



## IMPACT OF ARTIFICIAL INTELLIGENCE ON INDIAN BANKING, CLASSICAL VS GENERATIVE AI

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**ABSTRACT:** In Financial Sector on Artificial Intelligence, has start integrating itself into the financial space in a big way. The Customer for instance is expecting customised service from banks and other entities in the financial sector. on the other hand, the regulator is expecting compliance and the government as the third-party expecting bath privacy and Secrecy. Now how do banks and non-bank financial entities integrate all this and stay on top of the financial technology artificial intelligence.

Some statistics, as per the latest Reserve Bank report on trends and progress in banking more than 78.8% of banks have adopted. AI chatbots without the 12 public sector Bank leveraging AI and machine learning (ML) Technologies to offer Virtual assistants. Furthermore, in quoting research from the Economist, which has found than 776 of Bankers believe unlocking value from AI will be the differentiator between Winning and losing entities Banks.

### INTRODUCTION:

It looks like were exploring how artificial intelligence (AI) is impacting the banking sector. Here's a revised version of our text with a clearer structure and focus:

According to the dictionary artificial intelligence is the branch of Computer Science dealing with the reproduction or mimicking of human level intelligence Self-awareness knowledge conscience thought is Computer programs they world is embracing artificial intelligence because Several reasons artificial intelligence is almost error free artificial intelligence is cast friendly as endgame just to name but a few of banks have also not been left behind and this is how our banks is using AI and this is why we need to know this information on stickle around for a personal financial tip before How your bank is using Althis information may seem

irrelevant to you but trust Me it isn't you need to know about it and I shall be telling you why let us agree through that increasing you knowledge base in any way is always a good think it isn't an exited technology, has long been used by the banking industry to increase productivity the fast expanding Capability. Capability of AI we can currently witnessing the Drastic upheaval in the finance Sector the nagor banks are utilizing AI For example, it facilitates more individualized client experiences, increases efficiency, and promotes decision-making. Even though AI has been around for a while in the finance sector, its growing capabilities are currently propelling quick developments and breakthroughs.

### AI Dialogues

- AI Integration in Finance: Customer needs VS Compliance



- RBI Trends & progress Report: 78.8% Banks using AI Chatbots
- The Economist: 77% Bankers Believe That AI is crucial for competitive.

## **.OBJECTIVE:**

- To research and evaluate the main uses of AI in banking and how they affect the sector's productivity and operations.
- To determine the obstacles related to the integration of AI in the banking industry.
- To examine AI's prospects for the future, as well as its viability and integration into the financial sector.
- Efficiency is systematized as a result, which lowers human error.
- Artificial intelligence is having an effect on the Indian banking sector.
- To increase banking efficiency, some of the top players in the sector are implementing artificial intelligence technology into their operations.
- In the banking sector, artificial intelligence (AI) has become a disruptive technology that is changing how banks run and provide for their clients. Efficiency, accuracy, and customer satisfaction have all significantly improved in banking since AI-powered solutions have been integrated.

## **CLASSICAL AND GENERATIVE**

Artificial intelligence (AI) can be broadly classified into two categories: classical AI (also known as logic-based AI) and symbolic AI (also known as symbolic artificial intelligence). The former is the collection of all methods in AI research that are based on high-level symbolic (human-readable) representations of problems, whereas the latter is focused on

producing new content such as text, images, and music. When conversing with humans, generative AI can react organically. It can also be used to personalize customer workflows and provide customer service. AI-driven chatbots, voice bots, and virtual assistants, for instance, can provide first-contact resolution by responding to consumers more precisely.

- What is meant by classical AI?

In the banking industry, artificial intelligence (AI) is becoming a more significant technological advancement. By utilizing it as a means to drive both internal processes and client-facing software, banks can enhance their customer service, fraud detection, and financial and investment management.

- What is meant by generative AI?

In the banking industry, generative AI is the application of sophisticated artificial intelligence (AI) to increase overall efficiency and security, automate activities, improve customer service, identify fraud, and deliver individualized financial advice. The banking sector is being revolutionized by generative AI.

