

Environmental Agenda: Risks of Maintaining the Status Quo

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Abstract. “Turn to nature” and the inextricable connection between nature and man, ensuring the well-being, security and development of the latter, should become an integral element of Russian identity and national idea, its mission for itself and for the world. The concepts of “nature” and the Motherland should become inseparable. At the same time, the inseparable connection between the protection of nature and human well-being, the development of human capital can become one of the most important tools for the internal consolidation of the country, an idea that unites the elite (regardless of political preferences) and society.

1 Introduction

The significance of digital assets has also increased, with many companies’ market value being determined by their internet audience, brand awareness, and reputation in cyberspace. Furthermore, the importance of digitalization for socio-economic development is widely recognized, with almost all researchers and experts agreeing on its significance. This has led to the adoption of industry-specific digital transformation strategies in many countries, combining the development plans of individual technologies with their specific applications. Government support measures, including regulatory sandboxes, living labs, and virtual test sites, have led to the emergence of new breakthrough solutions [1]. These developments have expanded the opportunities for cooperation between participants at different stages of the life cycle of digital products and services.

From our point of view, the key feature of digital transformation, which distinguishes it from similar concepts, in particular digitalization (although it is often very difficult to do this!), is qualitative changes in business processes and activity models, primarily arising within digital platforms, and significant socio-economic effects from their implementation [2]. Digital transformation is not only the introduction of digital technologies, but also the transformation of many horizontal and vertical business processes, optimization of operating procedures, change in established models and formats of interaction between participants in value chains [3]. New technological solutions require complementary investments in improving organizational practices, developing employee competencies, a culture of working with data and digital solutions. Digital transformation contributes to solving systemic problems in industries, reorganizing labor and automating routine tasks.

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Thus, in the electric power industry, the number of accidents at infrastructure facilities is reduced, in construction - the level of injuries at the construction site. Digital products improve coordination within and between organizations and reduce transaction costs. For example, platform solutions in logistics reduce the role of intermediaries, while expanding the possibilities for communication with end users. In the electric power industry, consumers become prosumers, i.e. independently generate electricity and get the opportunity to sell its surplus.

2 Research Methodology

Before analyzing the potential impact of digital technologies on human well-being and quality of life, it is important to define what is meant by these terms [4]. The term “well-being” has many definitions, depending, among other things, on the context of the study: for example, social well-being, professional well-being, psychological well-being, and others are distinguished. At the same time, along with the term “well-being”, modern studies often use related concepts, including “quality of life”, “life satisfaction”, “well-being”, which are often defined through similar parameters. In the broadest sense, well-being is interpreted as “a state of comfort, health or happiness”¹. There is no universal definition of “well-being”, primarily due to the complexity and subjectivity of this concept itself, because for each person the set of parameters that are of priority importance for his life is individual. Approaches to measuring well-being are also constantly evolving: in their development, they have gone through a number of successive stages - from an assessment based solely on quantitative criteria of material wealth to the concept of “subjective well-being”, which can be interpreted as a combination of objective and subjective factors of a person’s perception of his own environment. Thus, the PERMA approach is often used, which assesses well-being based on five elements:

- positive emotions (Positive emotion);
- involvement (Engagement);
- relations (Relationships);
- meaning and purpose (Meaning and purpose);
- achievements (Accomplishments)

Almost simultaneously with the beginning of the large-scale and all-pervasive spread of digital technologies, the problem of assessing their impact on the quality of human life and the level of his well-being arose. In this regard, a special term appeared in the research environment – “digital well-being”, - defined as “maintaining and increasing human well-being in a social environment characterized by the digitalization of almost all spheres of life”.

3 Results and Discussions

The quantitative assessment of “digital well-being” is difficult for a number of reasons - primarily due to the ambiguity and subjectivity of the very concept of well-being, as well as the lack of necessary metrics and relevant databases [5]. In this regard, qualitative assessments of the impact of digital technologies on human well-being now predominate, based on the premise that although digital technologies can have both positive and negative impacts on human quality of life, their net effect is generally positive. One of the most comprehensive assessments of the human impact of digital technologies is presented by the OECD in the How’s Life in the Digital Age? study, conducted as part of the Going Digital project and the How’s Life? initiative. The experts attempted to assess the impact of the digitalization dimension on 11 factors of well-being included in the OECD Better Life

Index (BLI) (health; education and skills; income and wealth; work and earnings; work-life balance; social connections; governance and civic engagement ; personal safety; environmental quality; housing; subjective well-being).

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To counter environmental problems, a restructuring of the global economy is necessary, but the corresponding “green” transformation must be inclusive and line up in accordance with the interests of not only developed, but also developing countries. Especially considering that it is the processes taking place in developing countries, due to superiority in population, volumes and growth rates of economic activity, that determine the future of the planet. The approach to combating environmental problems and, in particular, climate change, which is currently being promoted by Western countries, is in conflict with a number of other Sustainable Development Goals: in particular, the elimination of poverty and the reduction of inequality: it is difficult or even impossible for developing countries to simultaneously develop “green” technologies, as well as to provide the poor with food, water and electricity. This is especially difficult in countries specializing in the export of traditional natural resources and carbon-intensive products. The transfer of “dirty” industries to the developing world solves the local environmental problems of developed countries at the expense of developing countries and shifts the burden of responsibility for global problems to them, without solving them on a global scale. It is necessary to move towards “clean” development by joint efforts, the development of such rules and instruments of international economic relations and global governance that would provide real assistance to this transition by all countries of the world from rich developed states. This is not about “international development assistance” and aid policy, but about the joint determination of the future trajectory for solving environmental problems.

