artificial intelligence. It's one of the key areas in the banking sector where artificial intelligence systems have excelled the most After the implementation of data analysis techniques in the banking industry is the FICO Falcon fraud assessment system, which is based on a neural network shell to deployment of sophisticated deep learning based artificial intelligence systems today, fraud detection has come a long way and is expected to further grow in coming years.

Block Chain

Banks based on customers are going through major changes that operate from the preferences to the buying behaviors of the customers directed by social media and mobile. The block chain is established to implant the advantage of the payment process, which speeds up the procedure of payment, through enhancing assistance and satisfaction.

Swift Rate of Adoption and Adaptation to Technology

The technology is being adopted aggressively in both the banking and financial sector as it has become the need of the hour. The assured financial stability and how these sectors function as more and more data is being available online have to be analyzed. One can expect a more efficient and hassle-free customer interaction in the banking and financial sectors such as credit and insurance decisions. These financial decisions took a lot of time and the probabilities of errors were more in the past. Constant monitoring and supervision will assure safety and improved regulatory compliance which will further improve the industry standards

CONCLUSIONS

Artificial Intelligence (AI) is no new term in the banking sector; in fact, many financial institutions have already found success with the help of AI. But how can this technology be leveraged for banking functions.   To stay ahead of the technology curve, financial organizations are willing to take a holistic approach to reap benefits of Artificial Intelligence. This is definitely going to be an endless and continuous learning activity and moving beyond 'Automation of process' to bring in 'Intelligence factor' is going to be the key to get the optimal output. Various banks have already started implementing a variety of AI applications including chatbots, risk monitoring, training, etc. Artificial intelligence helps improve customer personalization, identify connections, and patterns that cannot be quickly figured out by humans and provides answers to several banking issues in real-time.

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