THE GLOBAL LABOR MARKET IN THE COORDINATES OF THE DIGITAL ECONOMY

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New forms of employment and labor relations in the global labor market under the influence of the digital economy were explored. It is determined that new forms of labor act as an organizational and legal way and condition for the use of intellectual labor, characterized by the absence or modification of one or more features of classical labor relations, namely: the emergence of special employment contracts, which change the way employees are hired, flexible legal regulation labor relations. The classification of new forms of work in the digital economy was formed. It is proved that under the influence of the development of digital technologies there is a proliferation of new forms of work, namely the organizational-legal ways and conditions of use of intellectual labor, which are characterized by the absence or modification of one or more features of classical labor relations, namely the appearance of special employment contracts, according to which method of hiring employees and flexible legal regulation of relations in the field of work; transforming the idea of the workplace in the ordinary sense of this element of work organization; the ability to use a work schedule that optimizes employee working time.

The study of the current state of the labor markets of the European Union countries was conducted and the leading tendencies of the development of the US labor market were determined. The consequences of the evolution of the content of labor in the context of innovative changes are evaluated and the transformation of the employment model towards the use of non-standard forms of employment, increase of flexibility and mobility of labor is investigated. In order to identify current trends in the transformation of the labor markets of developed countries under the influence of the fourth industrial revolution, the main trends of their development in the EU and the USA were analyzed. In 2018, the EU employment rate for people aged 20-64 was found to be 73,2%, which is the highest annual average in the EU's history. Employment rates above 75% were in 16 countries: Sweden, Denmark, Finland, Estonia, Lithuania, Latvia, Czech Republic, Germany, Netherlands, United Kingdom and others. The lowest figure was recorded by Greece – 59,5%. The US employment report exceeded market expectations and showed a marked improvement in all key respects. The number of unemployed people in 2014–2018 decreased.

The positive and negative consequences of the transformations of the labor markets of the developed countries were highlighted. The spread of a new model of labor relations in the world is based on the automation of cognitive processes, the introduction of artificial intelligence, the Internet of Things and digital management.

The main consequence of the transformation of the labor markets of developed countries is the transition to a service model of employment. Transformation markets in the developed world have also revealed the following: new forms of work organization, such as freelancing, pharmacy work, artificial intelligence in management, e-governance, dramatic acceleration of technological change, automated desert factories, driverless cars connected to the Internet, e-banking, online business, open online training courses. A promising direction for further development of the labor market in developed countries is the interaction with digital technologies and artificial intelligence, whose potential impact on the labor market is endless. There are three levels of development of artificial intelligence: assisted intelligence, advanced intelligence, autonomous intelligence – technology of the future, which involves the use of machines that will act independently.

References

1. Limba, T., Stankevičius, A., Andrulevičius, A. (2019). Industry 4.0 and national security: the phenomenon of disruptive technology. Entrepreneurship and Sustainability. Issues 6(3), pp. 1528-1535. https://doi.org/10.9770/jssi.2019.6.3(33)

2. The Deloitte Global Outsourcing Survey 2018. Available on: https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-cons-global-outsourcing-survey.pdf

3. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) (Authentic text). Available on: Electronic data. Available on the Internet: https://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm

4. Employment statistics. European Commission. Eurostat. Available on: https://ec.europa.eu/eurostat/statistics-explained/index.php/Employment_ statistics#Employment_rates_by_sex.2C_age_and_educational_attainment_level

5. European Innovation Scoreboard (2018). Available on: http://ec.europa.eu/growth/content/european-innovation-scoreboard-2018-europe-must-deepen-its-innovation-edge_en

6. ALFS Summary tables. OECD Stat. Available on: https://stats.oecd.org/viewhtml.aspx?datasetcode=ALFS_SUMTAB&lang=en

7. Freelancers income report 2018. Available on: https://www.dropbox.com/s/s85xwc7sbbqz3xz/Freelancers%20income%20report%202018.pdf?dl=0

8. Freelancing in America 2018. 5th Annual Report. Available on: https://www.upwork.com/i/freelancing-in-america/2018/

9. Creative Crowdsourcing Leader eYeka Releases 2017 Industry Report and Welcomes the Age of Ideation // The official website of eYeka. Available on: http://news.eyeka.net/2017/06/creative-crowdsourcing-leader-eyeka-releases-2017-industry-report-and-welcomesthe-age-of-ideation

10. Schwab, K. (2016). The fourth industrial revolution. Geneva: World Economic Forum. Geneva, Switzerland: World Economic Forum, 184 p.

11. Dirican, C. (2015). The Impacts of Robotics, Artificial Intelligence On Business and Economics. Procedia-Social and Behavioral Sciences, 195, pp. 564-573.

12. Abhayawansa, S.A., Guthrie, J., Bernardi, C. (2019). Intellectual capital accounting in the age of integrated reporting: a commentary. Journal of Intellectual Capital, 2019, 20(1), pp. 2-10.

13. Brynjolfsson, E. & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. New York, NY: WW Norton & Company, 336 p.

14. Hamill, Jasper (2017). Artificial muscle could make robots 15 times stronger than humans. New York Post. Last modified September 19, 2017. Available on: https://nypost.com/2017/09/19/artificial-muscle-could-make-robots-15-times-stronger-than-humans/

15. Makedon, V., Drobyazko, S., Shevtsova, H., Maslosh, O., Kasatkina, M. (2019). Providing security for the development of high-technology organizations, Journal of Security and Sustainability Issues 8(4), pp. 1313-1331. https://doi.org/10.9770/jssi.2019.8.4(18)

16. Schmidhuber, J. (2015). Deep learning in neural networks: An overview. Neural networks, 61(1), pp. 85-117.

17. Makedon, V., Hetman, O., Yemchuk, L., Paranytsia, N., Petrovska, S. (2019). Human resource management for secure and sustainable development. Journal of security and sustainability. Issues 8(3), pp. 345-354. http://doi.org/10.9770/jssi.2019.8.3(5)

18. Aghion, Philippe, Benjamin, F. Jones and Charles, I. Jone (2017). Artificial intelligence and economic growth. NBER Working Paper, 57 p.

19. Cooke, P. (2002). Knowledge Economies: Clusters, Learning and Cooperative Advantage. London: Routledge, 232 p.

20. Dirican, C. (2015). The Impacts of Robotics, Artificial Intelligence On Business and Economics. Procedia -Social and Behavioral Sciences, 195, pp. 564-573.

21. Meissner, H., Ilsena, R., Auricha, J.C. (2017). Analysis of Control Architectures in the Context of Industry 4.0. Procedia CIRP. Vol. 62, pp. 165-169.

22. Siau, K. and Yang, Y. (2017). Impact of Artificial Intelligence, Robotics, and Machine Learning on Sales and Marketing. Twelve Annual Midwest Association for Information Systems Conference (MWAIS 2017), Springfield, Illinois, May 18-19.

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