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BENEFITS OF HUMAN-CENTERED DIGITALIZATION IN THE CONTEXT OF UKRAINIAN LABOR MARKET

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Abstract

The paper investigates changes in the resilience of Ukraine's labor market. The expediency of using digital technologies as a factor in strengthening the resilience of the social and labor sphere is substantiated. Changing the paradigm of digitalization on the basis of Industry 5.0 towards human-centered digitization is emphasized. The advantages of using human-centered digitalization to strengthen the resilience of social and labor spheres in the period of post-war recovery of Ukraine's national economy are determined.

Key words: *Labor market; human-centered digitalization; resilience of labor market; Industry 5.0.*

1. Introduction

Digital technologies transform social and labor sphere by changing the ways of interaction between employees, employers and the state, the work process, motivation, etc. Digitalization is an ambivalent factor; alongside with opportunities, it can create threats to the social and labor sphere. The use of digital technologies in production, business processes, governance processes based on humanity will minimize the negative impact on social and labor sphere; determine its development and strengthen resilience. There is an urgent need to form a vision of using the advantages of human-centered digitalization as a factor in activating the development of social and labor sphere, strengthening its resilience, which should become an integral part of the road map for the recovery of Ukraine in the post-war period.

2. Overview

Ukraine's national economy was subjected to an unprecedented, destructive impact of military actions, which causes an urgent need

to develop directions for the country's post-war recovery. The basic resource for the recovery of the national economy is human capital, and the resilience of the labor market ensures its proper use in compliance with social guarantees and norms and the creation of conditions for its development.

The GLRI index is a convenient tool for measuring labor markets resilience, comparing them globally and identifying areas that require new policy strategies aimed at strengthening the resilience of national labor markets. GLRI provides a measurement of the labor market resilience by indicators grouped according to two components: structural and cyclical.

The structural component includes demography, country capabilities, economic development, which have a long-term impact on the labor market.

The cyclical component includes areas affected by short-term policy. Resilience can be strengthened in a structural, cyclical and balanced way.

According to GLRI indices 2021–2024, Ukraine is characterized by a reduction in potential, which is evidenced by a decrease in the gap between the structural and cyclical parameters (Table 1).

Table 1

**Changes in Ukraine's position
in the World Labor Market Resilience Index, by years [1–4]**

Index	Number of countries	General rank	Component rank		Gap between structural and cyclical parameters
			structural	cyclical	
GLRI 24	136	55	50	57	7
GLRI 23	136	56	52	61	9
GLRI 22	145	60	46	71	25
GLRI 21	131	66	50	78	28

Before the full-scale invasion of russia in February 2022, Ukraine belonged to the countries with a significant potential to strengthen labor market resilience in a structural way. However, there is a large-scale destruction of industrial, educational, residential infrastructure, occupation of part of the territory, pollution of territories. The most painful consequence of the war is the forced migration of the population, the deaths of civilians and soldiers. The population in Ukraine, according to expert estimates, has decreased from 41.2 million in 2021 to 28-34 million people. Such

conditions actually make a structural way of ensuring labor market resilience impossible.

The post-war recovery of Ukraine's economy must be based on the latest technological principles. This gives reason to focus on digitalization as a factor that creates a "window of opportunity" for the post-war recovery of the national economy. ***Digitalization should be considered in the context of the development of Industry 5.0 as the optimal way of post-war recovery of Ukraine***, which involves changing the emphasis in the "man-machine" interaction to a human-centered one. This is extremely important for the post-war recovery of Ukraine, with its obvious lack of human resources and destroyed infrastructure.

This approach to post-war recovery will allow solving a number of problems in the country. *First*, the digitalization of labor functions will enable accelerating the need for labor force, which will be in short supply given the significant decrease of both the population of Ukraine as a whole and the labor force.

Secondly, Industry 5.0 is aimed at combining human abilities with technology. Characteristic features of Industry 5.0 are competitiveness and sustainability of industry and realization of its potential; technological means of management; employee empowerment through the use of digital devices; ecological, sustainable use of technologies; expanding the responsibility of corporations for the creation of the entire chain of added value. The harmonious combination of human abilities and skills with the capabilities of digital technologies will reduce the routine of work, create opportunities for employee self-realization and conditions for increased labor productivity and quality of working life.

Thirdly, digital technologies are a powerful tool for the rehabilitation of the military and civilians, as well as their return to the labor market. Digital technologies have significant potential in the field of rehabilitation, in particular, artificial intelligence should be used as an individual means of software rehabilitation, 3D printing in the field of health care, special software tools to provide remote monitoring of health and psychological support, virtual and added reality as a means of acquiring skills in various life and professional situations.

Fourth, digitalization should be used to build government and corporate governance based on ESG (Environmental, Social, Governance) standards. The use of digital technologies in management based on ESG principles will reduce the level of social tension, the number of conflicts in social and labor sphere, ensure compliance with social standards and guarantees, compliance with the principles of human oriented digitization.

3. Conclusions

The resilience of Ukraine's national labor market is characterized by a threatening demographic situation, low quality of working life and loss of sustainability potential. Using the benefits of human-centered digitalization and the development of Industry 5.0 will allow minimizing the effect of destructive factors, strengthening social and labor sphere resilience and solving a number of complex tasks in the post-war recovery of Ukraine such as technological replacement of insufficient number of the labor force, employee empowerment through the use of digital devices; increasing the inclusion of the working environment and workplaces; reducing the level of social tension.

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