



Artificial Intelligence: Promises and Paradoxes

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Abstract

The last few decades have witnessed technological developments growing beyond bounds. Of all the advancements, AI is deemed to be the most promising transformation as it has revolutionised the way we live, think and act, thus altering the socio-economic landscape. AI has permeated almost all aspects of the life of a common man, with innumerable promises to ease lives, take the burden of repetitive tasks, and fasten the pace of work with a cost-effective and error-free approach. However, these countless benefits bring with them certain challenges, which have long-term implications for individuals and society at large. This chapter seeks to understand the promises and paradoxes of AI, with special consideration to employee well-being. Having accounted for them, the authors venture to argue that AI should not be viewed as a threat to mankind. It is a tool created by humans, and needs to be rationally applied to tap into its full potential.

Keywords: Artificial Intelligence, Technology, Cognitive Skills, Employee Well-Being, Job Security.

Introduction

Humans have always been acknowledged as the most intellectually developed species, with ample cognitive abilities. There is scientific evidence to endorse that humans have evolved and their brains have increased in size and intelligence, thus rendering other species a subordinate status when it comes to

intellect and creativity. By virtue of this, human civilisation has evolved and witnessed numerous technological advancements which have revolutionised the way we live, think and act. Artificial Intelligence, better known as AI, is one of the most promising developments, which has assumed inordinate importance and has become an integral part of everyone's life, both personal and professional. Though the concept of AI, with few stories and narratives, finds a mention in history, the concept as it appears today began in the mid-20th century, with significant developments taking place in the 1950s and 1960s. The years that followed experienced rapid technological advancements in the area of artificial intelligence, each expanding the horizon by bringing in unprecedented innovations that reshaped almost all sectors of the economy in distinct ways. Today, AI has sneaked into our lives to such an extent that humans are overwhelmingly dependent on it for tasks that were hitherto accomplished by them only.

Artificial Intelligence (AI), as the name suggests, refers to using computer technology to execute tasks that require human intelligence. Initially, the concept of AI focused on developing systems that could automate repetitive tasks. Gradually, the concept evolved to carry out problem-solving by analysing data and making informed decisions based on that analysis. With increasing foundational understanding and technological sophistication, advanced models having the capability to learn, adapt and perform tasks requiring complex cognitive skills soon took over. The advent of AI ushered in a new era with computers increasingly replacing humans, and the trend is on the rise at an unprecedented pace, making its acceptance inevitable. This transformation is viewed by business leaders as a key to unlock new levels of productivity, which are presumably more cost-efficient as well. Accordingly, there has been a significant increase in the adoption of AI by organisations across the globe. As per the reports by Grand View Research Inc., the global AI market is expected to have a Compound Annual Growth Rate (CAGR) of 37.3% over the period from 2023 to 2030. This figure is sizable enough to demonstrate the pace at which AI is infiltrating diverse spheres of everyday life. Whether it is health care, education, finance or marketing, the presence of AI is undeniable. Besides, AI-powered virtual assistants like Siri and Alexa have invaded almost every household, without the users (quite many of them) being even aware that they are using AI. Entertainment Platforms like Netflix, shopping engines like Amazon and Myntra, are all using AI to process data to enable personalising user experience using highly improved algorithms. This clearly showcases the almost universal presence of AI, thus necessitating a thorough investigation to appreciate and accept the transition, to unlock its full potential.

However, as Friedman had said, "*There is no such thing as a free lunch*", so the same applies to AI as well. AI is often labelled as a double-edged sword, owing to the benefits and challenges that accompany its application. This chapter is an attempt to contemplate both the dimensions to help improve understanding of the most

dynamic phase of technological development, which is more powerful than the ones humankind has witnessed in the past. It is time we introspect on each progression of this technological advancement, carefully examine its applications, and build an understanding of the short and long-term implications AI holds for society at large. The future of human-machine partnership shall depend on practical and economic implications, but shall surely also include within its ambit ethical considerations.

Promises of AI

Contemporary times are witnessing AI becoming an integral part of our everyday lives. It promises a technologically advanced world, which is expected to be quite different from and advanced than the past, rendering it traditional. The advantages offered by AI are manifold, diverse and far-reaching, penetrating almost all spheres of a common man's life. The integration of AI into the human resource processes has remodelled the way organisations recruit, motivate, evaluate and engage their employees. The transformation has positive implications across diverse domains relating to the human element of the organisations. However, this section shall limit its scope to its positive impact on employee well-being.