## **REVIEW OF LITERATURE:**

1) MR. RameshLaxminarayan (from HDFC Bank,)

. According to him, artificial intelligence is different between artificial intelligence and artificial intelligence. He believed that the left brain was a model of classic machine learning or classical artificial intelligence, and the right brain was a model of learning or what is artificial intelligence and how does it work today? On the left are many analytical functions that predict what kind



of statistics we know as probability structures. Write the things that are more analytical to the right, and you will know that you can write and speak. So, what we found is that historically the left side has been used in the banking industry for a long time, because neural networks, long-term machine learning model. Machine learning, risk management, credit management, these are the topics that have long been out of banks, because the computing power has entered the students to a large extent. As Generative AI, we are reborn in that sense, and we all do it in one way or another. And it's coming fast, it's knocking now, it seems like it's starting to agree and it's early. I always say, but there are many reasons to use it. And you know how to say it well.

## 2) VV Balaji (from CTO, ICCIC Bank)

Balaji, He says about the, this is not a question of generative classical AI. It's about when you talk about AI, as we get along all are one step above the other, it is not that after five years the classical AI would vanish. It is not that, it is on top of generic AI so all have different use cases, different one as may find a future process where classical AI and generative AI will Co-exist, along with so many other tools before a particular thing classical AI. if I talk about classical, AI, there are lots of machine learnings "Credit decisioning, in fraud prevention, in many areas, Also, there as many other things like document AI, voice AI, where we Convert a voice into text or text into voice, read a document Completely, I'm referring to in banking .we have used in at the process what you talked about that's what all the banks have used which is credit decision Making brand identifying fraud transaction and application processing. And many are used

to checking or so many areas where have already used classical AI and generative AI will be on top of it on various areas, so it is not classical AI plus generative AI will be classical at plus generative AI.

## 3) Rishi Aurora, Managing partner, IBM Consulting Indian & south Asia

Rishi was investigated in sales, marketing, IT services, business management, engineering skills, IR management, construction, building, education, financial management, administrative assistance, telecommunications. He is one of AI and India's classic bank versus generator - search for a great person in the financial sector in the bank to how to invest in the banking sector with AI.

## RESEARCH METHODOLOGY

A research approach was used to attain the goal. we gathered information from the primary and secondary data. Conversational AI is hungry with then banking; the computer is having issues and it's causing frustration. SBI is using IBM Watson for digital platforms such as SBI YONO and Yes Bank with its 'Yes Robots' for payments, 'Yes Tag' for chat, and ""Power"" chat box for loan products, excelling in conversational AI is implementing software robotics, taking advantage of recent developments in AI like facial and voice recognition. Digital Bank's chatbot, powered by KAI from Kassite, is India's first chatbot-powered mobile bank. Axis Bank's intelligent banking chatbot, in partnership with Active.ai, provides a conversational interface to customers. HDFC Bank introduces "On Chat" in collaboration with Niki AI and EVA with Sense Forth, making progress in the field. City Union



Bank's humanoid "Lakshmi" can converse with customers on over 125 topics. Could the implementation of chatbots pose a threat to human jobs in the banking sector? Banks may deny it, but let's observe and see what happens. One technology set to revolutionize banking operations is artificial intelligence (AI). When discussing AI in banking, it has been projected that banks could save around \$450 billion through AI applications. These opportunities stem from advancements in technology. The application of AI in banking can be beneficial in six key areas: process optimization, credit decisioning, fraud and money laundering detection, trend trading and wealth management, marketing and customer service, and security and compliance. These areas are where AI can contribute to increased profitability, competition regulation, and overall operational efficiency.

- AI used in banking sector in India
- ✓ Banks can detect fraudulent activity, monitor system vulnerabilities, reduce risks, and enhance the general security of online banking with the use of AI and machine learning.
- ✓ **Customer service and chatbots:** AI-powered chatbots, like SBI's SIA or HDFC's EVA, have been adopted by several Indian banks, including HDFC, SBI, and ICICI, to help clients with questions about account balances, transactions, and services.
- ✓ **Risk management and Fraud Detection:** To assist banks spot possible fraud, artificial intelligence (AI) systems are being used to scan massive amounts of data for anomalous transactions. By examining consumer behaviour, AI-driven

models may also evaluate the risks associated with lending and credit card use. Personalised Banking: By examining a customer's investing choices, spending patterns, and risk tolerance, artificial intelligence (AI) assists in producing personalised financial recommendations. Banks are employing AI to provide customers with individualised savings and investing options.

✓ **Credit scoring and loan approvals:** Traditional credit scoring models have been enhanced with intelligent analytics that improve customer credit assessment. AI models are used for fast financial approvals.

✓ **Control efficiency:** AI automation is used in support processes such as managing document approvals, form processing and structural checks, to help reduce human error and increase the efficiency.

