

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

Impact of Artificial Intelligence

Dr. Anita Malviya¹ and Dr. Manoj Malviya²

Asst. Professor & HoD (Commerce), Government College Pithampur, Dhar, M.P.¹ Asst. Professor (Commerce), S. K. P. Government PG (Lead) College, Dewas, M.P² annu06418@gmail.com and 111Manoj9@gmail.com

Abstract: Artificial Intelligence (AI) has rapidly become an integral part of our daily lives, transforming various aspects of society and opening up new possibilities and opportunities. The world of AI is rapidly expanding, with new innovations and breakthroughs happening every day. AI is changing the way we live our lives in many ways and has the potential to be a game-changer for many industries. Some of the benefits of AI are that it can take on repetitive tasks, it can handle tasks that are complex and require human intelligence, and it can help humans make better decisions. AI is already being used in many industries such as healthcare, education, finance, law enforcement, and transportation. this paper helps to guide policy-makers, technology experts, and the general public towards the responsible and equitable deployment of AI. The next generation of AI is expected to do more than just provide insights and suggestions. It will be able to make decisions for us in a way that is more accurate than ever before.

Keywords: Artificial Intelligence, lives, Healtcare, Impact, Society

I. INTRODUCTION

Artificial Intelligence's importance and subsequent components have been known for a long time. They are being seen as tools and techniques to make this world better. And it's not like you have to go through to be able to use these fancy tech gadgets. You can look around, and I'm sure most of your work is smoothed out by artificial intelligence.

In computer science and computers, the term artificial intelligence has played a very prominent role. The term has become more popular due to recent advances in Artificial Intelligence and Machine Learning. Machine learning is the area of artificial intelligence where machines are responsible for completing daily tasks and are believed to be smarter than humans. They are known to learn, adapt and perform much faster than humans and are programmed to do so. Robotics and integration with IoT devices have taken machines to think and work to a new level where they outperform humans in their cognitive abilities and smarts. Its importance lies in making our life easier. These technologies are a great asset to humans and are programmed to minimize human effort as much as possible. They can operate in an automated fashion. Therefore, manual intervention is the last thing that can be sought or seen during the operation of parts involving this technology. These machines speed up your tasks and processes with guaranteed accuracy and precision, making them a useful and valuable tool. Apart from making the world an error-free place with their simple and everyday techniques, these technologies and applications are not only related to our ordinary and everyday life. It is affecting and holds importance for other domains as well.

OBJECTIVES OF THE STUDY

The objectives of the study are-

- 1. To know about the usage of artificial intelligence .
- 2. To get aware about the merits and demerits of artificial intelligence .

II. METHODOLOGY

This study is based on secondary data . websites, journals and article have been used to collect secondary data. **Important uses of Artificial Intelligence are given below:**

1. In Medical Science

Artificial Intelligence has made an unprecedented impact in the medical industry and hence changed the face of the medical industry. Various machine learning algorithms and models have efficiently predicted various important use

Copyright to IJARSCT www.ijarsct.co.in



IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

cases, such as determining whether a particular patient has malignant or benign cancer or tumor based on symptoms, health records, and history. It is also being used in future predictions where patients are well informed about their deteriorating health and what they should do to return to a normal and healthy life.

Artificial intelligence has created a virtual care private assistant specifically built for people's needs. It is widely used to monitor, research different types of cases, and analyze past cases and their outcomes. It also seeks to improve their model's and assistants' efficiency by predicting what could be improved and making themselves smarter.

AI in medicine is used in diagnosing patients and providing guidance in treatment decisions. Nowadays we can spot early signs of many illnesses with the aid of advanced medical data-based models. Modern smart te-chnology can predict the spread of infectious disease by analyzing data from hospitals, la-boratories, and even surveillance cameras. In all these cases, and many more, you'vedealt with AI systems and algorithms. AI covers a huge range of technologies and can have many different applications in numerous areas.

The use of healthcare bots is another efficient move taken by the medical industry to work their way up in medicine, which is known to provide 24/7 assistance and take up the less important work of managing appointments. It has not have been possible without the intervention of these smart artificial i/ntelligence-based machines.

2. In the Field of Air Transport

One of the major systematic transport in the world is air transport, and there has become an urgent need to optimize their mode of operation. Here came the involvement of Artificial Intelligence, where the machine is involved in planning the routes along with the flight landing and take-off charts.

Artificial intelligence has been used in many aircraft, navigation maps, taxing routes, and a quick examination of the entire cockpit panel to ensure the correct operation of each component. Hence, it gives very promising results and is being adopted very frequently. The ultimate aim of artificial intelligence in air transport is to give easier and more comfortable travel to human beings.

3. In the field of banking and financial institutions

Artificial Intelligence plays a vital role in managing financial transactions and handling many other activities in the bank. The day-to-day operations of banks, such as transactions and financial operations, stock market money and their management, etc., are being handled more easily and efficiently by these machine learning models.

