ROLE OF ARTIFICIAL INTELLIGENCE IN ENHANCING E-COMMERCE

Dr. Champa Devi Maurya*

ABSTRACT

AI is a study of how human brain think, learn, decide and work, when it tries to solve problems. The main purpose of Artificial Intelligence is to improve computer functions which are related to human knowledge, like reasoning, learning, and solving problems. E-commerce is now adopting this technology to identify patterns based on browsing, purchase history, credit checks, account information transportation etc. Many e-commerce businesses have started implementing various types of Artificial Intelligence for understanding customers, and provide them a better customer experience. Now a day's AI has become a very important force for the development of e-commerce. Artificial Intelligence gives customers an enriched experience which in return helps them to maximizing profits. Machine learning system, a part of Artificial Intelligence, it solves the inconvenience related with human intelligence and helps to make better logistic speed and quality. This paper highlights the role of artificial intelligence in enhancing e-commerce in different forms.

Keywords: *Artificial Intelligence, E-Commerce, Optimize, Enhancing, Logistics*

Introduction

Artificial Intelligence is an intelligent device that is created by human beings. It is capable of performing tasks smartly without being openly instructed to do so. AI is very smart in handling the customer data and forecasting the purchase behaviour of customers. This has brought the high level of automation in the e -commerce industry. We make use of AI in our daily lives without even realizing it. For example Spotify, Siri, Google Maps, YouTube, Search, protection and prevention from Fraud, etc., all of these applications make use of AI for their working. The main aim of AI is to facilitate computers and machines to perform smart tasks like problem solving, decision making and understanding human communication. It has a great impact on our quality of life.

*Assistant Professor, SBJS Rampuria Jain College, Bikaner, E-commerce is the buying

and selling of goods and services over the internet. Almost anything can be purchased through e-commerce today. Examples of e-commerce sites are Amazon, Nykaa, Myntra, etc. E-Commerce is providing unique non-cash payment features, 24x7 availability of services and improved sales. The models of E-commerce are:

1. Business-to- Business (B2B)
2. Business-to- Consumer (B2C)
3. Consumer-to- Business (C2B)
4. Consumer-to-Consumer (C2C)
5. Government-to- Business (G2B)
6. Government-to- Citizen (G2C)

Application of AI in E-Commerce

Artificial intelligence is becoming more mature and is smartly changing the way people work and live, especially in the field of E-commerce, AI has gradually developed into a powerful tool to increase sales growth and maximize e-commerce operations. Most large e-commerce players have adopted AI to make product recommendations that users might be interested in, which has led to considerable increases in their sales. Artificial intelligence is a self-learning algorithm which is creating personalized shopping experiences for online buyers. At present, the application of AI is used in the field of e-commerce is as follows:

1. Chatbots: It automatically responds to customer questions and recommend product using a natural language processing system. Chatbots helps to find suitable products for consumers, check the supply of products, evaluate products, and help consumers to pay. If there are any complaints, chatbot can help customers to contact the corresponding service personnel. Consumers can talk to the robots through text, voice and even pictures. Labour costs reduced through effective use of chatboats, user experience optimized, service quality improved, and wealth maximize. They are now serving customers in odd-hours and peak hours as well.

2. AI Detection of Fake Reviews and Filtering Spam: Customers feedback is very important terms that is necessary for customer trust in the E-Commerce shopping. Customer positive feedback on products help other customers to make buying decisions, but due to the huge volume of reviews it would be impossible for human eyes to scan through them to filter out malicious content.

3. Optimising Voice Search: Voice is slowly replacing text based search in online shopping. Voice recognition accuracy is continuously improving. Almost 80% of

133

requests are made in a natural language with Google assistant. Apple's HomePod powered by Siri is a voice controlled personal device.. Another example is Amazon's Echo powered by Alexa. Today, people are relying on voice assistants like Alexa, Siri to find out about a product to buy it online. Artificial Intelligence helps in finding exact products through various parameters.

4. Supply-Chain: Forecasting of demand for different products at different time frames is possible through AI, so that they can manage their stocks to meet the demand. Inventory forecasting is not simple task in rapidly changing competitive markets, So, artificial intelligence can help to order cycle and calculate the influence of these factors on turnover and inventory. Now a day's AI is become smarter and making it more accurate for businesses to predict inventory demand.

5. Recommendation Systems: It was powered by artificial intelligence to assist customers to quickly discover the items they were looking for. Amazon's home assistant, Alexa is also artificial intelligence enabled virtual shopper assistant. It provides the customer modern shopping experience and only needs to verify your voice pattern to process the order. This is one of the main reasons why companies have been investing in them since the early 2000s.

