AN EMPIRICAL BONE-UP ON ARTIFICIAL INTELLIGENCE& MACHINE LEARNING INBANKING SECTOR

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Abstract
Banking sector triggers an important role in growth of Indian economy of one's Country. Banking is said to be the life line of an economy by embracing digitalization, Banks can provide enhanced customer services by Digitalization for every level form front-to-bank-end of banking. This means that Digital banks mostly rely artificial intelligence to automate back-end operation such as administrative task and data processing which in turn alleviates pressure put on employees to complete day to day tasks. Artificial Intelligence and Machine Learning in the banking sector will forever shape; how banks and the client have a more exhaustive and gainful experience by automating processes. The objective of this research paper is how Artificial intelligence and Machine Learning on banking sector at the leading edge.

Keywords: Machine Learning, Digital Banking, Cashless Transactions, E-Services.

1.0 Introduction

Artificial Intelligence technologies are implementing in the world where we live in, and banks need to use these technologies for present completive world. Success requires a universal transformation crossing multiple layers of the organization. Decades to Decades banks have been adapting the latest technology to modify quality of the services . In 1987 Banks introduced ATMs and In 1990s introduced electronic, card-based payments. The 2000s , 24/7 online banking, followed by the mobile-based banking in the 2010s.During 2010 many banks were adapted semi-automated method followed in banks may be acheque process, Transfer of cash, withdraw of cash, loan processing and also implemented paytm, phone pay(2015) internet banking and mobile banking which made a innovatory towards cashless transaction. Due to COVID-19 pandemic several digital platform have accelerated during the, and big-tech companies are looking to enter financial services as the next adjacency. In the year 2018, India developed as a great market for the Fintech options. In India 1.3 billion people with diversity in language, culture, belief and lifestyle. This are the various challenge faced. Hence, AI and ML is Difficult to implement in India. If banks will adopt new technologies there will be a huge changes in banking sectors. The latest technology in banking for the next decade from 2021 will be artificial Intelligent robots, Satellite banking, Globalisation of banking. But the development of the financial system will be in continuous manner, as the digital age is introductory up new opportunities, the use of Artificial Intelligence in banking sectors will be more and more in India. AI will save the money of $ billion by 2032.

Artificial Intelligence is creating a tinkle the world. In the world of finance and technology, artificial intelligence has demonstrated its merits by creating an option of faster, cheaper and better transactions. Artificial Intelligence in the banking sector has already made inroads in India. In future a good results and improves banking process in a smoother manner.

The changing management and administration process may leads to digital transformations. However, due to a sustainable development, genuine availability and the necessary quality of digitalisation in banking. By using necessary changes in banks will sustain in longer way. Now banks are merging because of huge NPAs and money laundering cases

Now a day it requires a digital world in a long-term success, Banking sectors requires digitalised business models. Because reduce the cost and increases effective services to their customers and employees . Now many banking sectors has a negative customer experiences and higher operating costs. But they need to change and challenges in future

Next generation technology to banks is Digital Operations and Platforms (DOP). In advanced technologies such as digital, robotics, and E-Banking to offer powerful business intelligence that helps in improving business visibility, allow customers and employees to respond quickly to evolving market needs.

1.1 Present application of Banking

Mobile banking

AI works in mobile app and becoming more practical, custom-made, For example, one of Canadian Bank has included Siri in its iOS app. Now, very easy to transfer money from one card to another card, it's enough to say something like: "Hey, Siri, send $20 to Alex!" -.AI creates wonderful results in the banking sectors. Banks generate near by 66% revenue from mobile banking. Comparison of mobile banking and when customers visit branches. Banking sectors using next generation technology tools to improve quality of service in survival of in competitive era

AI Chat Bots

Chat bots are AI enabled conversational lines. Chat bots are new kind of recognised in the market and it is slowly adopting all the financial institutions. Bots communicate with customers in lesser time and cost. It reduces four minutes for each communication that the chat bot handles.For example is the launch of the Ceba chat bot, which brought great success to the Australian Commonwealth Bank. With its help, about half a million customers were able to solve more than two hundred banking issues for example activate their cards, check account balances, withdraw cash, etc.

