# The Economics Pioneers The Case of Artificial Intelligence in Future Labour Markets Khushi Sinha



Discussions around AI (Artificial Intelligence) potentially conducing a radical change in labour market status quo reappeared last month following a report by Goldman Sachs centring on this exact issue. As per the report (2023) in question, generative AI could possibly "displace" up to 300 million jobs worldwide – the sheer scale of it, perhaps worrying. It could cause significant disruption, as studies on Europe and the US show that 2/3 of jobs could be automated and 20-50% of workload in the US could be replaced by AI (Goldman Sachs, 2023). However, the report also emphasized the crucial point that AI may produce new positions as well, driven by more specialised needs of the new technological era. It is also expected to boost global productivity by approximately 7%, the Goldman Sachs report claims (2023).

This report largely summarises the current debate on the impact of AI on the labour market. While it carries the danger of displacing myriads of jobs, especially those entailing repeated or routine tasks in the short term, it may also unlock important developments in the form of productivity boost, increased efficiency of existing jobs and creating new positions in AI and technology related fields.

When analysing this issue, one must consider differences in industries, national labour market conditions, as well as varying required skill sets. Positions requiring simple data entry or routine tasks have a higher risk of being replaced by AI than those needing critical thinking, innovation or emotional intelligence.

Policymakers, tech developers and firms will be required to work hand-in-hand to mitigate the negative effects of AI disruption and foster the benefits of this new technology. For instance, they must ensure new jobs or a financial cushion for those whose jobs are at risk, foster AI's productivity multiplier effect and make sure that these labour market transitions occur smoothly.

#### Al-conduced job displacement

The increased and continued sophistication of generative AI fuels fears of such technology taking over many employment opportunities. The introduction of Chat GPT for instance earlier this year manifested to the world the new levels which trained automation can achieve. As mechanical robots take over physical jobs such as warehouse workers or assembly line workers, they also potentially threaten jobs of the likes of programmers or accountants through generative AI and Large Language Models (LLMs) (Axios, 2023). However, such technology is still considered to be in early phases and has shown to be susceptible to many errors and failures to imitate humans, such as misinformation or flawed logical coding.

It is, however, quite evident at the moment that AI is bound to take over at least a portion of existing jobs. Those most at risk are data entry and processing, customer service, repetitive manufacturing, accounting and medical analysis.

It's worth noting that while AI may automate some tasks in these industries, it is unlikely to completely replace human workers. Instead, AI is likely to augment and enhance human work, allowing workers to focus on more complex and creative tasks. Additionally, there will always be a need for human oversight and decision-making in many industries, particularly those that require empathy, intuition and social skills.

The crux of the issue is not to consider AI as a negative actor in the picture, but to tactfully use it to our advantage. Vocational training should be steered to fit this new transition, tailor it to effectively increase productivity of new and existing employment and limit its negative effect on inequality through downward pressure on wages amongst other (Axios, 2023).

#### Skills for the new Al-driven economy

The emergence of new and more intelligent technology only highlights the renewed importance of skills in the new era. With AI being able to do tasks requiring low to medium skill levels, the new generation of workers must treat skills as their "competitive advantage" and prioritise its development (World Economic Forum, 2023).

The new Al-driven economy requires capabilities that would protect one's desirableness in the labour market and harness Al with those skills. It requires a variety of skills that enable workers to collaborate effectively with Al systems and take advantage of the benefits that these systems offer. The following skills are likely to be in high demand (Kanwal, 2023):

- 1. Data literacy: Because AI systems heavily rely on data to make decisions and perform better, workers must be literate in data interpretation and analysis.
- 2. Thinking in a Computational Manner: computing is the process of solving big issues by disassembling them into simpler, more manageable components. Working with AI systems and creating new uses of AI technology require this ability.
- 3. Critical Thinking: Employees must be able to assess AI system output and decide based on their own judgment and research.
- 4. Creativity: While AI systems are capable of automating repetitive tasks, they are unable to replicate human creativity and innovation. The AI-driven economy will have a significant demand for those that can solve problems creatively and unconventionally.
- 5. Cooperation and Communication: Having strong cooperation and communication abilities is crucial for working with AI systems and for working in various teams with other employees.
- 6. Flexibility and adaptability: As AI technology develops, workers must be able to quickly adapt to new tools and technologies and be willing to continually pick up new skills.