Use cases such as anti-money laundering where suspicious financial transactions are being monitored and reported to regulators are a classic example of artificial intelligence in the banking and financial industry. Other use cases include credit systems analysis which is popular among credit card companies. Suspicious credit card transactions are tracked geographically and acted upon and resolved based on various parameters.

4. In the field of gaming and entertainment

From virtual reality games to today's modern games, this is one industry where artificial intelligence has made the biggest leap forward. Bots are always there for you to play with, so you don't need another person to play. The level of personalized detail and graphics is also possible due to the advent of Artificial Intelligence and is taking this industry to a different level.

Advantages and Disadvantages of Artificial Intelligence

An artificial intelligence program is a program that is capable of learning and thinking. It is possible to consider anything to be artificial intelligence if it consists of a program performing a task that we would normally assume a human would perform. While artificial intelligence has many benefits, there are also drawbacks. The benefits of AI include efficiency through task automation, data analysis for informed decisions, assistance in medical diagnosis, and the advancement of autonomous vehicles. The drawbacks of AI include job displacement, ethical concerns about bias and privacy, security risks from hacking, a lack of human-like creativity and empathy.

Copyright to IJARSCT www.ijarsct.co.in DOI: 10.48175/IJARSCT-17160



118



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

1. Reduction in Human Error

One of the biggest benefits of Artificial Intelligence is that it can significantly reduce errors and increase accuracy and precision. The decisions taken by AI in every step is decided by information previously gathered and a certain set of algorithms. When programmed properly, these errors can be reduced to null. Example:

An example of the reduction in human error through AI is the use of robotic surgery systems, which can perform complex procedures with precision and accuracy, reducing the risk of human error and improving patient safety in healthcare.

2. Zero Risks

Another big benefit of AI is that humans can overcome many risks by letting AI robots do them for us. Whether it be defusing a bomb, going to space, exploring the deepest parts of oceans, machines with metal bodies are resistant in nature and can survive unfriendly atmospheres. Moreover, they can provide accurate work with greater responsibility and not wear out easily.

Example:

One example of zero risks is a fully automated production line in a manufacturing facility. Robots perform all tasks, eliminating the risk of human error and injury in hazardous environments.

3. 24x7 Availability

There are many studies that show humans are productive only about 3 to 4 hours in a day. Humans also need breaks and time offs to balance their work life and personal life. But AI can work endlessly without breaks. They think much faster than humans and perform multiple tasks at a time with accurate results. They can even handle tedious repetitive jobs easily with the help of AI algorithms.

Example:

An example of this is online customer support chatbots, which can provide instant assistance to customers anytime, anywhere. Using AI and natural language processing, chatbots can answer common questions, resolve issues, and escalate complex problems to human agents, ensuring seamless customer service around the clock.

4. Digital Assistance

Some of the most technologically advanced companies engage with users using digital assistants, which eliminates the need for human personnel. Many websites utilize digital assistants to deliver user-requested content. We can discuss our search with them in conversation. Some chatbots are built in a way that makes it difficult to tell whether we are conversing with a human or a chatbot.

Example:

We all know that businesses have a customer service crew that must address the doubts and concerns of the patrons. Businesses can create a chatbot or voice bot that can answer all of their clients' questions using AI.

5. New Inventions

In practically every field, AI is the driving force behind numerous innovations that will aid humans in resolving the majority of challenging issues. For instance, recent advances in AI-based technologies have allowed doctors to detect breast cancer in a woman at an earlier stage.

Example:

Another example of new inventions is self-driving cars, which use a combination of cameras, sensors, and AI algorithms to navigate roads and traffic without human intervention. Self-driving cars have the potential to improve road safety, reduce traffic congestion, and increase accessibility for people with disabilities or limited mobility. They are being developed by various companies, including Tesla, Google, and Uber, and are expected to revolutionize transportation.

Copyright to IJARSCT www.ijarsct.co.in





International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

6. Unbiased Decisions

Human beings are driven by emotions, whether we like it or not. AI on the other hand, is devoid of emotions and highly practical and rational in its approach. A huge advantage of Artificial Intelligence is that it doesn't have any biased views, which ensures more accurate decision-making.

Example:

An example of this is AI-powered recruitment systems that screen job applicants based on skills and qualifications rather than demographics. This helps eliminate bias in the hiring process, leading to an inclusive and more diverse workforce.

7. Perform Repetitive Jobs

We will be doing a lot of repetitive tasks as part of our daily work, such as checking documents for flaws and mailing thank-you notes, among other things. We may use artificial intelligence to efficiently automate these menial chores and even eliminate "boring" tasks for people, allowing them to focus on being more creative.

Example:

An example of this is using robots in manufacturing assembly lines, which can handle repetitive tasks such as welding, painting, and packaging with high accuracy and speed, reducing costs and improving efficiency.

8. Daily Applications

Today, our everyday lives are entirely dependent on mobile devices and the internet. We utilize a variety of apps, including Google Maps, Alexa, Siri, Cortana on Windows, OK Google, taking selfies, making calls, responding to emails, etc. With the use of various AI-based techniques, we can also anticipate today's weather and the days ahead. Example:

About 20 years ago, you must have asked someone who had already been there for instructions when you were planning a trip. All you need to do now is ask Google where Bangalore is. The best route between you and Bangalore will be displayed, along with Bangalore's location, on a Google map.