Another example, Bank of America launched a chat bot that sends users notifications, informs them about their balances, makes recommendations for saving money, and provides updates to credit reports, and so on. This is the way the bank helps its clients to make informed decisions.

Data collection and analysis

Banks may record millions of business transactions every day. Banks have huge data collection and it is difficult to analyse for that banks should implement new ideas and solve this issues. AI-based apps collect and analyse data. It improves the Quality and satisfaction of customer. By adapting AI and ML, the revenue of the Banks may increase by 8% and a reduction in costs by 10%.

Transaction Data Enrichment

This is for identification of local merchants & represents transactions and merchants convert them to understandable way

1.2 Future banking process -Bank of 2030

1. CYFI(cyber risk and financial crime
2. Demand : anytime anywhere banking,
3. Innovative
4. Robust
5. Secure
6. Optimized and ready to meet the expectations of empowered
7. Tech-savvy customers
8. Digital world
9. Omni-channel banking
10. Chat bots

2.0 Review of Literature

1. Artificial Intelligence: In Banking A Mini-Review; Aaron Smith &HaithamNobanee(2019) studied implementation of artificial intelligence, opinions about artificial intelligence, positive and negative impact of implementation of AI.
2. Pros and Cons of Artificial Intelligence in Banking Sector of India; Dr.Shivraj Singh(2019) studied improve efficiency and predict customer behaviour, operational efficiency; how emerging technologies such as Robotic Process Automation can assist with making internal banking processes more efficient
3. Impact of Artificial Intelligence on Performance of Banking Industry in Middle East; AmerAwadAlzaidi (2018) Described adaptation in the banking sector, technological inventions, Use of technology, a comprehensive review of the application of AI techniques in banking sector improving overall performance of the systems and banking network, opportunities associated with application of artificial intelligence in banking sector of Middle Eastern region.

2.1Objectives of the study

1. To study the Managing Risk of customers and employees through AI and ML
2. To study the Provides link between browser and lender through AI
3. To study the AI is good to solve the customer problems and employees
4. To study the Creating of synergy between Human and AI
5. To study of the opportunities and challenges of AI in use in the banks of India .

3.0Research Methodology

Type of Research: This kind of study needs more understanding of the conceptual frame work and the implications. Hence, an exploratory research study was made. With ER, a researcher starts with a general idea and uses research as a tool to identify issues that could be the focus of future research.

3.1 Data Collection: Data can be classified into two types:

3.1.1Primary data: Primary data is the original data collected by researchers for a specific purpose with the following tools in Bangalore, Karnataka in the form of Interviews, Questionnaires and Surveys Observations, Focus group Interviews,

3.1.2Secondary data: Secondary data is not originally and it is collected by somebody else for some other purpose .Documents with the help of secondary data in the form of research articles, newspapers, web information, interviews and presentations.

Sample Size: 41
Data Analysis tool: The usage of Percentages (%) & Pie Charts.
Period of Study: The period of study was taken from Dec 2021 to till date as the research topic was just evolved.
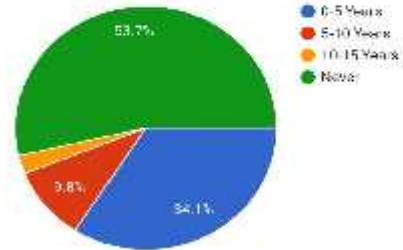
4.0Data Analysis and Interpretation