#### Al and Social Inequality

A complex topic that's still being researched and discussed is how AI will affect job quality and income inequality. On the one hand, artificial intelligence has the potential to enhance job quality by automating routine and repetitive tasks, freeing up workers to concentrate on more complex and creative work. AI can boost productivity, which can result in higher salaries and better job security for employees (Chen, Chang, 2022).

However, AI can also exacerbate income inequality by automating low-skilled jobs like those in manufacturing and services that are typically held by low-paid workers. For these workers, who might not have the skills necessary to transition to new roles in the AI-driven economy, this could result in job displacement and lower wages. Additionally, by fostering biases in hiring and decision-making that can result in inequal opportunities and outcomes for various groups of workers, AI can exacerbate already-existing inequalities in the workforce (Chen, Chang, 2022).

To overcome these obstacles, policymakers and employers must adopt a proactive stance to guarantee that the advantages of AI are distributed fairly and equitable across the workforce. This could entail funding educational and training initiatives to help workers acquire the skills required for the AI-driven economy, as well as creating laws and regulations that encourage accountability and transparency in the application of AI systems. Furthermore, initiatives to encourage diversity and inclusion in the creation and application of AI can aid in the reduction of biases and guarantee that AI is utilized in ways that are advantageous to all societal members.

#### Al and job creation

Even though AI has the potential to automate some jobs, it could also open up new career opportunities across a range of industries. In the economy driven by AI, new job roles have taken on the following examples:

Data scientists and analysts are in higher demand as a result of Al's reliance on data, which necessitates the ability to gather, examine, and interpret vast amounts of data. Data scientists and analysts are in charge of creating and putting into use the algorithms and models that let Al system grow and learn.

All educators are experts in charge of instructing and outlining to non-technical stakeholders how All systems operate. They guarantee the accountability, integrity, and reliability of All systems (Griffith, 2023).

As AI becomes more commonplace in society, there is an increasing need for experts, namely AI ethicists, who can think about the ethical implications of AI and assist in creating laws and policies that encourage its responsible use (Griffith, 2023).

Users can interact with AI systems in natural and intuitive ways thanks to the work of user experience (UX) designers who develop user interfaces. They make sure that AI systems are approachable and available to people with various backgrounds and abilities.

Al has the power to transform the industry be enabling more individualised and targeted advertising. Specialists, in digital marketing who are knowledgeable about utilising Al to enhance marketing campaigns are in high demand.

Overall, the AI-driven economy is generating new job opportunities across a range of industries, from technology and data science to ethics and design. There will probable be more opportunities for workers to contribute to the AI-driven economy as new job roles are created as AI technology develops.

### Bibliography

- Axios. (2023, March 29). Robots are coming for jobs that pay over \$20 per hour. Retrieved from https://www.axios.com/2023/03/29/robots-jobs-chatgpt-generative-ai.
- Chen, S. L., & Chang, H. W. (2022). Artificial intelligence and job quality: A systematic review. Public Administration, 100(1), 12-26. doi: 10.1002/pa.2326
- Griffith. E. (2023, April 6). You're Hired! 5 New Jobs Created by Al. PCMag. https://www.pcmag.com/news/youre-hired-5-new-jobs-created-by-ai
- Goldman Sachs. (2023, April 5). Generative AI could raise global GDP by 7 percent. Retrieved from https://www.goldmansachs.com/insights/pages/generative-ai-could-raise-global-gdp-by-7-percent.html
- Kanwal, F. (2023, February 20). The Must-Have Skills in the Era of Artificial Intelligence: How Al's Democratization Will Impact Workers. Kenan Institute of Private Enterprise.

  https://kenaninstitute.unc.edu/commentary/the-must-have-skills-in-the-era-of-artificial-intelligence-how-ais-democratization-will-impact-workers/
- World Economic Forum. (2023, April 18). How to leverage skills in the post-knowledge AI economy.

  Retrieved from https://www.weforum.org/agenda/2023/04/how-to-leverage-skills-in-post-knowledge-ai-economy/.