9. AI in Risky Situations

One of the main benefits of artificial intelligence is this. By creating an AI robot that can perform perilous tasks on our behalf, we can get beyond many of the dangerous restrictions that humans face. It can be utilized effectively in any type of natural or man-made calamity, whether it be going to Mars, defusing a bomb, exploring the deepest regions of the oceans, or mining for coal and oil.

Example:

For instance, the explosion at the Chernobyl nuclear power facility in Ukraine. As any person who came close to the core would have perished in a matter of minutes, at the time, there were no AI-powered robots that could assist us in reducing the effects of radiation by controlling the fire in its early phases.

10. Medical Applications

AI has also made significant contributions to the field of medicine, with applications ranging from diagnosis and treatment to drug discovery and clinical trials. AI-powered tools can help doctors and researchers analyze patient data, identify potential health risks, and develop personalized treatment plans. This can lead to better health outcomes for patients and help accelerate the development of new medical treatments and technologies.

Disadvantages of Artificial Intelligence

1. High Costs

The ability to create a machine that can simulate human intelligence is no small feat. It requires plenty of time and resources and can cost a huge deal of money. AI also needs to operate on the latest hardware and software to stay updated and meet the latest requirements, thus making it quite costly.

Copyright to IJARSCT www.ijarsct.co.in



IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

2. No Creativity

A big disadvantage of AI is that it cannot learn to think outside the box. AI is capable of learning over time with pre-fed data and past experiences, but cannot be creative in its approach. A classic example is the bot Quill who can write Forbes earning reports. These reports only contain data and facts already provided to the bot. Although it is impressive that a bot can write an article on its own, it lacks the human touch present in other Forbes articles.

3. Unemployment

One application of artificial intelligence is a robot, which is displacing occupations and increasing unemployment (in a few cases). Therefore, some claim that there is always a chance of unemployment as a result of chatbots and robots replacing humans. For instance, robots are frequently utilized to replace human resources in manufacturing businesses in some more technologically advanced nations like Japan. This is not always the case, though, as it creates additional opportunities for humans to work while also replacing humans in order to increase efficiency.

4. Make Humans Lazy

AI applications automate the majority of tedious and repetitive tasks. Since we do not have to memorize things or solve puzzles to get the job done, we tend to use our brains less and less. This addiction to AI can cause problems to future generations.

5. No Ethics

Ethics and morality are important human features that can be difficult to incorporate into an AI. The rapid progress of AI has raised a number of concerns that one day, AI will grow uncontrollably, and eventually wipe out humanity. This moment is referred to as the AI singularity.

6. Emotionless

Since early childhood, we have been taught that neither computers nor other machines have feelings. Humans function as a team, and team management is essential for achieving goals. However, there is no denying that robots are superior to humans when functioning effectively, but it is also true that human connections, which form the basis of teams, cannot be replaced by computers.

7. No Improvement

Humans cannot develop artificial intelligence because it is a technology based on pre-loaded facts and experience. AI is proficient at repeatedly carrying out the same task, but if we want any adjustments or improvements, we must manually alter the codes. AI cannot be accessed and utilized akin to human intelligence, but it can store infinite data.

III. CONCLUSION

Finally, we need to continue to have an open and honest conversation about the potential risks and benefits of AI, and engage with stakeholders from all sectors to ensure that AI is developed in a responsible and ethical manner. By doing so, we can ensure that AI is a force for good and that it helps us solve some of the world's most pressing problems. In the end, it is up to us to shape the future of AI and ensure that it benefits us all. Let us embrace the transformative power of AI, but also recognize the responsibility that comes with it, so that we can build a better, more equitable future for all.

REFERENCES

- [1]. Benko,attila ,ve ceeillia sik lanyi 2009 ."history of artificial intelligence ".ss1759-62 icinde encyclopedia of information science and technology , second edition . IGI Global .
- [2]. Haenlein ,michael , ve Andreas kaplan 2019." A brief history of Artificial intelligence ,on the past ,present ,and future of artificial intelligence " california management review 61 (4);5-14 doi; 10.1177/0008125619864925.

Copyright to IJARSCT www.ijarsct.co.in



IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 9, March 2024

- [3]. Chen ,Lijia ,pingping chen ,ve zhijian lin . 2020 ."artificial intelligence in education :A Review ".IEEE Access 8:75264-78 doi :10.1109 /Access .2020 .2988510 .
- [4]. Mc Carthy ,john .t.y. "WHAT IS ARTIFICIAL INTELLIGENCE ?
- [5]. https://www.tutorialspoint.com/artificial_intelligence/artificial_intelligence_overview.hm
- [6]. Sheikh, S. (Ed.). (2020). Understanding the Role of Artifcial Intelligence and Its Future Social
- [7]. Impact. IGI Global.

