A Study on Role of Artificial Intelligence (AI) Technology in Business Management

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Abstract

Artificial intelligence, which is the development of computer systems and machine learning to mimic human intelligence's problem-solving and decision-making abilities. It has impact on a variety of business process. Artificial intelligence (AI) is being used by every organization for a variety of purposes. In this regard, the researchers to discuss and highlight the importance of AI in this paper and also the role of artificial intelligence in today's business management. Many studies have been undertaken on different applications using artificial intelligence, the role and challenges of ChatGPT and similar generative artificial intelligence in today's business management. A very few studies have been done on the role of artificial intelligence. However, this study is based on secondary data; the researchers referred to some of the articles available on websites, newspapers, magazines, books, etc.

Keywords: Artificial Intelligence, Computer, System, Machine Learning, Problem-solving, ChatGPT.

Introduction

Artificial Intelligence is the term used to describe machines that simulate human cognitive abilities. It encompasses a broad spectrum of technologies that let machines carry out operations like reasoning, problem-solving, decision-making, and experience-based learning that used to require human intelligence.

Today, artificial intelligence (AI) is a universal term for several related disciplines, including machine learning, deep learning, and natural language processing. Numerous applications, including chatbots, virtual personal assistants (like Siri and Alexa), recommendation engines, driverless cars, and medical diagnostic systems, have been made possible by the advancement of AI. These applications show how AI may be used in real-world settings to carry out particular activities with a high degree of efficiency and precision.

Review of literature

Kresimir Buntak[1] Matija Kovacic, Maja Mutavdzija: in their study, they have discussed, the application of artificial intelligence in business, and the development of artificial intelligence. The areas of application, areas of usage, and descriptions, and also discussed in their study of customer relation management.

Ritika Gupta and Himanshu Katoch: Have studied in their study, the role of artificial intelligence in business management, in their research they have discussed the rapid evolution of artificial intelligence technology, the top three sectors of business that use Artificial intelligence, the main objectives of their study impact of artificial intelligence on business, Providing recommendation for the effective of AI in the workplace. They have discussed how artificial intelligence has become a pivotal tool for marketing professionals, aiding in a diverse array of tasks and functions.

Nitin Liladhar Rane: They have discussed in their study the Role and challenges of chat GPT and similar generative artificial intelligence in business management. They have discussed the challenges of ChatGPT and similar large language models in business management.

According to MIT Sloan Management Review (2017): Discussed in this study artificial intelligence global executive study and research project, 85% of executives believe that AI will help their businesses gain or sustain competitive advantage.

Objective of the study

1. To Know the importance of artificial intelligence operations in today's business management.
2. To Study the impact of use of artificial intelligence operations in today's business management.
3. To Study the benefits of artificial intelligence operations in today's business management.

Scope of the Study

Artificial intelligence can boost growth for a lot of businesses by facilitating increases in efficiency and productivity. It may assist in the identification of new goods and services, enhance decision-making through the analysis of large data sets, and increase consumer demand by creating new income streams.

Simplify and optimize repetitive procedures and jobs to save time and money, boost output, and improve operational efficiency. Decide on commercial matters more quickly by using the results of cognitive technology.

Research Methodology

This Study is based on secondary source of information, in this regard the researcher used many articles, research papers, books, magazines and websites to write and develop the article on the chosen title.

About Study

Artificial intelligence (AI) operations are crucial in today's business management for several reasons:

1. Data-driven decision-making: AI helps analyse vast amounts of data, providing actionable insights for informed decisions.

2. Process automation: AI streamlines tasks, reducing manual labour and increasing efficiency.

3. Enhanced customer experience: AI-powered chatbots and personalized recommendations improve customer satisfaction.

4. Predictive maintenance: AI detects potential equipment failures, minimizing downtime and reducing costs.

5. Cybersecurity: AI-powered systems identify and respond to cyber threats in real-time.

6. Competitive advantage: Businesses adopting AI operations gain a competitive edge in their industries.

7. Scalability: AI handles growing workloads and expanding data sets with ease.

8. Cost savings: AI reduces labour costs, energy consumption, and waste.

9. Innovation: AI enables businesses to develop new products, services, and business models.

10. Agility: AI facilitates rapid adaptation to changing market conditions and customer needs.

The impact of artificial intelligence (AI) operations in today's business management is significant, with both positive and negative effects:

Positive impacts:

1. Increased efficiency: Automation of routine tasks, enhanced productivity, and reduced manual errors.

2. Improved decision-making: Data-driven insights, predictive analytics, and optimized strategic choices.

3. Enhanced customer experience: Personalized services, chatbots, and responsive support.

4. Innovation and competitiveness: new business models, products, and services, enabling companies to stay ahead.

5. Cost savings: Reduced labour costs, energy consumption, and waste.

Negative impacts:

1. Job displacement: Automation replacing certain jobs, requiring workforce re-skilling.

2. Dependence on technology: Over-reliance on AI, potentially leading to decreased human skills.

3. Bias and errors: AI systems can perpetuate biases and make mistakes, impacting decisions.

4. Cybersecurity risks: AI systems can be vulnerable to cyber-attacks and data breaches.

5. Ethical concerns: AI raises questions around privacy, accountability, and transparency.

The benefits of artificial intelligence (AI) operations in today's business management include:

1. Improved Efficiency: Automation of routine tasks, enhanced productivity, and reduced manual errors.

2. Enhanced Decision-Making: Data-driven insights, predictive analytics, and optimized strategic choices.

3. Personalized Customer Experience: Tailored services, chatbots, and responsive support.

4. Innovation and Competitiveness: New business models, products, and services, enabling companies to stay ahead.

5. Cost Savings: Reduced labour costs, energy consumption, and waste.

6. Scalability and Flexibility: AI handles growing workloads and adapting to changing market conditions.

7. Predictive Maintenance: AI detects potential equipment failures, minimizing downtime and reducing costs.

8. Cybersecurity: AI-powered systems identify and respond to cyber threats in real-time.

9. Supply Chain Optimization: AI streamlines logistics, inventory management, and demand forecasting.

10. Employee Augmentation: AI assists workers, enhancing their capabilities and job satisfaction.

11. Data Analysis and Insights: AI uncovers hidden patterns, trends, and correlations in complex data sets.

12. Automated Reporting and Compliance: AI generates reports, ensures regulatory compliance, and reduces administrative burdens.

Conclusion

In conclusion, artificial intelligence (AI) is a transformative technology that is revolutionizing various aspects of business management and society as a whole. AI has the potential to drive significant growth, innovation, and progress, but it's crucial to approach its adoption with a thoughtful and nuanced perspective

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