

ARTIFICIAL INTELLIGENCE: A NEW TOOL IN E-COMMERCE**Dr. Morage Prakash V¹, Dr. Pandit C. Bilamge²**¹Professor of Commerce Govt. Women's First Grade College Jewargi Colony,
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Kalaburgi, (Karnataka-India)**ABSTRACT**

The use of Artificial Intelligence (AI) in e-commerce opens up new horizons for innovation and efficiency, but also brings significant challenges. This paper aims to analyze the impact of AI in e-commerce, with focus on personalizing customer experiences, optimizing business processes, and data-driven decision-making. Simultaneously, ethical, security, and regulatory challenges posed by the widespread adoption of AI are discussed. This article only examines how AI may be used to optimize company operations and personalize customer experiences, but it also looks into how AI is changing e-commerce marketing methods. The way e-commerce companies handle market segmentation and targeted advertising is significantly changing as a result of AI's capacity to examine customer behavior and forecast future trends.

INTRODUCTION

Artificial Intelligence (AI) is a set of technologies that enable computers to perform a variety of advanced functions, including the ability to see, understand and translate spoken and written language, analyze data, make recommendations and more. Artificial intelligence (AI) is playing an important role in E-Commerce activities nowadays. AI is the combination of two words artificial and intelligent. As we all know, artificial means not real, and intelligence means the ability to implement after understanding and learning that particular topic. In other words, it means it can replicate the intelligence of a human. Over the past couple of years AI technology has gained momentum and has become a powerful tool to increase the sales and optimize the operations

E-Commerce business is growing in a rapid speed in all most all the sectors of business. The common man is also in a place to purchase the goods through e-commerce operators. It is because majority of the people are having access to the cell phones. At the same time everybody is having bank account with the increased use of zero balance account. The invention of UPI is the revolutionary step in the transfer of money from one account to another. The digital payment is common in almost all the cities and towns. The metros are already reached a highest level of digital transactions in every field. Due to this, there is a rapid growth in the field of e-commerce.

The variety of products are pushed into the e commerce business. It is time consuming for the customer to search his interested product out of many. At the same time it is essential to identify the perception of customers towards our product. People are not ready to spend more on searching their interested products. Further, identification of the customer likes and dislikes is also a big challenge for the business houses. In order to cross these hurdles, business houses are using Artificial Intelligence technique extensively.

Businesses gain from e-business by being able to access customers globally at a low cost and without regard to location. Improve your time management and communication skills to become more adaptable and efficient. In this paper an attempt is made to know the importance of use of AI technique in e commerce business along with the challenges which come across in the process.

USES OF AI IN E-COMMERCE

The use of AI technique in big business organizations is common. E commerce uses AI across various functions to optimize various operations and improve the customer satisfaction. Many large e-commerce giants, including Flipkart, Amazon, Sephora, and IKEA are already leveraging the opportunities of AI and machine learning to streamline their operations. Plus, your business can make the most of it. The following are the common uses available for e-commerce industry.

1. Product Recommendation

It is very easy to collect the shopping experience of a customer by using AI technique. One of the most important ecommerce metrics for retailers is average order value. The AOV of your ecommerce business has a direct impact on the revenue generated and can be improved with the help of artificial intelligence. AI can use collected data to influence customers' product purchase decisions based on knowledge about products searched, previous orders, and browsing habits. If you provide relevant product recommendations, customers will not ignore them and will end up spending more in your online store. A win-win situation for your business.

2. Powerful search experience

One of the main reasons customers leave your ecommerce store is because they can't find the product they want. Online businesses typically have large product catalogues, making it difficult for consumers to find what they are looking for. Therefore, creating a robust and accurate search experience is essential. Artificial intelligence is a technology that can help you achieve what you need. It helps create a search engine that acts as a sales representative by providing customers with the right products. Alternatively, e-commerce businesses can also integrate AI-powered search software like Doofinder and Search Unify to deliver a better search experience.

3. Better customer service through chatbots

With the help of AI, e-commerce businesses can respond to customer inquiries 24/7, increasing conversion rates and sales. As customer demands increase and patience becomes scarce, it is essential for e-commerce businesses to be responsive and provide fast customer service. Chatbots provide a personalized customer experience by directing customers to specific product pages or FAQs to help them find the best answers to their questions.

4. Optimized price

Pricing plays an important role in B2B as well as B2C businesses. You can also change your prices based on supply, demand, and many other factors to find the best price for your business. AI can help you do this efficiently. With access to the right customer data, AI tools can predict the right price and discount amount for products to maximize sales and profits.

5. Effective Marketing

Ecommerce marketing is all about understanding buyer behavior and adapting your offers accordingly. Ecommerce marketers can use AI to understand their customers and learn their preferences easily and effectively, segmenting them into different groups for effective marketing. Providing personalized content and marketing can also increase customer retention rates.

6. Trend Prediction

That's right. Artificial intelligence can help you predict the future and tailor your offers accordingly. Post-pandemic, many businesses want to plan their inventory with real-time and historical data in mind. AI can help you do this in a profitable way. You can use it to identify future sales and demand patterns based on customer behaviour so you can plan inventory and prepare your delivery team accordingly.

CHALLENGES OF USE OF AI IN E-COMMERCE

AI offers many benefits in e-commerce, but it also presents challenges:

1. **Data privacy:** AI algorithms make personalized recommendations and predictions based on user data. Collecting such data raises privacy and data protection concerns. AI also presents security risks to businesses involving proprietary intellectual property, leading to accidental leaks and breaches.
2. **High initial investment:** Implementing AI is expensive. This includes investments in infrastructure, talent and management. Additionally, AI solutions do not always provide a positive return on investment (ROI).
3. **Chances are the customer service is not good:** Because AI customer service relies on chatbots, it may not be able to provide the same support and empathy as human customer service representatives. If not done properly, AI can lead to customer service friction, customer dissatisfaction, and a bad reputation.

Ultimately, AI will transform the e-commerce industry in the future, but we can already see many examples of artificial intelligence in online shopping. AI plays a huge role in adding better customer experience and innovative solutions in the e-commerce industry. Product recommendations, personalized shopping experiences, virtual assistants, chatbots, and voice search are the most common uses of AI in e-commerce. The benefits don't end there. The benefits of extracting insights from customer data collection and segmenting it to tailor online merchandising services to each customer's interests and tastes are further enhanced by AI. With the help of AI and data collected from customers and businesses, today's e-commerce businesses can use that data more effectively to make informed decisions by predicting future outcomes and adjusting their marketing campaigns accordingly.