The Impact

of Artificial Intelligence

on Jobs

Content List

Introduction

What is AI?

Artificial Intelligence (AI) is an emerging technology used within many industries in the modern era promising a huge leap forward for the workforce providing many tools capable of automation and statistical evaluation making what was thought to be impossible possible. In this report we will explore the impact AI has on the industry and outline the positive and negative implications of using AI.

Why is AI needed?

There has been a significant rise in the use of AI as it leaves its mark on the job market by expanding its integration to multiple businesses evidenced by a survey from Gartner which shows a 200% expansion in the implementation of AI tools over the past four years, with the survey conveying more benefits of using AI than most people may have believed. AI has become an essential tool in the modern era as it is able to help with the management of solving modern problems such as accelerating the development of new treatments for illnesses and improving health diagnosis through its ability to analyze data and produce results based on the data, which could for example result in a reduction of the mortality rate of a certain disease.

The Future of AI

While AI may provide a thriving environment for us it also carries its own drawbacks related to Ethical, Social and Legal issues, this is because AI is a very recent and malleable technology which creates the dilemma of whether it is safe to use and control, therefore it is unclear if the development of AI tools will have limitations of their own and how these limitations will affect the public usage of AI. Limitations such as these could cause systems to fail and with AI following a purely statistical model it may produce results that are either prone to error or cause complete failure, in which case an AI tool assisting the development of medical treatments may cause deaths which could open more cases on the ethics of using AI.

The Positive Implications of AI

Opportunity Gap

The development of AI tools led us to achieve greater resources for development of other technologies and it is a fantastic opportunity for us to hold due to one of many benefits AI provides. One such benefit is that it can process data blazingly fast especially compared to humans, and with the addition of it being able to synergize with other technologies could make tasks much faster. As a result, industries such as I.T, Data and Simple Labour can be enriched as it holds high value in improving the Quality of Life by exponentially increasing efficiency at the Workplace as this can reduce time and labor consumption. In addition, features such as automation offers the advantage of safety for hazardous working environments reducing injuries and the risk of death from jobs such as Space and Ocean Exploration and Mining.

Job Upskilling

In a recent report from the Guardian shows evidence of upskilling by influencing the creation of new jobs as it opens new skillsets to be learnt by students alike, in this report a small sample of 860 businesses implemented AI tools in their workflow with 78% showing improvement of working conditions and assisting in reshaping the nature of our industries. With these statistics AI could play a critical role in helping employees adapt to newer and harder working environments and improving the human to AI collaboration.

Big Data & Big Impact

AI can optimize the way we live everyday life as it plays a huge role in modern computing as with machine learning becoming more advanced, it will not be long before most concepts of society are automated. As everything becomes more digital, the expectation of processing data being handled by AI is becoming more of a reality and the technologies using “Big Data” will have AI managing it. Some of the technologies we expect AI to take over are:

* Supply and Demand Chain
* Telecom
* Retail
* Healthcare
* Media & Entertainment
* Banking and Financial Services

With these applications being managed by AI we expect more efficient handling of packages of delivery services, accelerated medical practices, increased banking security and many more to come. This is already happening with Support Line Services as most businesses already developed their own chatbots which can assist customers with certain queries without the need of appointing someone to the position providing a service with limitless potential without the drawbacks those of humans, which include fatigue and hunger since unlike us AI does not require self-sustenance therefore improving a business's workflow.

The Negative Implication of AI

Fear of existence

The most common response to negative implications of AI is the fear of the height of power AI will obtain over humans in the future which spread through propaganda and social media. The hope for peace over control of AI systems is slowing diminishing like our fate if AI does decide to revolt against us but that is unlikely to occur as most governments made agreements and legislations for AI development one such law is “The AI Act” which is a law placed in from preventing the unsystematic creation of AI tools which can range from hacking tools and general purpose tools. Furthermore, a study conducted by Neuroscience News Communications has revealed the biggest fear most people think of when talking about AI is the possibility of AI establishing humans as a problem thus the only way to solve that problem is the removal of the source of the problem from the equation which in this case are humans.

