

## **Artificial Intelligence and Employment – A Conflict between Ethics and Economic Efficiency?**

The ability of intelligent computers and machinery to emulate human behavior such as learning and predicting serves as the base for this blog post. AI is steadily being established throughout the economy and various industrial sectors. There are vast possibilities to implement those technologies in businesses. One example is the use of artificially intelligent systems by banks in the finance sector to identify credit misrepresentation (Gull, 2019). Another use case of AI in finance are high frequency stock exchanges during which machines can outright replace human input (West, 2018). Moreover, AI is also made use of in self driving vehicles. This self-driving technology is not only found in privately used cars but is implemented in vehicles like forklifts or other robotic machinery employed in modern distribution centers (Gull, 2019). Some businesses use AI to sort job applications and choose the most suitable candidates (Wittpahl, 2019). Other sectors already characterized by the widespread use of AI are health care, space exploration or defense, on top of the AI technologies we use in our everyday lives as chatbots to place orders or make lodging reservations (West, 2018). These examples offer only a glimpse into the areas of application of AI. However, the versatility of this technology becomes obvious.

The multitude of possible applications of AI has led to a scientific consensus which recognizes the potential threat it poses to employees in certain sectors. This technology is not only able to replace the physical work of humans, but also their way of thinking and predicting (Autor, 2015). Making predictions is the requisite for decision making. Moreover, the sole purpose of prediction can be seen in that it is the ground which decisions are based on (Agrawal *et al.*, 2019). Thinking about how many decisions humans make in both their business and private lives gives an idea about the severity of the impact of AI regarding this subject. This is the revolutionary aspect about AI because of which the impact on employment may be even more grave than we think. The central question to this topic is how severely these technologies are changing the working life. Are there certain professions in which artificially intelligent machines are already executing the majority of tasks? How many of such professions will there be in the future? Will the economic advantages offered by AI outweigh the ethical aspects of providing work and income?

The use of AI in businesses undeniably offers many advantages. It allows processes to be carried out more economically efficient. These systems are able to process substantial amounts of data within short periods of time (West, 2018). With this data readily available, business leaders and managers can make crucial decisions within minutes, rather than waiting for the data to be collected and evaluated. Furthermore, AI promises stability, as well as reliability when compared to its human counterpart. Aspects such as pay raises, absences, belatedness etc. do not have to be taken into consideration. Consequently, the implementation of AI allows a steady workflow, foreseeable costs, and a high output. However, replacing human workforce with intelligent machines is not only a matter of economic efficiency. It is an ethical question, as well. The decision on whether to implement AI technology is in the hands of business leaders. Yet, businesses will need to adapt to technological advancements on the market sooner or later. The continuity of a business, as well as its competitiveness are crucial and decisive factors to success. In this case one needs to make an ethical decision in that they must weigh their profit against the wellbeing of other humans.

Of course, AI does not only destroy jobs, but helps create new ones. There will be a need for programming, supervising, and servicing artificially intelligent machines. However, this requires a much higher level of skill and a certain technical knowledge and specific education compared to some of the jobs that are replaced by machines. Also, we must consider the rate at which technology using AI is taking jobs. Some of this technology could work as efficiently as an entire department, whereas supervising the AI and programming it might not require as many personnel. Some sources even state, that AI has the capacity to carry out the work which was before done “by several hundred thousand people” (Etzioni and Etzioni, 2017, p. 36).

One detail that is worth noting in the context of job ethics is that AI can be of great value when it comes to the working conditions in businesses, as well as the efficiency. This technology can be used to support employees and facilitate and shorten otherwise tedious or repetitive tasks (Stahl, 2021). One example is the application of AI in industrial settings, where it is used for the maintenance of machines by predicting possible damages before they occur. Thus, employees do not have to carry out these routine tasks (Wittpahl, 2019). This provides numerous benefits to the workers in that their mental wellbeing in the form of levels of motivation or their attitude towards work can improve drastically.

Thus, the answer to the question of implementing AI in businesses does not have to be one of two extremes in that it either replaces human workforce entirely or is not introduced into a business at all. AI has the ability to offer support to employees and therefore increase the economic efficiency of a business.

In conclusion, in the future we will need to rethink the way we look at jobs. Nowadays and in the past, it was very well possible for somebody to acquire a degree and work in that job their whole life. In the future this will not be as easy. Jobs will change at a quicker rate, equally to the fast-changing economy and technological advancements. Hence, humans will be required to constantly move forward, learn, and broaden their horizon. This form of adaptation will be the prerequisite for a successful professional career. It can be assumed that we are not yet at a point which marks the complete dispensability of human workforce caused by AI. Technology will advance quickly over the next years and decades. However, it is more likely that humans and AI will initially co-exist, rather than the former being immediately replaced by the latter.

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