6. Auto-Generated Product Descriptions: Product descriptions are used by customers to make purchase decisions. It influences customers decision. AI helps in content generation tools, E-Commerce use the power of AI to create descriptions that tackle the interest of the buyer. The AI reply customer queries solve their problems and even identify new opportunities for the sales team. Those products and services will not be offered to the customers whom are inappropriate for online shopping.

7. Personalized Search: The E-commerce industry is transforming by artificial intelligence in online shopping, it predicts shopping patterns that shopper buys when they want. For example, if online shoppers regularly buy a particular brand of product, then the online retailer could send a personalized offer to these shoppers for this product, or even use a machine learning-enabled recommendation for a supplementary product that goes well with grocery products.

8. **Virtual personal shoppers:** Customers can have direct conversation with a shop assistant to enquire about a specific item in an offline store. These smart virtual shoppers will actively engage with the customers. Customers will now be able to talk to these virtual assistants and solve their queries. They do not have to select options by r entering specific words.

9. Upgrading delivery method: Once customer buys any product on any E-Commerce website, they want it to be delivered as soon as possible. Amazon even offers prime membership that allows customers to avail same day or one day delivery. The future application of AI will witness robots delivering products at doorstep; it is the power of AI and data-driven innovation.

10. Virtual Reality and Augmented Reality: The use of virtual reality and augmented reality can be used to create systems that give customers to have fantasy of shopping in the real store. The E-Commerce industry can have real-time access to customer data and systematically identify opportunities for selling its products. This is one of the best applications of AI for E-Commerce.

11. AI based hiring processes: HR department can reduce their work by using AI technology in many ways. For example, sorting of application, screening applications, keep applications with most match preferences, arranging face-to-face interview can be automated through AI technology, by using software as a service product. This reduces the work load of HR departments by using AI technology for best candidate selection.

12. Re-commerce: As the name suggests, re-commerce refers to the resale of products that were owned by others previously. E-Commerce stores can work with AI to design, develop, and implement systems that explore this opportunity. It makes the world leaning towards sustainability & environmental friendliness.

Future of Artificial Intelligence: Artificial intelligence is not only important for the industry but for the human being also in the coming future, it acts as the main driver of emerging technologies like big data, robotics and IoT. AI will have more impact on the quality of life. Virtual assistants in everyday life, helping us save time and energy. The future of Artificial Intelligence is inspiring and will come with high intelligence.

Conclusion: Artificial Intelligence has emerged to be the next big thing in the field of technology. It has impacted almost every industry AI makes every process better, faster, and more accurate. This technology has many applications such as identifying and predicting fraud transactions, accurate credit scoring, and manage huge amount of data automatically. Artificial Intelligence provides better management process of industries and also helps in developing new solutions to problems which is very cumbersome manually. Artificial intelligence in E-commerce industry is helpful to online retailers for providing chatbot services, evaluate customer comments, and provide personalized services to online shoppers.

References

- Pannu Avneet,(2015). Artificial Intelligence and its Application in Different Areas. *International Journal of Engineering and Innovative Technology (IJEIT)* Volume 4, Issue 10.

- Shyna K and Vishal M (2017). A Study on Artificial Intelligence in E-Commerce. *International Journal of Advances in Engineering & Scientific Research,* Volume 4,(Issue 4, June-2017), pp 62-. ISSN: 2349 –3607 (Online), ISSN: 2349 –4824 (Print),

- Gupta Siddharth, Borkar Deep, Chevelyn De Mello, Patil Saurabh,(2015). An E-Commerce Website based Chabot. *International Journal of Computer Science and Information Technologies (IJCSIT),* Vol. 6 (2).

- Sahu Mausami, (2016). Plagiarism Detection Using Artificial intelligence. I*nternational Journal of Scientific &Technology Research*, Volume 5, Issue 04.

- Dr. Gawali S. N., (2019). Artificial Intelligence in E-Commerce. *International Journal of Management and Economics,* ISSN: 2231 – 4687,Vol. I No. 28.

- Delfmann, W., S. Albers, and M. Gehring, (2002). The impact of electronic commerce on logistics service providers. *International Journal of Physical Distribution & Logistics Management,* 2002. 32(3): p. 203 -222.

- Nadikattu, Reddy Rahul, (2019). New Ways in Artificial Intelligence. *International Journal of Computer Trends And Technology*.

- Shukla Saloni, Joel Rebello, Threat of automation: Robotics and artificial intelligence to reduce job opportunities", http://economictimes.indiatimes.com

- http://www.optimonk.com

- http:/www.dzone.com