Our Last Invention

While A.I (Artificial Intelligence) is dangerous it could very much be the pinnacle of human inventions outlined by a quote by (Nick Bostrom) as he goes on to say that “*Machine intelligence is the last invention that humanity will ever need to make*” suggesting A.I will either be our greatest achievement or our last. A.I will become a dominant technology used across every industry including the humanities subjects however, there is no need to fear it as A.I will always challenge human intelligence providing a great steppingstone for future milestones. That said it is not a guarantee that AI will stay silent as there will also be people who would want to misuse the creation of AI such as in the department of Cyber Security where tools could be made for hacking making any place on the internet unsafe to browse.

Misuse and Misconduct

The misuse of AI technology will be imminent as (Rebecca Neubauer) who is a writer from Business News Daily stated that AI tools such as ChatGPT developed by OpenAI are at risk of “Model Poisoning” because of their open-source nature. Moreover, model poisoning will be an implication of AI tools losing their control over security and privacy as A.I is malleable it can be used for the development of Malware used in Big Data breaches of Personally Identifiable information (PII) and even Sensitive Personal Identifiable information (SPII) which are information pertaining data on an individual which can be harmful towards the owner if the leaked data is used in an unlawful way. Another way AI may be misused is through warfare and the development of killing machines which is a common concern that comes up when talking about AI as there are many posts on social media pertaining data and evidence to robots killing people, one such example of this is the 2022 social media post with the heading “Robots Killing 29 humans” , though there is speculation that all these posts are fake and are just social media’s made up stories without any evidence backing it up but it is very likely this to happen judging from previous experimentation with warfare tools.

Job Displacement

There are also some aspects of AI which negatively impact the economical nature of businesses, for example loss of employment in certain areas resulting in some people on the street rather than in an office. Moreover, with unemployment on the rise it will also be difficult to keep up with A.I no matter how professional one is at their job as this kind of intelligence, one which is superior may impose certain psychological effects such as stress and anxiety since more people will be required to adapt to the new system in this rapidly growing environment. The result of this is complicated as this would affect everyone differently however with stress and anxiety hovering a business it would reduce their workflow and motivation for employees therefore any produce made by a company may have poor alterations made for the customer which in return the business will have poor customer retention.

Wrapping it up

Artificial Intelligence has shown beneficial results in improving the efficiency, productivity, and development of a business as it made the workplace more comfortable and flexible for human interaction providing an easier and safer environment for employees, yet it still requires more development to solve unemployment and the psychological impact it leaves for future generations. It will be important however that in the future Artificial Intelligence is well governed so that we are able to utilize the positives and reduce the negative impacts on our society.

Reference

|  |
| --- |
| **Introduction** |
| News, N. (2023). *Neuroscience, Artificial Intelligence, and Our Fears: A Journey of Understanding and Acceptance*. [online] Neuroscience News. Available at: <https://neurosciencenews.com/artificial-intelligence-fear-neuroscience-23519/>. |
| **Introduction** |
| Costello, K. (2019). *Gartner Survey Shows 37 Percent of Organizations Have Implemented AI in Some Form*. [online] Gartner. Available at: <https://www.gartner.com/en/newsroom/press-releases/2019-01-21-gartner-survey-shows-37-percent-of-organizations-have>. |
| **Introduction** |
| Bostrom, N. (2015). *What happens when our computers get smarter than we are?* [online] Ted.com. Available at: <https://www.ted.com/talks/nick_bostrom_what_happens_when_our_computers_get_smarter_than_we_are>. |
| **Pros & cons** |
| von der Osten, B. (2021). *15 Artificial Intelligence Pros and Cons that you Need to Know*. [online] Rock Content. Available at: <https://rockcontent.com/blog/artificial-intelligence-pros-and-cons/>. |
|  |
| Duggal, N. (2023). *Advantages and Disadvantages of Artificial Intelligence*. [online] Simplilearn. Available at: <https://www.simplilearn.com/advantages-and-disadvantages-of-artificial-intelligence-article>. |
|  |
| Kelly, P. (2023). AI having ‘positive impact’ on UK jobs but could increase regional inequalities, says report. *The Guardian*. [online] 20 Sep. Available at: <https://www.theguardian.com/global-development/2023/sep/20/ai-having-positive-impact-on-uk-jobs-but-could-increase-regional-inequalities-says-report>. |