An Impact of Artificial Intelligence in Indian Banking Industries

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The banking sector is witnessing round breaking changes: foremost being the rise in customer- centricity. Tech-savvy customers, exposed to advanced technologies in their day-to-day lives, expect banks to deliver seamless experiences. To meet these expectations, banks have expanded their industry landscape to retail, IT and telecom to enable services like mobile banking, e-banking and real-time money transfers. While these advancements have enabled customers to avail most of the banking services at their fingertips anytime, anywhere, it has also come with a cost for the banking sector. This study also gives an insight into the positive and negative impact of an Artificial Intelligence using in Indian Banking Industries. This study is of descriptive nature so all the required and relevant data have been taken up from various journals, magazines for published papers and websites.

Keywords: Tech- savvy customers, Customer-Centricity, Mobile Banking, E-Banking and Real-Time Money Transfers.

INTRODUCTION:

Every industry is assessing option sand adopting ways to create value in the technology driven world. The banking sector is witnessing round breaking changes: foremost being the rise in customer- centricity. Tech-savvy customers, exposed to advanced technologies in their day-to-day lives, expect banks to deliver seamless experiences. To meet these expectations, banks have expanded their industry landscape to retail, IT and telecom to enable services like mobile banking, e-banking and real-time money transfers. While these advancements have enabled customers to avail most of the banking services at their fingertips anytime, anywhere, it has also come with a cost for the banking sector. This study also gives an insight into the positive and negative impact of an Artificial Intelligence using in Indian Banking Industries. This study is of descriptive nature so all the required and relevant data have been taken up from various journals, magazines for published papers and websites.

LITERATURE REVIEW:

1. Dr. Monica Sharma (2020) in her research paper explained that the current applications of AI in the banking industry has changed the face of banking in India. Her research entirely focused the concept of AI in the field of banking, how it has brought revolutionary changes in banking and its impact on human manpower also.

2. Mr. C. Vijay(2019) in his paper how Artificial Intelligence is used in the Indian banking sector, What are the benefit sand what are the Challenges facing India's Artificial Intelligence. Development that Artificial Intelligence offers to Fin Tech and the different ways in which it can improve the operations of an Indian banking sector.

3. Mr. Amer Awad Alzaidi (2018) explained implementation of Artificial intelligence in banking sector and understand its impact. The data collected was also quantitatively analysed using SPSS21.0 software

OBJECTIVE OF THE STUDY:

1. To under stand meaning and reasons for Artificial Intelligence.
2. To study the implementation of Artificial intelligence in Banking Industries.
3. To study the positive and negative impacts of Artificial Intelligence in Banking Industry.

RESEARCHMETHODOLOGY:

This study is of descriptive nature and tells about the meaning and reasons of Artificial Intelligence along with the impact of positive and negative impacts of Artificial Intelligence in Indian banking industry. Hence makes use of secondary data. The entire study is based only on observation and documentary analysis. Furthermore, there quired & relevant secondary data are collected from various Research Papers, Journals, & Publications, websites and many others. Books have also been referred for theoretical information on the topic as required.

FINDINGS:

This part is divided in to following subparts as under:

1. Meaning and Reasons for Artificial Intelligence.
2. Implementation of Artificial intelligence in Banking Industries
3. Positive and Negative impact of Artificial Intelligence in banking industry.

Artificial intelligence (AI) is the basis for mimicking human intelligence processes through the creation and application of algorithms built into a dynamic computing environment. Stated simply, AI is trying to make computers think and act like humans. Achieving this end requires three key components:

1. Computational systems

2. Data and data management

3. Advanced AI algorithms(code)

The more human like the desired outcome, the more data and processing power required.

REASONS FOR ARTIFICIAL INTELLIGENCE :

Today, the amount of data that is generated, by both humans and machines, far outpaces humans' ability to absorb, interpret, and make complex decisions based on that data. Artificial intelligence forms the basis for all computer learning and is the future of all complex decision making. Computers are extremely efficient at calculating these combinations and permutations to arrive at the best decision. AI (and its logical evolution of machine learning) and deep learning are the foundational future of business decision making.

