

## **Artificial Intelligence in Reshaping Businesses**

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### **Abstract**

Artificial intelligence (AI) has remained a hot topic since 1956. It has found wide applications only now. AI has revolutionized lot of areas including healthcare, banking, finance, marketing, etc. It has completely transformed how businesses are being done. With AI, companies can now gather data on how customers perceive their brand via social media posts, reviews, and ratings that mention the brand. This analysis allows companies in identifying opportunities for further improvement. This paper makes a brief note on how AI is reshaping business in current times.

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### **1. Introduction**

Artificial intelligence refers to any type of computer-based program that carries out human-like thinking and activities such as learning, planning and problem-solving. Although AI has been in existence since 1956, it took decades of work for making its practical use a technological reality. In business now, artificial intelligence has found wide range of uses. It is already changing the way business processes operate in every industry to such an extent that it has become imperative for maintaining a competitive edge[1].

A recent research shows that nearly three-quarters of companies have either already integrated AI or are exploring the use of AI (43%), according to IBM's "2021 Global AI Adoption Index." Advances in AI tools have actually made artificial intelligence more accessible for companies. For instance Natural Language Processing (NLP) is a branch of AI that has made interaction with system a flexible job and thus assisting companies in implementing this practice in customer care services. The best example of NLP can be seen in use of Voice-enabled applications such as Alexa, Siri, and Google Assistant that respond to our voice commands. Other applications of AI in business have been elaborated in the next section.

### **2. Applications of AI in Business**

AI has created multiple avenues for boosting productivity and lower costs significantly. The array of areas where it has found uses, may be as summarized[1][2].

#### **customer support and target marketing**

Chatbots have been employed for addressing customer support. They use NLP for appropriately responding to customer requests much faster than a human at lesser cost. Predictive analytics is applied on the customer data gathered from feedbacks, social media and other internet entities for perceiving customer demands, needs and buying patterns and bring out better suggestions in their favour. Even advertisements, these days are placed via machines by first identifying target customer group and then promoting products or services as per each individual's preference[4].

## **Smarter & safer supply chains and other operations**

Organizations have started using machine learning algorithms for forecasting the time of need and appropriate time to move supplies. This helps in elimination of risks such as over or under stocking. AI is also leading the way for carrying out other operations in a smarter and optimized way like intelligent store design, product selection, product pricing, monitoring inventory, identifying anomalies, bugs and cyberattacks. AI based applications are also being used in industries for monitoring safety and quality control. Further, such customized applications may be used for training the workforce for skill development.

## **Other industrial needs**

AI applications span sectors. Some examples include healthcare, finance, transport etc.[5]. The healthcare industry is using artificial intelligence for providing better diagnostic results over clinical data of any specific person which leads to better customized individual treatment plans. In finance data mining techniques have been used for fraud detection and data security on the basis of historical and real-time data to separate legitimate transactions from illegitimate ones and in making trading decisions as well. AI is also being used for smarter traffic management operations and transportation logistics.

## **3. The way ahead**

There has been a manifold rise in the number of AI enabled start-ups. With number of AI tools available, companies are efficiently employing such tools for capturing customer priorities and serve accordingly[3]. Not just this, AI has led to automation of tasks within organization. Thus, businesses who embrace AI will have a profound success in the coming decade and beyond. There is just the need to have the right skilled taskforce at hand for better serving such industry needs in future.

## **References**

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