To begin with, the simplest and most obvious of all, AI offers the advantage of automating routine tasks. Repetitive tasks come with the danger of making the job monotonous and boring, which can kill an employee's motivation. With the help of AI tools, employees can be relieved of a number of such tasks which are time-consuming and repetitive, making their work less time-consuming, more impactful and additionally fulfilling. Tools like chatbots and virtual assistants can not only help manage the workload but also deal with monotony. Simple tasks like drafting emails, handling regular customer queries can be easily left to tools like Microsoft Copilot, Chat GPT, and Google Dialogue to reduce the employees' workload and give them time to focus on the creative, innovative and strategic parts of their jobs (Autor et al., 2006; Felten et al., 2019), leading to a rise in job satisfaction and overall productivity. Automation also reduces the chances of errors, thereby increasing efficiency and productivity, and leading to lower stress levels for the employees. (Tiwari et al., 2024).

AI can also go a long way in strengthening the decision-making processes in organisations. With access to vast data sets and the ability to process them quickly and efficiently, something a human mind cannot do, AI can greatly enhance the decision-making process. The human mind has bounds due to factors like cognitive biases, limited data processing capacity and time constraints. AI, with its ability to rapidly analyse vast data sets, can identify patterns and generate insights that a human mind may not be able to do efficiently and rapidly. This can thus augment human judgment and strengthen the decision-making process. This ability adds to innovation and competitiveness, particularly in areas like healthcare, where such insights can help discover treatments and improve diagnoses and patient care

(García-Madurga, Gil-Lacruz, Saz-Gil, Y Gil-Lacruz, 2024). While human judgment is required to interpret the AI-generated insights and keep ethical considerations in mind, AI can help make the process more comprehensive and foolproof.

AI can be very effective in enhancing employee well-being based on the understanding of human behaviour. Since AI has the ability to analyse factors like behaviours, habits and engagement patterns, it can help people understand themselves in better ways. By studying their motivators, challenges and preferences, they can lead them towards positive lifestyle changes, better health routines, thereby contributing to their well-being. (Davis et al., 2023). Providing actionable insights and personalised coaching is not something a human mind can provide on a sustained basis. Besides, by taking the onus of repetitive tasks, AI liberates employees to take over tasks which are more strategic and productive, in addition to enhancing their mental well-being.

Life in general and work life in today's competitive world have become extremely competitive, and therefore stressful and challenging. This can have a detrimental effect on people's mental and emotional well-being. AI can step into this and help detect stress and burnout triggers in advance. Tools like Sentiment analysis, speech recognition, and physiological monitoring can help identify early signs of stress, burnout, and mental health issues. As they say, Forewarned is Forearmed- so this ability can help employees detect the triggers and deal with them effectively in time. Timely detection can help in preventing damage to their mental and eventual physical health. Early detection can also help organisations provide timely support to the employees. (Chen et al., 2020).

Physical health is also a crucial part of employee wellbeing, and anything that can help track it will always be welcome. AI-powered health devices step into this role by helping people track their health metrics in real time and with ease. Metrics like heart rate, sleep, and physical activity, which were never paid attention to earlier, are now getting the attention that they need, thanks to AI. Such real-time feedback supports proactive health management and keeps employees aware of their wellness goals. (Gupta & Singh, 2022).

AI also plays a critical role in facilitating and streamlining communication and collaboration in today's world. Cutting across geographical, cultural and language barriers, it can help connect people in ways that have never happened before. Tools like Zoom, Google Meet can not only help connect people but also help with tasks like note-taking, meeting summaries, identifying action items and suggest follow-up emails, thereby saving the precious time of employees. Helping streamline communication also helps reduce misunderstandings, prevent overload, thereby improving efficiency and emotional well-being.

The advent of AI has democratized knowledge and skill development in unprecedented ways. Knowledge before AI became a part of our lives, was constrained by geographical, cost and availability factors, but AI has transformed this dynamic by making knowledge and learning widely available, personalised and on-demand. Learning platforms like *Coursera for Business*, *edX*, *Udemy Business*, and *LinkedIn Learning* that are powered by AI use algorithms to analyse employees' skill gaps and career aspirations to curate customised learning paths. By tailoring content to individual needs and requirements, these platforms ensure that they focus on discovering and developing skills that directly support their needs.

All in all, it can be said that AI has transformed our lives in diverse ways. The world as we see today appreciably depends on AI and the future might witness increasing dependence on it. The AI revolution, as it is popularly called, is benefitting mankind, organisations, and also economies at large, and by virtue of the benefits it promises, it is here to stay and grow vigorously.

The Paradox of AI

In today's world, AI has become a buzzword, used in common parlance. The technological advancement ushered by AI has become an omnipresent phenomenon, spreading its wings across all domains of life. It has transformed the industries, revolutionised the way businesses function, transformed communication, and redefined jobs, all of which have long-term implications for individuals and society at large. The previous section has elucidated the blessings offered by AI to the working population. However, it definitely prompts some concerns which need to be accounted for and addressed to ensure harnessing technology to benefit mankind.

