



Original Article

FROM TRADITIONAL TRADE TO SMART TRADE: THE ROLE OF ARTIFICIAL INTELLIGENCE

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**Abstract:**

*Artificial Intelligence is revolutionizing the world in multiple ways; one such way is how it is changing international trade. AI is essentially an extension of a human's ability to make informed decisions by harnessing an enormous amount of data. As such, it plays a significant role in transforming the old ways of trading and commerce. In fact, one of the areas where trade has benefited the most from the advent of AI is in forecasting demand and supply chain management. Other areas include customer relationship management and supporting international trade transactions. This paper seeks to shed light on the contribution of AI to trade, which has resulted in the creation of a new term termed smart trade, by discussing its applications, benefits & challenges. More specifically, the results demonstrate that, to some extent, human judgment should still hold some sway in AI, supported decision, making within the world trade as it helps promote more ethical, inclusive, and sustainable trade practices. It is a literary review article that, besides academic literature, also involves the study of published reports, trade documents, and policy papers. One of the promoting factors of trade, the accessibility of data, is heavily supported by AI when it finds useful information in the real, time analysis of large datasets related to trade and commerce. Traditionally firms have relied on periodic market surveys which provide very limited in terms of timeliness, sampling, and measurement errors. Contrarily, data, driven firms take advantage of the fact that AI, powered analytics creates a continuous flow of useful market insights that make the firms the best informed and biggest customers in the market.*

**Keywords:** Artificial Intelligence, Smart Trade, Global Commerce, Decision-Making, Digital Economy

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**Introduction:**

Trade and commerce have experienced a deep evolution, throughout the last centuries, coming from barter systems to digital platforms

nowadays. In the past, most trade decisions were made through human experience, intuition, and a very limited amount of data. However, with the world becoming more integrated, markets getting



tougher, and the continuous march of technology, traditional trading systems are no longer capable of meeting the rapidly changing demands of the global market. Among the tremendous advances in the world of technology, Artificial Intelligence (AI) has stood out as an exceptionally capable tool that can analyze huge datasets at once, detect trends, and compromise with a faster or more accurate decision making. From this point of view, AI paves the way for companies in global trade and commerce to shift their practices from conventional ones to smart trade systems. To be smart in trade means one leverages the state, of, the, art digital tools, especially AI, to increase the level of effectiveness, openness, and competitiveness in trade activities. This paper examines the role of AI as a driver of reshaping business functions such as supply chain, logistics, marketing, and customer service in the process of transforming the industry from smart trade to smart business. AI, powered tools make it possible to perform predictive analysis, monitor in real, time, and automate the regular trade procedures. Besides, the research suggests that the implementation of AI in trade can lead to a faster and more adequate reaction to the changing market conditions, at the same time allowing for better resource management and sustained growth. For instance, AI applications for demand forecasting serve in predicting future customer demand, logistics for route optimization, while digital marketing applications of AI focus on customer engagement and interaction. In the field of international trading, applications of AI technology enable fraud analysis and customs clearance. Such applications clearly show how AI transforms traditional trading into smart trading.

### **Objectives of the Study**

The objectives of the study are as follows:

1. To perceive the meaning & significance of Artificial Intelligence when related to trade & commerce.
2. To examine the impact of AI on the evolution from traditional trade to smart trade.

3. To analyze the effects of AI on decisions in global trade and business.
4. To determine the difficulties involved in the application of AI in trade practices.
5. To propose recommendations for the optimal use of AI within international trade.

### **Research Methodology:**

This paper mainly focuses on secondary data. Relevant data has been collected from various sources such as research papers, books, reports published by international institutions, and online sources. This data has been analyzed in a descriptive and analytical manner in order to comprehend the implications of artificial intelligence in the context of transforming trade and commerce.

### **Concept of Artificial Intelligence in Trade and Commerce:**

Artificial Intelligence: It is the capability of computers to undertake activities that demand intelligence for carrying out actions such as learning and problem-solving. Also used in the business world for purposes such as demand prediction and analysis, price optimization and management, and analysis for detecting any form of fraud as well as handling customer service via chat bots or virtual assistants.

