

The Impact of Artificial Intelligence on Employment and Employee Behavior

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ABSTRACT

AI adoption has increased rapidly over the last decade and is transforming business and revolutionizing the world in ways that we cannot yet imagine. Embracing AI automation has become imperative to increase productivity and efficiency, thus enabling employees to focus more on the strategic and creative aspects of their jobs. In turn, AI can elevate job satisfaction and increase engagement and it will bring positive impact to employee behavior. However, one of the main concerns this technology raises is job displacement, causing anxiety among workers. This fear might be overblown as human skills will prevail and occupations that require specialized and interpersonal skills and those involving unpredictable circumstances will continue to grow. While the job displacement effect may be inevitable, it will only dominate in the short run. In the long run, the technological innovation of AI will potentially generate more jobs than it destroys. Henceforth, workers will need to upskill and reskill, as well as work alongside AI technology to remain competitive in the job market.

Keywords: Artificial Intelligence, employment, employee behavior, automation, job satisfaction.

INTRODUCTION

Artificial intelligence (AI) is the ability of a machine to perform tasks that would typically require human intelligence, as to mimic human cognitive activity. Simply put, AI enables computers to think and act like humans. The principle behind it is that AI reads human behaviour in a way that a machine can easily imitate it to perform human-like tasks. AI has existed for decades but recent advances in machine learning and robotics have led to significant advancement in the past few years, taking the world by storm. While the Covid-19 pandemic has accelerated the adoption of AI, the global AI market is expected to continue its upward trajectory. According to Grand View Research, the global AI market was valued at \$136.55 billion in 2022 and is projected to expand at a compound annual growth rate (CAGR) of 37.3% from 2023 to 2030, to reach \$1.81 trillion by 2030.

Discussion

As AI adoption continues to grow, it is acknowledged to be an engine of productivity and growth. According to McKinsey, productivity growth is expected to reach 2% annually over the next decade, with digital opportunities contributing 60% to this increase. AI could add between \$2.6 trillion and \$4.4 trillion worth of productivity globally.

How AI Increases Productivity

One of the most notable advantages of AI technology is automation as it raises productivity. Leveraging AI driven technologies enables companies to analyse vast amounts of data quickly and accurately without getting exhausted unlike humans, thus reducing the chances of human error.

The fact that AI can work around the clock without any breaks can also be beneficial to jobs that always require human assistance. For example, AI can assist in answering queries, such as call centers using chatbots. Chatbots can handle multiple customers simultaneously, thus increasing productivity and efficiency, and allowing the service team to attend to more complex queries instead.

Additionally, AI can identify patterns that may be difficult for humans to study thus improving the reliability of decision making, leading to an increase in productivity and efficiency in the workforce. AI does not have emotions thus will be objective and will make decisions based only on facts.

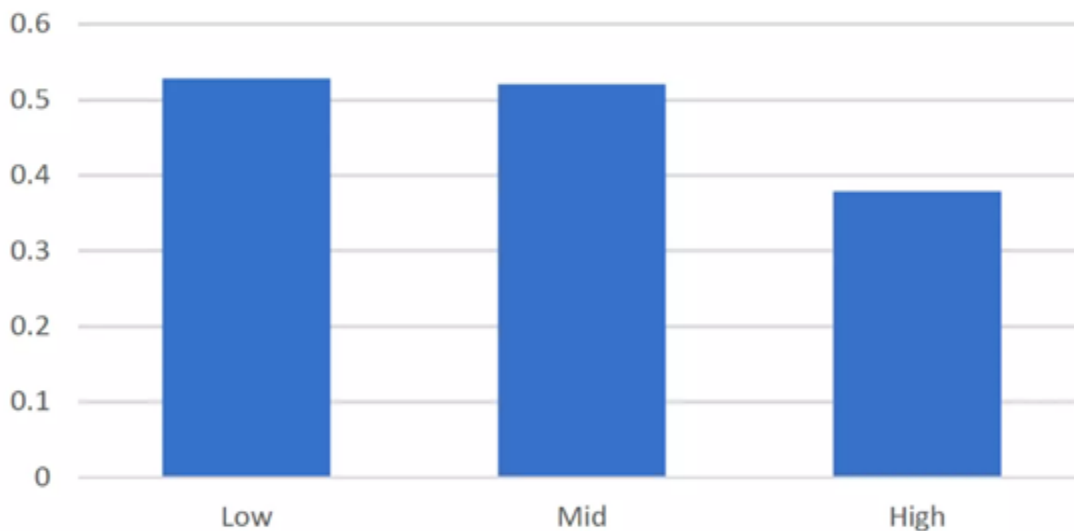
Furthermore, since the machine follows predefined rules and logic, room for error is minimized when performing routine tasks. Therefore, by automating mundane tasks that can be time consuming, employees can focus more on what matters, such as the strategic and creative aspects of the job.