ARTIFICIAL INTELLIGENCE (AI) IN BANKING:

Artificial intelligence (AI)includes learning and natural language, it can be used in the banking Machine learning is a method of data analysis which automates analytical model building, Machine learning occurs when computers change their parameters/algorithms on exposure to new data without humans having to reprogram them. Natural language processing
 (NLP) refers to the ability of technology to use human
 communication, naturally spoken o rewritten, asinine put that prompts computer activity, natural language generation (NLG) refers to the ability for technology to produce human quality prose, It sorts through large amounts of available data to produce a human-sounding response, NLG can take the form of speech, or of a multipage report summarizing financial results.

POSITIVE IMPACTS OF AI FOR BANKING SECTOR:

AI can help the bank understand the expenditure pattern of the customer, The bank can come up with a customized investment plan & assist the customers for budgeting, bank scan send the notification about the advice for keeping a check on the expenses and investments based on the data, The transactional & other data sources can be tracked to help understand the customer's behavior and preferences to improve their experience. Artificial intelligent can sift through massive amounts of data and identify patterns that might elude human observers, One area where this capacity is particularly relevant is in fraud prevention, Artificial intelligence and machine learning solutions are deployed by many financial service providers to detect fraud in real time.

Improvement in Online and Mobile Banking:

The online banking and mobile banking become increasingly popular as a tool for 24/7 transaction, AI enables Banks to access customer data, such as detailed demographics, website analytics & records of online and offline transactions, machine learning can integrate & analyze information.

Risk assessment process:

Risk assessment process while giving loans requires both accuracy & confidentiality, It is a very complex & critical process, Artificial intelligence can handle & simplify this process by analyzing relevant data of the prospective borrower, Artificial intelligence can combine & analyze data related to the latest transactions, market trends, and the most recent financial activities to identify the potential risks in giving the loan.

Security & Swifting Transactions:

Banks must be bankable for presenting secure & swift transactions, Artificial intelligence is designed to detect the fraud in the transactions on the basis of a pre-defined set of rules, the mobile app can detect any suspicious activity in the customer's account on the basis of behavior analysis, any online transaction of a huge amount from the customer's account which has a history of small transactions can be detected instantly.

Protection in Personal Data:

Artificial intelligence plays a vital role in protecting personal data, As we witness a rapid rise in the instances of cyber crimes, AI-based fraud detection can prevent such attempts, So, for thebankingandfinancesector,AIhasatremendousscopeinthedomainofcybersecurity,
The mobile app development services can detect the issue of fraud & data breach for the banks.

Hedge Fund Trading & Management:

Hedge fund trading & management can be done on the move with the help of AI-based mobile app solutions for the banking sector, AI-related tools can fetch real-time data from various financial markets across the world, AI model scan analyze different financial markets, so, AI models can assist the users to take decisions quickly.

Offering High Security:

AI can offer high security to the banking sector, AI-based mobile application scan make the transaction quicker & safer, the bank and financial institutions can understand the user's behavior and offer personalized experience through an app, Banks handle customer-oriented operations easily while reducing the cost of hiring additional employees.

Shifting tasks from Humans:

Artificial intelligence can shift tasks from humans to AI, so, it can reduce costs, it can speed up response time, keep humans apprised of the latest regulatory changes, and save time by preparing reports, The Bank has computer programs that carry out repetitive tasks ranging from automated programs to respond to data requests from external auditors.

Employee Effectiveness &Customer Experience:

Artificial intelligence improves employee effectiveness and enhances customer experience through targeted emails and other offers, It increases revenue, It increases the productivity of sales reps, AI offers greater precision & accuracy, From cash transfer to bills payment, cards management, and other support, AI can enrich the satisfaction level of your customers, All of these operations can be easily managed through desktops, smart phones, and other mobile devices.

Identification of Fraudulent Transactions:

The finance industry is harnessing machine learning to lower operational costs & drive profitability, This field involves both front-and back-office activities across multiple institutions, Machine learning algorithm scan analyze thousands of data points in real time and flag suspicious or plain-right fraudulent transactions, stopping many fraudulent claims in the process.

Increase in Efficiency, Accuracy:

Artificial intelligence increase efficiency, accuracy, and speed of mathematical calculations, it can handle large quantities of data, banks can find the best combination of the initial margin reducing trades at a given time based on the degree of initial margin reduction in the past under different combinations of those trades.

Better Customer Support:

Several pieces of evidence advocate that the customers willingly prefer self-service options which allow them to chat with a virtual assistant as if it were a live customer representative. Most leading banks have already added virtual assistants to their instant website chat bots, voice response systems, and mobile applications. Artificial Intelligence considers each interaction as a teachable moment, so the chat bots (virtual assistants) keeps getting better while under standing customers. With AI, virtual assistant scan deliver better customer support. It also allows sentiment analysis, so the virtual assistant can determine when individuals are getting frustrated and instantly transfer them to a live agent.