#### **1. From Traditional Trade to Smart Trade:**

In conventional trade systems, the processes involved were manual; information was limited, and decision-making involved tedious procedures. In smart trade systems, AI technology is applied to automate processes, enhance accuracy, and optimize response time. AI assists in real-time tracking of commodities, predicting markets, and also in optimizing supply chains, thereby reducing costs incurred in trade processes.



## **2. Role of AI in Global Trade and Commerce:**

AI has relevance in international trade as it assists in international transactions, improves logistics, and boosts trade finance services. AI-based systems help businesses in following international regulations, risk mitigation, and trade route optimization. The other field in which AI has importance is in the case of ecommerce as AI provides customized services to customers and assists in easy access to the international marketplace. For instance, technologies such as smart customs systems powered by artificial intelligence have the ability to automatically authenticate papers, identify discrepancies, and eliminate trade time, which can take days, down to mere minutes, thus making international trade even faster and more transparent. Similarly, in logistics, route optimization by artificial intelligence prevents businesses from using congested ports or regions that are politically unstable, thus cutting down costs and associated risks associated with delivery.

## **3. Human Decision-Making and Artificial Intelligence: The Need for Balance:**

Despite the benefits provided by AI technology in making decisions better, it should actually function as a decision-support system in such a manner as to complement human judgment instead of replacing it. Human experience and understanding are vital for making trade decisions. In this regard, for example, in trade decisions, an individual may want to take into account market relationships and social obligations in addition to profit considerations as recommended by an AI system. In this context, it can thus be said that Human-Centered AI is relevant to ensure well-structured trade practices. In addition to this, if human reliance on AI technology to support trade decisions grows to an excessive extent, then such decisions may turn out to be rigid and mechanical

instead of reflecting human value considerations in international trade.

## **4. Challenges in Adoption of AI in Trade:**

The adoption of AI into trade has certain challenges, such as high cost and implementation expenditure, lack of skilled workforces in this technology, data privacy concerns, and ethical issues. It might be difficult for small and medium enterprises to engage in the implementation of AI technologies due to limited financial and technical capabilities. Over-dependence on AI's intelligence will lead to biased and unethical decisions if human deliberations are not important to them. Besides, AI systems perform just as well as the quality of data fed into their training; poor, biased, incorrect, or inefficient data cannot yield anything but misleading trade decisions. For example, if an AI system trains essentially on data from developed countries, then applications for emerging markets will certainly be unrepresentative and perhaps unfair, leading to poor strategic choices. Therefore, without proper data governance, transparency, and continuous human supervision, AI could magnify errors rather than reduce them.

## **Findings and Suggestions:**

The study makes it clear that the efficiency and effectiveness of trade activities are greatly enhanced by the use of Artificial Intelligence, as AI enables fast processing, analysis, and forecasting. The application of Artificial Intelligence enables fast and data-driven decision-making in international trade, resulting in lowering risks and uncertainties in trade activities. The implementation of intelligent trade systems helps in upgrading the competitiveness of companies in the global market, as trade activities in terms of logistics, services, and transactions become more effective. But, as stated in the study, the involvement of human intelligence is required in trade activities for making trade ethical,



fair, and sustainable. Keeping in mind the above discoveries, it is proposed that businesses should proceed with the implementation of AI technology in a phased manner along with proper employee training sessions in order to prevent blind faith in technology. Policy makers should create proper regulations and guidelines for using AI technology in trade and commerce in a proper manner. Moreover, special attention needs to be given to MSMEs in providing support for adopting the required AI technology so that they can efficiently contribute to the smart trade setup.

### **Conclusion:**

Artificial Intelligence is turning traditional trade into smart trade. This is because Artificial Intelligence is bringing about efficiency, transparency, and innovation in global trade. But despite the numerous benefits that Artificial Intelligence has to offer, it has limitations. This is because it cannot offer all the intelligence that is needed. This calls for a balanced approach when it comes to the use of Artificial Intelligence. This is because instead of depending on Artificial Intelligence, humans ought to partner with it. This is because the future of global trade will be shaped by the use of Artificial Intelligence. This is why the intelligence of machines is not important, but the wisdom that humans ought to use when it comes to Artificial Intelligence.

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