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The Challenges of Robotics and Artificial Intelligence

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The Challenges of Robotics and Artificial Intelligence

In evaluating the concerns and challenges arising from robotics and artificial intelligence, there has been increased attention on the possible future of these systems and automation as a whole over the years. Protuberant scholars have cautioned concerning the danger of a dystopian prospect when the intricacy of these structures develops even more. However, these pieces of advice stand in disparity to the existing sophisticated AI and robotics technology. Contrary to the most confident views of technical advancement, the most certain questions about ethical issues and negative impacts resulting from automation are what's next for the human race. Technological evolution from industrialized robots to service machines characterizes a progression into a more tailored system using an increased level of autonomy that has rendered human labor impractical. Machine devices that have the capability of performing responsibilities in an unrestrained, human-centered setting have been designated.

Likewise, growth in artificial intelligence study has had a similar influence on how autonomous and intellectual service machines are perceived. Therefore, with all these benefits come drawbacks, thus the ethical concerns. One major concern is the hierarchy of labor, which is primarily apprehensive with automation. As artificial intelligence and robotics are being embraced through automation of jobs in the labor force, unemployment and loss of jobs have been the main consequence being experienced since automation has been widely replacing human labor (Belk, 2020). Similarly, a way of eliminating artificial intelligence bias has been a concern. Although AI has the speed and capability of processing far beyond humans, it cannot always be reliable to be rational and unbiased; thus, ethically, the systems should be abolished. The other situation is protection against unintended consequences. We should be worried about

adversities and imagine the possibility of terrible unforeseen consequences of advanced artificial intelligence and robotic systems.

The truth is that robotics and artificial intelligence are becoming better and better at modeling human relationships and conversations. Similarly, this kind of automation has taken precedence because the advantages are enormous hence revolutionizing professional sectors. The negative impacts currently being experienced as a result of automation were not preempted because the benefits of artificial intelligence and robotic systems outweigh the disadvantages. Therefore, automation has been embraced because the extent of human errors has been minimized. With AI, resolutions have been gathered from previous information databases using various algorithms using well-programmed machines. Consequently, errors are reduced, and acquiring correctness with a greater degree of accuracy has been possible.

Similarly, enterprises and organizations have the right to prioritize what they feel would be beneficial to them and the business. They should not be condemned for replacing employees with robotics and artificial intelligent systems because it is evident that they take risks compared to humans (Kaplan, 2020). Most risky limitations of human beings can be averted by the development of AI robots capable of performing risky tasks. Although human beings require some time out of work to refresh and carry on with their personal lives, on the contrary, artificial intelligence has the capability of creating machines that perform throughout without any breaks hence the reasons why AI and robotics are replacing the human labor force.

I do not think that any harm would be associated with the implementation of robotics and artificial intelligence systems that would affect anyone negatively, considering that any enterprise wish is making profits. Furthermore, there are many more benefits resulting from the implementation of these systems, which are beneficial to these organizations because nearly

every large organization currently uses digital assistance to interact with their clients, minimizing the need for human resources significantly. For instance, one can converse with a Chabot asking them your exact needs and they would promptly respond. In addition, some of these Chabot's are more advanced and intelligent such that you would not be able to determine you are chatting with a human being or a robot, indicating that there is no harm in this situation.

Likewise, artificial intelligence has assisted in the emergence of new inventions in almost every domain to solve complex issues; hence there is no harm caused in this situation. For instance, recent inventions have made it possible for healthcare practitioners to foresee breast cancer early in ladies using advanced Artificial intelligence-based technologies. Likewise, there is no harm involved in this situation because through robotics and AI, conducting predictive maintenance is made possible (Belk, 2020). AI systems enable us to conduct industrial equipment maintenance based on the times and conditions of operation, encouraging the life cycle and performance of machinery. Therefore, most organizations are willing to compromise and replace several employees with these systems for their proven benefits, which I do not find harmful in any way.

Nonetheless, further investigations on this matter suggest a need to research the safety of robotics and artificial intelligence because currently, the short-term benefits that have been experienced have motivated research in numerous areas such as economics, technical topics like verification, security, and validity. However, an important concern that should be addressed is the consequences of the quest for strong robotics and artificial intelligence prospers. The system becomes better than human beings in all cognitive responsibilities in the long term. Designing smarter AI systems is a cognitive task in itself. Thus, such systems could experience recursive

self-advancement, causing an intelligence detonation while leaving human intelligence far behind.

Similarly, even though revolutionizing and inventing new technologies, like superintelligence, strong artificial intelligence and robotics might assist the human race in eliminating diseases, war, and poverty to some extent, becoming the largest event in human history. However, concerns have been expressed with some of the experts citing that these advancements could be the last unless human beings learned to line up the artificial intelligence and robotic systems' objectives before these systems become tremendously intelligent (Liu & Zawieska, 2017). Likewise, the need to conduct further safety research is encouraged because these systems can sometimes be performed as something beneficial and can develop destructive methods of achieving goals.

Organizations should fully rely on the artificial intelligence code of ethics, also known as artificial intelligence value platform. This governing declaration formally describes the role of AI and robotics as it applies to the constant advancement of the human race. Similarly, the purpose of this code is to provide stakeholders with guidance in situations where ethical choices ought to be made about the use of robotics and artificial intelligent systems. Most importantly, although inventors are currently in the initial stages of robotics and artificial intelligence adoption, enterprises should initiate responsible and ethical approaches when creating and adopting this technology. Therefore, enterprises should consider such concerns and adhere to these codes before fully automating. In that light, the codes of ethics mandate that the objective of AI and robotics research should be creating beneficial intelligence and not undirected intelligence and the systems possessing the possibility of ascertaining reasons why certain systems might be harmful.

Secondly, robotics and AI systems should be secure and safe through their operative lifetime and verifiable where feasible and applicable. Likewise, another code that should be applied in the implementation of automation is that the power convened by control of highly advanced robotics and artificial intelligence systems should be subjected to improvement and respect rather than subverting the civic and social procedure to which societal health depends (Liu & Zawieska, 2017). Lastly, the risks posed by these systems, especially existential or catastrophic risks, should be subjected to mitigation and preparation efforts equal to their projected impacts before enterprises can fully embrace automation.

My personal view on this issue mainly focuses on the limited knowledge among individuals concerning robotics and artificial intelligence. Even though there exist numerous places where AI and robotic systems can be implemented as an advanced alternative to the traditional systems, only college students, technology enthusiasts, researchers, and a limited number of individuals are aware of the potential of this technology, thus the challenge. For instance, there are mostly small and medium enterprises that can employ this technology to schedule their work or develop means of increasing and managing their resources, managing and selling products online. Understanding customer behavior and preferences, thus reacting to the market efficiently and effectively. Therefore, I think that automation can be achieved by further educating people of the underlying benefits that would amount to automation success.

On the contrary, I think that another challenge that has kept researchers on edge is the human level in these scenarios. Winfield (2019*)* argues that although enterprises boast of a greater percentage inaccuracy, human beings still hold an upper hand mainly because AI services cannot match human intelligence yet. Likewise, he suggests that this is so because it is the same human race leading the development of these machines; thus, they cannot surpass human

intelligence. Thus, I believe that the challenges associated with robotics and artificial intelligence are minimal compared to the benefits of automation; hence organizations should adhere to the necessary codes of ethics in implementing these systems.

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