- After implantation of ai in banking industry

✓ Banks can now handle enormous amounts of data at lightning speed thanks to AI and gain insightful knowledge from it. Digital payment advisors, biometric fraud detection systems, and AI bots are examples of features that improve service quality and reach a larger clientele.

✓ **Customer Service and Chatbots:** Many Indian banks, such as HDFC, SBI, and ICICI, have introduced AI-powered chatbots like SBI's SIA or HDFC's EVA to assist customers in queries related to account balance, transactions, and services.

✓ **Risk Management and Fraud Detection:** AI tools are being used to analyze large volumes of data for unusual transactions, helping banks identify potential fraud. AI-driven models can also



assess risks in lending and credit card usage by analyzing customer patterns.

✓ **Personalized Banking:** AI helps in creating personalized financial advice by analyzing a customer's spending habits, investment preferences, and risk tolerance. Banks are using AI to offer tailored investment and savings products to individuals.

• How it will be after 5 years after implementing ai in banking industry

✓ As personalization becomes the new norm, artificial intelligence (AI) will be essential for financial institutions to stay relevant to their clients and future-ready. In addition to impacting bottom line revenue, AI is now being utilized to significantly boost top line revenue.

In the next 5 years, after the continued implementation of AI in the banking industry, several key developments are likely to occur

✓ **Hyper-Personalized Services:** AI will enable even more tailored banking experiences. Banks will use advanced data analytics to predict customer needs and offer real-time, customized financial solutions, such as personalized loan rates, ✓ who are currently underserved by traditional banks.

✓ **Advanced Automation and Cost Reduction:** The use of AI for automation will further streamline operations, reducing costs by automating loan approvals, document processing, KYC verification, and other routine tasks. Banks will become leaner and more agile, focusing on enhancing customer relationships rather than operational tasks..

## CONCLUSION:

AI is not the future of banking it is present as more and more data become available new technologies like quantum edge and

investment opportunities, and budgeting tips based on individual behavior and preferences.

✓ **Seamless Digital Banking:** Traditional banking activities will become fully integrated with AI-powered mobile and digital platforms, allowing customers to manage every aspect of their finances through apps. There will likely be fewer physical bank branches as AI enhances the convenience of online and mobile banking.

✓ **Real-Time Fraud Prevention:** AI's ability to detect and prevent fraud in real-time will become more sophisticated. Advanced machine learning models will be capable of identifying subtle patterns of fraudulent activities with near-zero delays, minimizing financial losses for both customers and banks.

✓ **Improved Risk Management and Credit Scoring:** AI algorithms will assess not only traditional data like credit scores but also alternative data sources such as social media behavior, online purchases, and payment patterns. This will improve accuracy in credit decisions, giving more people access to financial products and services, particularly those cloud computing will Continue to transform the market success requires a holistic transformation spanning multiple layers of the organization and need to pull together people processes and data and have them all work Collaboratively for bank ensuring adoption of ai technologies across the enterprise is no longer choice but a strategic imperative. Artificial intelligence is revolutionizing the banking sector by optimizing workflows and improving client interactions. Leading this change are artificial intelligence (AI) solutions, which provide creative and useful fixes for the financial services



industry. An essential part of the Indian financial sector is the Indian Banking System. By offering a range of financial services to people, companies, and the government, such as deposits, loans, and credit facilities, it contributes significantly to the nation's economic growth. Through process optimization and improved customer experiences, artificial intelligence is revolutionizing the banking sector. With their inventive and useful solutions for financial services, AI solutions are leading this revolution. Within the Indian financial sector, the Indian Banking System is an essential component. By offering diverse financial services to individuals, businesses, and the

- <https://www.w2ssolutions.com/blog/generative-ai-in-banking-and-finance/#:~:text=Unlike%20traditional%20AI%20systems%20that,images%2C%20or%20even%20entire%20scenarios>
- <https://www.slideshare.net/slideshow/role-of-ai-in-banking-2pptx/259952523>

government, such as deposits, loans, and credit facilities, it plays a crucial part in bolstering the nation's economic progress

## REFERENCES:

- <https://bfsiitsummit.com/blogs/generative-ai-in-finance/>
- <https://www.universalai.in/wp-content/uploads/2020/03/A-STUDY-OF-AI-IN-BANKING-SYSTEM-KRI160616.pdf>
- <https://www.weforum.org/agenda/2023/12/how-ai-can-streamline-indian-banking/>