

51. UNEMPLOYMENT IN THE ERA OF DIGITALIZATION

Vlaskina M.V.

*Belarusian State University of Informatics and Radioelectronics
Minsk, Republic of Belarus*

Liakh Y.V. – Senior Lecturer

This paper navigates through the dichotomy of digital disruption and digital transformation, shedding light on how technological advancements reshape employment landscapes. By incorporating insights from scientific literature and empirical studies, the paper offers a general understanding of the interplay between automation, job displacement, and the evolution of new job markets.

The implementation of digital technologies, also known as digitalisation, has caused a transition from a traditional industrial economy to a digital one. This shift has significantly affected the economic, environmental, and social aspects of countries, including changes in the structure of the labour market and its mechanisms. Global changes in technological infrastructure transform the labour market, create new forms of employment and influence the supply and demand ratio in various segments. As a result, the scale of labour force release, or the unemployment rate, is affected.

Unemployment is a state in which individuals who are willing and able to work cannot find jobs due to a lack of demand for labour from employers. It is important to maintain a clear and concise explanation of this concept without introducing any subjective evaluations. This economic phenomenon occurs when there are available resources, but not enough demand for labour [1].

The impact of information and communication technology (ICT) on employment has been described in current literature. In 2019, Fossen and Sorgner categorised digitalisation into digital disruption and digital transformation. Digital disruption refers to the optimisation of certain jobs and tasks, replacing manual labour with machine labour, it can also be defined as computerisation or automation. Transformational digitalisation, on the other hand, refers to situations where productivity is enhanced by digital technologies and interaction between workers is facilitated by ICT equipment [2].

The impact of digital disruption is mainly manifested in job losses in segments of the labour market that involve routine operations. However, the progress of ICT and digital technologies leads to the fact that non-routine, non-algorithmised tasks are increasingly performed by means of artificial intelligence. The limits of displacement of human forces by machines are determined only by the possibilities of reproducing human perception.

According to the McKinsey Institute study, the industries most vulnerable to automation are transportation, construction, manufacturing, and wholesale and retail trade. On the other hand, social work and healthcare are least likely to be affected. It is forecasted that less than 5% of professions will be fully automated [3]. It is also important to note that any invention, such as the Internet or the first computer, may result in a short-term increase in unemployment. However, this is a natural phenomenon regulated by the market over time, and lost jobs are eventually replenished. Therefore, the fear of complete replacement of manual labour by machine labour is considered unfounded.

The potential for technological unemployment in the long term is a significant factor driving labour market transformation: the importance of education and intellectual activity is increasing, new flexible forms of employment are being formed, including freelancing and self-employment, remote work is gaining popularity, increasing staff mobility, and much more. Technological advancements not only create new job opportunities but also drive the demand for workers with specialised skills in areas such as data analysis, software development, and digital marketing. Moreover, technological unemployment could indicate that the industrialised world is making progress in solving an important economic problem: scarcity. This problem has forced people to work too hard and for too long. By reducing the need for human labour, technology could help alleviate this issue.

Overall, while automation may initially lead to job displacement in certain sectors, it simultaneously stimulates the growth of new job markets, the demand for a diverse range of skills and contributes to solving the problem of scarcity, helping humanity to reach a new stage of its development. Understanding this interplay is crucial for policymakers, employers, and workers to navigate the challenges and opportunities presented by technological advancements and to ensure inclusive and sustainable economic growth.

References:

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