Digital technologies have a predominantly positive impact on the level of employment and income of the population: they reduce barriers in the labor market associated with the geographical factor (especially in the ICT sector), which increases competition between specialists [12]. The effectiveness of the interaction between the employee and the employer ceases to depend on their location, which expands the possibilities of human capital and improves the quality of services in the labor market. In addition, the range of available vacancies is significantly expanding through the use of specialized sites and search engines. In the OECD, these opportunities are still used much more actively than in Russia: the share of the population using the Internet to search for work online in Russia is

6.4% (against 19.3% in OECD countries) [15]. In addition, today Russia still lags behind OECD countries in terms of the share of the population working remotely: even during the peak period of the lockdown in 2020, the share of people working remotely did not exceed 11%² (versus 25%³ in OECD countries), although the COVID-19 pandemic has created serious economic and social prerequisites for the transition to a remote work format. The share of people employed in the ICT sector is still relatively small both in Russia and in the OECD: 1.8% versus 3.4% [13]. The risk factor in matters of employment is traditionally considered to be fears of an increase in unemployment due to robotization of jobs. According to a study by ISSEK HSE⁴, three-quarters of respondents (74%) believe that the processes of robotization of labor will lead to the disappearance of many current professions [14]. At the same time, among the working population in Russia, skepticism about the quality of robots' work prevails: 44% are sure that it is impossible for a robot to perform their work, and 35% believe that a robot is only able to cope with part of the duties. Only 16% of respondents stated that it is realistic for robots to perform their main duties (the same indicator in OECD countries in 2019 was 14%).

4 Conclusions

Much of the current research on the impact of digitalization on human quality of life is based on the assumption that increased access to and ability to use digital technologies will inevitably lead to improved well-being for both the individual and society as a whole: this assumption is one of the reasons for investing in the development of digital technologies, innovative technologies/products and development of digital skills of users. At the same time, public concern about the potential negative consequences of new technologies (both real and imaginary) stimulates political discussions and scientific research on this topic. Quantifying the impact of digital transformations on the level of well-being (that is, assessing "digital well-being") is difficult for a number of reasons, including the lack of quantitative metrics, low comparability of indicators across countries, and, above all, the subjectivity and ambiguity of the concept of well-being itself. In this regard, qualitative assessments, supported by available statistics, prevail today. Based on the OECD Better Life Index methodology and How is life in Digital Age?; Opportunities and Risks of the Digital Transformation for People's Well-being, HSE ISSEK has developed the Digital Well-Being Conditions Index, which allows assessing the conditions created in Russia for the population to take advantage of the opportunities created by the digital transformation of the economy and society. In the BSCI model, these conditions are compared with the average indicators of OECD countries in five areas that are significant for the quality of life of the vast majority of people. In general, in terms of the opportunities created by digitalization to improve the well-being of the population, Russia is slightly inferior to the OECD countries in most parameters. Among the indicators with the greatest potential for improvement is the Digital Skills Gap. In addition, Russia is not yet fully using the possibilities of online learning and remote employment. The conditions created in Russia and in the OECD for the possibility of using e-government services are comparable, although the proportion of the population that does not have sufficient skills to use online government services in our country is higher than the OECD average. In terms of Internet access (including broadband access), Russia lags slightly behind the OECD average, which reduces the ability of the Russian population to enjoy the benefits of digitalization and increases the risks it poses. In addition, the territorial gap in levels of access between urban and rural populations is slightly higher than the OECD average. As a result, there is also a gap in the skills of the Russian population to use the opportunities of digital technologies. In this regard, it is important to ensure the maximum coverage of the population with broadband Internet access while simultaneously addressing the problem of the digital

divide, including through the accelerated implementation of programs to eliminate the territorial digital divide among the Russian population. In addition to the problem of access to ICT, it is necessary to strive to increase the level of digital literacy of the population as a key enabler for the positive impact of digital technologies on human well-being. According to the HSE ISSEK, today more than half of the Russian population assesses the level of their digital skills as “low”, or does not use the possibilities of ICT at all. This leads to an increase in the digital divide and, as a result, an increase in social stratification, which is expressed in the “cutting off” of a part of society from the benefits (e-government services, healthcare services, online shopping) obtained with access to digital technologies and the ability to use them. In this regard, in addition to providing physical access to ICT, it is important to develop targeted programs for the development of digital skills for the most vulnerable segments of the population, as well as to introduce the basics of digital literacy into educational programs. Despite the leadership of our country in the EAEU in terms of the share of the population with a basic level of digital skills, Kazakhstan is today the leader in the dissemination of advanced skills (6% versus 1% in Russia).

In Russia, the study of computer science begins mainly from the 7th-8th grade, and the skills of analyzing and processing data in spreadsheets begin to form in schoolchildren only starting from the 9th grade. As a result, according to experts, a very productive age for the formation of algorithmic thinking is missed - grades 5-6. In general, it can be predicted that the quality and accuracy of assessing the impact of digital technologies on human well-being will increase as new metrics are developed and big data analysis methods improve, including with the help of artificial intelligence technologies. At the same time, special attention in future research will need to be given to mechanisms that allow assessing the possibility of specific digital technologies and practices to benefit or harm a person and society.

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