Is AI Taking Over Human Jobs?

As AI transforms the workforce, the future will undergo a significant skill shift. McKinsey’s previous research has shown that as many as 355 million workers will have to reskill and change careers by 2030. While it is yet to be seen the impact AI has on overall employment, companies adopting AI have the same goal which is to improve productivity and reduce staff costs (Willemien, 2023).

With automation through AI, the shift from labour to capital in workforces will be inevitable. AI will take over the easily automated tasks while humans will continue to handle those that cannot be automated. This displacement of workers is especially prevalent for low-skilled to medium-skilled jobs as they have the most exposure to automation (See Figure 1).

Nevertheless, the effect of job displacement is likely to dominate only in the short run. According to case studies reported by The Economist, past cases suggest that in the longer run, the market will adapt to the automation and productivity effect will lead to a positive impact on employment (G. Petropoulos, 2017).



Source: Brekelmans and Petropoulos (2020)

Figure 1: Exposure to automation of different skill groups

In the high-skilled jobs, however, the impact of automation is not that prevalent (See Figure 1). As high-skilled jobs experience the productivity gains from adopting AI technologies, the creation of new tasks and jobs will emerge, but following the technological innovations, these jobs will most likely be high-skilled as well (Brekelmans S., G. Petropoulos, 2020).

The World Economic Forum concluded in October 2020 that while AI would likely take away 85 million jobs globally by 2025, it would also generate 97 million new jobs in fields ranging from big data and machine learning to information security and digital marketing.

Meanwhile, according to McKinsey’s Global Institute report, even as workers are displaced, there will still be growth in demand for work and consequently jobs.

Growing occupations will include those in unpredictable physical environments such as plumbers and gardeners. Jobs with specialized expertise and jobs that require high emotional intelligence and strong interaction with stakeholders will also see increasing demand for work, such as lawyers, doctors, teachers, salesforce, and other professionals (See Figure 2).

Total work hours by activity type, 2014–30 (midpoint automation1, step-up scenario)
 Billion

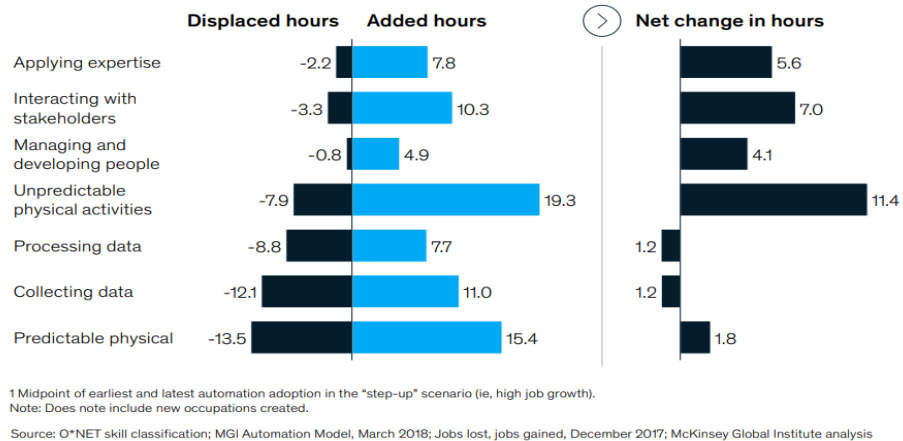


Figure 2: Net growth in work will involve more application of expertise, interaction, and management.

