

Artificial Intelligence & It's Applications

INTRODUCTION:

It is claimed that artificial intelligence, like GPT chat, is playing an increasing role in the research of management science and operational research areas. Intelligence is commonly considered as the ability to collect knowledge and reason about knowledge to solve complex problems. In the Future intelligent machines will replace human capabilities in many areas. Artificial intelligent is the study and developments of intelligent machines and software that can reason, learn, gather knowledge, communicate manipulate and perceive he objects. John McCarthy coined the term in 1956 as branch of computer science concerned with making computers behave like humans Artificial Intelligence is different from psychology because it emphasis on perception, reasoning and action. It makes machines smarter and more useful. It works with the help of artificial neurons (artificial neural network) and scientific theorems (if then statements and logics).AI technologies have matured to the point in offering real practical benefits in many of their applications. Major Artificial Intelligence areas are Expert Systems, Natural Language Processing, Speech Understanding, Robotics and Sensory Systems, Computer Vision and Science, Recognition, Intelligent Computer-Aided Instruction, Neutral Computing. From these Expert System is rapidly growing technology which is having a huge impact on various fields of life. The various techniques applied in artificial intelligence are Neural Network, Fuzzy Logic, Evolutionary Computing, and Hybrid Artificial Intelligence. Artificial intelligence has the advantage over the natural intelligence as it is more permanent, consistent, less expensive, has the ease of duplication and dissemination, can be documented and can perform certain tasks much faster and better than the human.

Features of Artificial Intelligence:

1. Reasoning and decision making
2. No emotions
3. Preventing Hazards
4. Learning Ability
5. Communication Ability

Application of Artificial Intelligence:

1. Artificial Intelligence in Logistics and Supply Chain:

When combined with customer data and analytics, physical artificial intelligence removes friction from the customer experience. Artificial intelligence empowers businesses to act on consumer data to drive improvements throughout many areas of supply chain operations. Mobile technology and the “Urbanization” of things have made consumers hungry for AI. Consumers demand shorter delivery waits from retailers and retailers will expect the same from manufacturers and distribution centres.

2. AI in Healthcare:

In the year ahead, and particularly in the next five to ten years, artificial intelligence is going to have a big impact on the healthcare industry and the ways in which healthcare related companies utilize AI. Here is a short note from Dr. Jeff Dunn, CEO of Redivus Health. Redivus Health is a transformative mobile app used by healthcare providers to prevent medical errors by offering both clinical decision supports during critical medical events as well as documenting those events electronically in real time.

3. Artificial Intelligence in e-Commerce:

Artificial Intelligence technology provides a competitive edge to e-commerce businesses and is becoming readily available to companies of any size or budget. Leveraging machine learning, AI software automatically tags, organizes and visually searches content by labelling features of the image or video. AI is enabling shoppers to discover associated products whether it is size, color, shape, or even brand. The visual capabilities AI is improving every year. By first obtaining visual cues from the uploaded imagery, the software can successfully assist the customer in finding the product they desire. Many e-commerce retailers are already becoming more sophisticated with their AI capabilities, and I only expect this to grow in the future.

References:

1. <https://www.newgenapps.com/blog/ai-uses-applications-of-artificial-intelligence-ml-business>
2. <https://www.researchinfinitesolutions.com/blog/what-is-artificial-intelligence-explain-its-features/>
3. Daniel B. Neill, "Using Artificial Intelligence to Improve Hospital Inpatient Care".
4. Deniel E.O.'Leary Artificial Intelligence and Expert System in Accounting Databases: Survey and Extension", Expert System with Applications, vol-3 1991.