The most perennial allegation against AI is the threat to job security. Having glorified AI in the previous section on its ability to reduce monotony by automating repetitive tasks, it also needs to be acknowledged that the process, though efficient, is increasingly replacing human labour. Resultantly, the fear of job displacement looms large in the minds of employees, thereby leading to insecurity, anxiety and job dissatisfaction among them. The most vulnerable section of employees is the one working at lower and middle levels. This level of employees normally perform tasks that are repetitive and can be easily replaced by machines. With AI becoming more sophisticated, even complex tasks requiring cognitive skills like supply chain management, logistics, data analysis and interpretation have all been shouldered by AI, thus leading to a state of rising apprehensions about job security. The advanced AI is capable of executing even creative tasks like writing emails, designing, copywriting, and writing content for social media, with minimal human intervention. The AI sophistication is on an unstoppable rise, increasing the scope of tasks it can snatch from humans, thus increasing the insecurity vis-à-vis jobs.

AI has reduced the work boundaries, allowing work from anywhere, at any time, with all having easy access to internet facilities. Though the concept sounds fascinating and offers ease of working, it has blurred the boundaries between work and personal life. The constant connectivity expects the employee to be constantly available, leading to burnout and reduced overall well-being. Employees often find it challenging to disconnect from work as emails and messages are always popping up on their devices, directing their attention to work even when they are with their families and/or a vacation, raising concerns about work-life balance. Besides, the rate of AI developments has outpaced the pace of upskilling or reskilling humans, posing a constant pressure to learn and master new skills on a perpetual basis, leaving less time for personal hobbies and family.

The increasing integration of AI in performance evaluation of employees, though it promises accuracy, fairness and equity by eliminating human bias, is quite often accused of a lack of empathy due to a lack of a humanistic approach. The AI algorithms, though good at numbers to evaluate qualitative aspects of reports, often overlook the qualitative aspect of job performance, raising questions about the accuracy of evaluations. Employees also grumble about being under constant monitoring of AI, blaming it for intruding on their private space, leading to a decline in mental and psychological well-being. The surveillance capabilities of AI, even when used for legitimate purposes such as security or performance evaluation, can erode trust and create a sense of unease. The increasing integration of AI into daily lives raises concerns on psychological well-being and mental capabilities. As dependence on AI increases, technological advances may lead to dehumanization, as machines lack the empathy which is there in human interaction.

In entirety, it appears that as AI continues to penetrate deeper into our lives and workplaces, well-being will continue to remain a concern, though the reasons might differ with time. The situation appears more frightening when we account for the large number of jobs AI has already taken over.

Let's Talk Solutions

AI has revolutionised our lives, and the momentum with which it is progressing, it hard to predict what the future of work will be like. Organisations are increasingly accepting it enthusiastically as it promises increases in productivity, with the added advantage of lower costs. But the flip side of the story is that increasing usage and dependence on AI is increasing the anxiety level of employees as they fear losing their jobs to machines. A survey of 1200 professionals by Pluralsight, an American LLC in online education, highlighted that close to 70% of them fear being replaced by AI, as their skills are becoming obsolete. The figure is sizable enough to allow concluding that employees do feel threatened by the increasing use of AI in organisations. However hard it may sound, AI is here to stay, and the coming times

shall witness it invading more deeply into our lives and jobs, and hence the debate of AI replacing human intelligence shall hang on for a long time to come.

A wiser approach thus lies in understanding, accepting and framing strategies to remain relevant to navigate efficiently through the new landscape. First and foremost, we need to understand that human intelligence has created intelligent machines. Accordingly, the machines are dependent on the intelligence they're programmed with and hence cannot go much beyond. This, thus, clears that AI needs the support of human intelligence and hence shall not be able to replace humans altogether. Besides, human intelligence is an elusive quality when it comes to emotions and empathy. No machine, however advanced it is, can have this trait, thus reinforcing that there are many areas where AI cannot be a threat to human intelligence.

Notwithstanding the fact that human intelligence has an edge over AI, the presence of AI is undeniable. It thus requires framing strategies to mitigate the negative perceptions related to AI, balancing technology using a humanistic approach, and providing opportunities for upskilling and reskilling to ensure that employees do not feel threatened by AI adoption. Empowering employees with the latest skills shall not only help them remain relevant in times of technological commotion but also allow organisations to have a smooth transition to an AI-powered workplace and best leverage it for optimal benefits. Besides, organisations with clear communication on AI adoptions shall effectively address employee anxieties related to job displacement, fostering a feeling of trust that AI is there to assist them rather than replace them, which shall go a long way in seamless integration of human and technology.

Lastly, humans have a natural tendency to perceive change as a potential threat, probably due to the fear of the unknown, as it might warrant drifting away from their comfort zones. Based on this natural human instinct, it can be concluded that the challenge is not the presence of AI, but rather the manner in which it is incorporated into our personal and professional lives. Humans are blessed with infinite cognitive potential; they only need to channel it to master new technology and best leverage it to benefit all.

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