How AI Affects Employee Behaviour

The accelerated adoption of AI in recent years, proliferated with the introduction of an AI chatbot known as ChatGPT in November 2022, has brought some excitement as well as concerns among workers. According to some experts, while some level of anxiety is justified, the fears of AI taking over jobs might be exaggerated. Instead of treating AI as a threat, workers need to focus on what they can control, such as upskilling and reskilling themselves and treat AI as a resource and use it to their advantage (Cox, J., 2023).

For those who can see the silver lining of AI, excitement is swirling around and their appreciation of the technology increases. As the adoption of AI enhances productivity and streamlines workflows, mundane tasks are reduced and even eliminated by automation. Thus, employees can have more time and energy to focus more on work that increases business value with creative and innovative solutions. In turn, this will enhance job satisfaction and self-efficacy.

According to the survey conducted by PwC, the majority of the nearly 54,000 workers polled in PwC’s 2023 Global Workforce Hopes and Fears Survey have a largely positive take on AI, choosing the positive impacts of AI more frequently than the negative ones. A third of the respondents are optimistic that AI can boost productivity and efficiency, while more than a quarter will use AI to their advantage to learn new skills. However, those workers who are non-specialized, which is about 22% of the total respondents, view AI to have no impact on their job at all, which suggests that they are less ready to adapt to the evolving technologies compared to their specialized counterparts (See Figure 3).

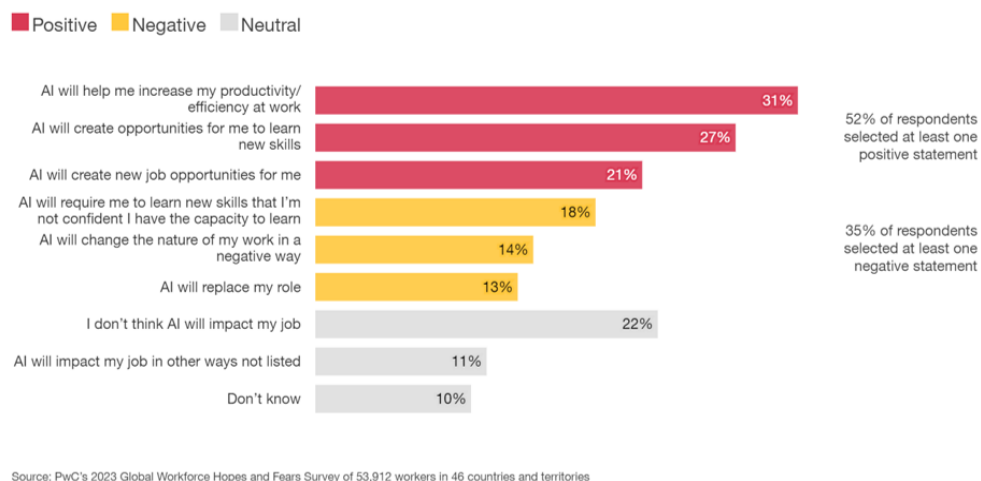


Figure 3: Employee attitudes on AI

CONCLUSION

AI has emerged as a transformative force that will continue to transform the nature of work and workplaces itself.

Nevertheless, AI is not a threat, instead, it is a tool that complements workers' skills and capabilities, and it presents opportunities for growth and innovation. As automation leads to a significant increase in productivity and efficiency, the impact on employee behaviour will be positive as they can focus more on what matters. The adoption of AI will eventually have a net positive impact on jobs; while job displacement will be inevitable in the short run, many more new jobs will be created in the longer run and there will still be work for everyone tomorrow. The technological innovation of AI will also lead to a shift like work towards those that are more tech savvy and those that require far greater interpersonal skills and cognitive skills. In turn, workers will have to continue to upskill and reskill to thrive in a changing work environment.

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