

# The Competitive Advantages of Using Artificial Intelligence (AI) In Indian Financial Market

Priya Kumari Dubey

*Research scholar*

*Department of Commerce and Business Management, Kolhan University Chaibasa, Jharkhand.*

Dr. Ajeya Verma

*HOD of the Department of Commerce & Business Management  
Kolhan University, Chaibasa, Jharkhand.*

Date of Submission: 20-05-2025

Date of Acceptance: 01-06-2025

## Abstract

Global financial system is a platform which helps in executing international financial activities like currency exchange, cross-border transactions, international trade and investment, flow of capital between countries etc.

The integration of Artificial Intelligence (AI) into global finance marks a significant inflection point in the evolution of financial systems. As financial markets become increasingly complex, interlinked, and data-driven, AI technologies offer promising pathways to enhance decision-making, optimize risk management, and automate a variety of financial functions. This article explores the transformative impact of AI on global finance, highlighting its current applications, potential research areas, associated risks, and regulatory considerations.

There may be many factors which help any country's financial system to compete globally. Here we are going to discuss the importance of **Artificial Intelligence** and its role in making the Indian financial system competitive in global financial market.

**Keywords:** Global Finance, Artificial Intelligence, Financial regulation, Financial Inclusion.

## What is Artificial Intelligence?

It is a collection of technologies which allow computers to perform analytical tasks which typically requires human intelligence for example it helps in analyzing data, understanding languages, gives solutions and suggestions etc.

It is a significant part of computer science that emphasizes on the creation of intelligent machines and these machines are very useful in financial sector which help to analyze the data.

It has many advantages like it can extract text and data from images and documents which is also

known as **Optical Character Recognition (OCR)**, it can help in providing services to the customers.

As we see that AI can serve in many ways therefore it would definitely going to be a competitive factor in finance field also but before discussing the advantages and disadvantages of AI for Indian Financial System we need to understand the Indian Financial System.

## What is An Indian Financial System?

The Indian Financial System is a hub of institutions that helps in connecting savers with investors and also helps in facilitating the movement of money across the nation. There are many institutions like banks, Reserve Bank of India (RBI), Securities Exchange etc. helps in performing the financial tasks within and outside nation also.

It is made up of a variety of markets including the stock market, the bond market, the derivatives market, the foreign exchange market, the money market etc. It is a place where financial products and services are sold and purchased for example investments, loans, financial instruments etc.

## Functions of Indian Financial Markets:

- Different financial products and services are traded over here, in other words it provides a platform for the buyers and sellers to trade different types of financial products & services.
- It helps in determining the price of the financial instruments that are traded in it. The price is determined with the force of demand and supply of the instruments.
- It helps investors by providing liquidity at the time of selling off the investments for funds
- It facilitates buyers to acquire funds when they need financial assistance

- The financial market in India affects the economic growth of the country
- It also helps in mobilizing the funds from investors to borrowers.

### How AI can help as a competitive factor to cope up the Indian Financial System in International Market?

Artificial Intelligence redefining the Indian financial system by introducing the new technologies which will make the system more efficient and data driven however some disadvantages are still there like, transparency, stability, employment issue, throat cut competition etc. Indian market currently struggling to match with technological advancement brought by AI. Regulatory bodies are also helping the financial system keep pace with the current AI advancement. Various types of financial advantage It can be categorized in the following way:

One thing should be noted that heavy reliance on AI and technology may result in vulnerabilities. Many AI models, particularly deep learning systems, operate as “black boxes,” offering limited insight into how decisions are made. Accountability becomes questionable in case of lacking of transparency especially in high-stakes financial environments. Global finance is experiencing unprecedented disruption due to the proliferation of AI technologies. Traditional financial models are giving way to more dynamic, algorithm-driven frameworks that enable faster, more accurate decision-making. The convergence of AI with global finance is not merely technological—it represents a paradigm shift with deep implications for economic governance, financial stability, and market behavior. For scholars, this intersection presents a fertile ground for inquiry into the socio-technical, regulatory, and operational dimensions of AI-enabled finance.

**Advantages of AI for Indian Financial Market:** As AI has already been started impacting the Indian financial market, this has become an inseparable part without which growth of the country cannot be imaging. Some of the major advantages are listed below for better understanding:

- AI is being used to enhance the productivity of the financial sector by making it automative and by speeding up many tasks.
- It is continuously helping in managing the financial risks, reshaping the financial markets and enhancing customer service also contributing in fostering innovation and streamline operations.

- In the beginning it may seem to be very costly but after achieving the stability level it will help in reducing the cost as well, introducing AI in any field will require very less man power.
- It can help in identify new business opportunities and optimize marketing campaigns, boosting revenue streams for example many financial institutions providing personalized investment strategies using AI.
- AI algorithms can help in analysing logical data as well which helps in identifying pattern and creditworthiness more accurately.
- One of the foremost ways is being used in finance industry is for fraud detection, traditional fraud detection systems cannot help in tackle these advanced fraudsters, AI powered finance software can help in analyse the vast amount of data in real time with 100% accuracy.
- Even in 2024, a significant portion of the population in India remains unbanked. This means that there are individuals who can't be offered services because traditional credit scoring models use formal credit histories to offer solutions. But AI and ML can be used for analyzing alternative data available like their utility payment histories or their social media activities to find their creditworthiness.
- With machine learning in financial regulation and other aspects, financial industries can leverage alternative data for credit assessments. This helps them extend services to underserved populations, enhancing financial inclusion.

**Advantages of AI for Indian Financial Market:** It is not so easy for a business to evolve AI and ML in the business process because though the n numbers of advantages are there of these technologies but any new implementation always comes with a combo of both i.e., advantages and disadvantages as well. Below herewith some advantages are discussed.

- AI and ML powered tools use very confidential and sensitive data, which automatically raises the concerns about the confidentiality, security and privacy of the data, the security of data becomes questionable and loses the customers' trust.
- AI decision-making can raise ethical concerns as it lacks transparency, which is called the “black box” problem. This arises from biases that can be there in training data which can lead to unfair outcomes in areas like credit scoring.

- For a small institutions, it can be costly to implement AI powered finance solutions, as it needs to invest in infrastructure, technology and talent as well.
- It has becomes necessary for every individual to adapt the skill of AI and ML other some jobs in danger due to implementation of this technology.
- These technologies are highly data dependent, they completely depend on high quality data to perform with accuracy.
- The banking sector must adhere to stringent regulations and compliance frameworks designed to ensure consumer protection and fairness. One of the biggest challenges for financial institutions is maintaining transparency amid rapid advancements in AI. They must navigate ethical considerations and avoid biased outcomes as much as possible. The algorithms they employ must be unambitious and explainable.

## II. Conclusion

Financial Institutions can only successfully leverage AI by mitigating the challenges, which comes along with the package of advantages of adapting AI. The most pressing concerns are like data privacy and confidentiality, compliance and regulatory framework and accumulation of necessary AI expertise.

Though expecting the future without advanced technologies in any field would be imaginary. Undoubtedly it has transformed the financial world, offering numerous advantages in terms of customer experience, efficiency, and fraud detection. However, it is essential to address the challenges and potential drawbacks associated with AI implementation, such as data privacy concerns, the need for human interaction, initial investment requirements, and ethical considerations. By understanding and managing these aspects effectively, financial sector can harness the power of AI while maintaining customer trust and delivering exceptional marketing experiences.

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