A questionnaire consisting of 8 questions are framed to know the impact of Artificial Intelligence in India banks. The results were analysed and the data was interpreted as follows
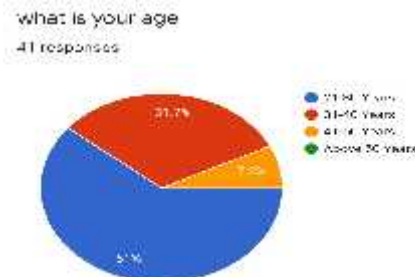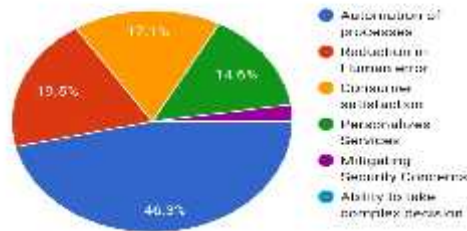
For how long have been working in Banking sector
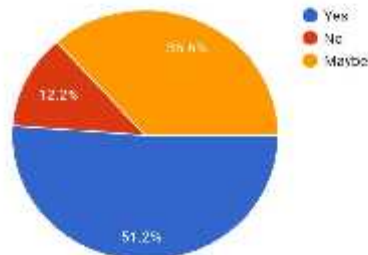
41 responses

What are the areas where AI is being used in your bank?
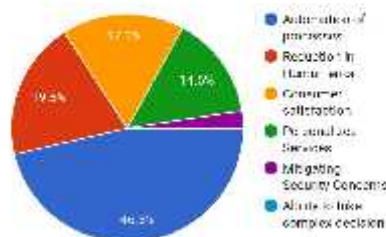
41 responses

Does your bank uses AI in banking processes?

41 responses

What are the areas where AI is being used in your bank?
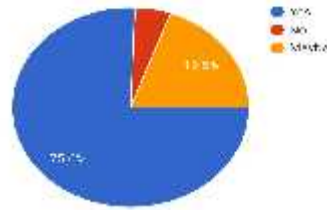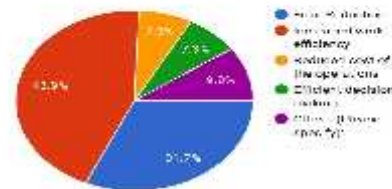
41 responses

Does the AI has a significant impact on the performance of the banking sector?
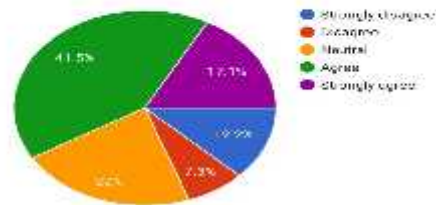
41 responses

What is the major driving factor behind adaptation of AI at your bank?

41 responses

Is there a significantly positive impact of AI on the performance of your bank?

41 responses

Finding
1. There is an positive impact on implementation of AI and ML in Indian Banking sectors.
2. Credit card providers, telephone companies mortgage lenders, banks, and the Government employees will get benefit of adopting AI systems to detect fraud and expedite financial transactions, with daily transaction volumes in the billions.
3. Electronic money transfer and its distribution channels such as ATM and online/mobile banking have been grown in the last decades.
4. The performance of banking sector will change by 75.6 % for adopting AI & ML.
5. The work efficiency will also increase by 45 %.
6. Indian bankers believe that 83 per cent by adapting AI & ML that will change in the next generation.
7. 93 per cent of bankers in India said they increasingly use data to drive grave and automated decision-making.

Conclusion
AI is growing important for financial services firms to be viable .Banking sector gets many profits by adopting advance Technologies. Artificial intelligence& ML is moving business processes and customer-facing services in

the banking sector. It is being used to meet governing compliance, detect fraud, and assess individual solvency. The application of AI& ML has the potential to create more efficient business processes, offer personalized services, and assist in larger goals such as financial inclusion. Definitely the recent trend towards digitalization is rapidly influencing the traditional banking models. However, it has also exposed the institutions to increasing cyber security threats. Artificial Intelligence gives financial advice to customers.AI knows well to India. Researchers have been working with various AI applications for decades, and especially in the area of social transformation with enabling technologies becoming a lot more accessible and inexpensive, AI is now becoming mainstream, with large enterprises and start-ups looking at different opportunities.

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