Enhanced Banking Services:
AI streamlines the banking process while giving customer service a new level of comfort ability. It allows banks to meet customers' expectations with comprehensive digital support. With Artificial Intelligence, you can achieve greater precision and accuracy. From cash transfer to bills payment, cards management, and other support, AI can significantly enrich the satisfaction level of your customers. All of these operations can be easily managed through desktops, smart phones, and other mobile devices.

Scam Recognition:

With an immense growth of banking fraud, scam recognition and reduction has become challenging for the banking sector. Several banks tried to identify the factors and powerful solutions but couldn't succeed. However, AI makes it easier to detect the factors involved in frauds and support investigators. It improves financial security with advanced fraud prevention tactics. Artificial Intelligence works as a real-time scam solution for the banking sector while handling complex situations and tactics. Based on advanced data crunching, AI can detect fraud by flagging unusual transactions. It also feeds back into the consumer's profile which subsequently builds a secure environment.

Advanced Data Analytics:

One of the main advantages of AI is its ability to complete tedious tasks through intricate automation, resulting in better productivity. Based on a machine learning algorithm, AI can quickly consume and process a massive amount of data at an expedited level. The enormous speed brings efficiency to financial services, providing scope for personalized offerings to consumers. What's even more, AI makes faster decisions while carrying out actions quickly.

NEGATIVE IMPACTS OFAI FOR BANKING SECTOR:

High Costs:
The production & maintenance of **artificial intelligence** requires high costs as they are very complex machines, **AI** consists of advanced software programs that require regular updates to meet the needs of the changing environment, In the case of critical failures, the procedure to reinstate the system and recover lost codes may require enormous time & cost.

Bad Calls:
Though Artificial Intelligence can learn and improve, it still can't make judgment calls. Humans can take individual circumstances and judgment calls into account when making decisions, something that AI might never be able to do. Replacing adaptive human behavior with AI may cause irrational behavior within ecosystems of humans and things.

Distribution of Power:

There is a constant fear of AI superseding or taking over the humans. Artificial intelligence can give a lot of power to the few individuals who are controlling it. Hence, AI carries the risk and takes control away from humans while dehumanizing actions in several ways.

Unemployment:

Replacement of the workforce with machines can lead to wide-reaching unemployment. Moreover, if the use of AI becomes rampant, people will be highly dependent on the machines and lose their creative power. Unemployment is a socially undesirable issue. Individuals with nothing to do can lead to the devastating use of their minds. Be it banking or any other sector; Artificial intelligence can effectively increase the unemployment rate.

Irrational Behavior in Ecosystems:

Although Artificial Intelligence can learn & improve, it still can't make judgment calls, Humans can take individual circumstances and judgment calls into account when making decisions, something that **AI** might never be able to do, Replacing adaptive human behavior with **AI** may cause irrational behavior within ecosystems of humans & things.

Risky Factors:

AI can offer a lot of power to the few individuals who are controlling it, so, **AI** carries the risk and takes control away from humans while dehumanizing actions in several ways, Artificial Intelligence delivered to wrong hands can turn out to be a serious threat to humankind, If individuals start thinking destructively, they can generate havoc with these advanced machines.

Replacement of Workforce:

Artificial intelligence allows you to replace the workforce with machines that can lead to wide-reaching unemployment, if the use of AI becomes rampant, people will be highly dependent on the machines & lose their creative power, Be it banking or any other sector, AI can increase the unemployment rate, Individuals with nothing to do can lead to the devastating use of their minds.

CONCLUSION:

AI is gradually proliferating the banking industry to reinforce financial services. In the time of social distancing and quarantine, people are more likely to take the digital route to stay up- to-date with their bank accounts and make transactions. With such advantages, it is nearly obvious that the majority of banks and financial institutions will adopt AI to stay competitive and deliver better customer support. However, several cons are also associated with a machine learning algorithm. As it continues to learn and grow, the decision-making capabilities may create problems in the near future. Also, since the manual workforce is being limited, the role of AI is critical in ensuring that banks can serve their customers effectively. We hope that our article sheds light on the inevitable need for AI to reduce the dependency on humans in the banking sector.

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