Kibayeva A.B.
1st year doctoral student specialty "Economics"
Turan University

«Impact of digitalization on the formation of human potential»

The historical development of the economy is characterized by the transition from extensive mode of production to intensive. If a few more centuries ago, the main role was brute physical strength, that used in routine agriculture or labor-intensive construction, today information and technology come to the first plan.

In the realities of a rapidly changing world, in the era of digitalization and digital society, the importance of human capital as an main factor in economic growth becomes obvious.

Human capital theory studies the process qualitative improvement of human resources and offered a common analytical framework to explain such phenomena as the contribution of education to economic growth, the demand for educational and medical services, age dynamics earnings, differences in wages for men and women, transmission of economic inequality and much more. Long ago since then people tried to learn the secret of the creative power of mankind, identify its most characteristic qualities and properties, give quantitative assessment.

Human capital includes accumulated investments in such areas of activity as education, professional training, migration. The knowledge and skills that the employee possesses and that they acquire through education and training, includes the dexterity gained from work experience, constitute a certain stock of productive capital.

Human capital refers to investments acquired through experience. knowledge, abilities and skills acquired by man, which determines its behavior, intellection, motivation and modus operandi, enhance the effectiveness of its work and increase well-being. Human capital acts as one of the significant factors in the

economic development of the state and determines labor productivity, which is one of the main indicators of the effectiveness of the socio-economic structure. Analysts often use such an indicator as “labor productivity in terms of gross domestic product”.

Human capital is a complex, diverse phenomenon, changing. Human capital focus on its various aspects, which determines the difference in approaches defining its essence and content. The pioneers of human capital as a holistic concepts by T. Schultz and G. Becker, focused on investments in human capital and assessment of their effectiveness. Investing in improving human capabilities
lead to an increase in labor productivity, increase of income, includes an increase in the employee's earnings. This means that reproduction takes place and cumulative accumulation of income through human abilities, which turns them into a special form of capital.

The main elements can be distinguished individual human capital:

a) knowledge that is an expedient form information used in economic activity that allows you to increase its efficiency;

b) abilities - the ability to successfully perform any activity. The following levels of development are distinguished abilities: lack of ability (zero level), partial ability, average ability, talent, genius;

c) experience or skills of action, skill of execution specific labor operations for a long time;

d) culture - principles and stereotypes of behavior within knowledge, rules, traditions, morality existing in the society;

e) motivation - the focus of the activity, its intensity, satisfaction with the process and results.

The term "digital economy" was coined the term in 1995 by the American computer scientist from the Massachusetts Institute of Technology Nicholas Negroponte. Today there are two approaches to understanding the term "digital

economy". According to the classical approach, digital economics is the field of electronic goods and services based on digital technologies (telemedicine, distance learning, sales medical content, etc.) According to the extended approach, the digital economy is an economic production that use digital technologies.

One of the reasons for digitalization is the growth of transaction sector that determines the course of innovative development postindustrial society. The transactional sector includes finance (bank sector, lending, insurance and pension provision), wholesale and retail trade, real estate transactions, transport, communications, media, public administration, as well as the provision of various communal, personal and social services.

The digital economy developed because it effectively satisfy the needs of the population, which means it is ahead of the "analog" economy. In certain areas, it has become a virtual augmentation of reality: for example, mechanical engineering enterprises have the opportunity to conduct virtual crash tests, saving significant funds. In addition, the digital economy does not require physical expansion, unlike the economy of the industrial era. There is no need to constantly increase the number of equipment and the number of personnel. Manufactures are becoming more compact and efficient, and technology is replacing physical scale.

In 2011, the term "Industry 4.0" (the fourth industrial revolution) was used for the first time at the Hanover Trade Fair for Industrial Technology. The term coined by Klaus Schwab - President of the World Economic Forum.

Industry 4.0 was conceived as a means of increasing the competitiveness of the German manufacturing industry through the enhanced integration of “cyber-physical systems” into factory processes.

Active automation of routine processes, development and implementation of robotics in production will allow companies increase significantly profits. In addition, “smart” (or intelligent) technologies are already becoming more widespread today: telephones, houses, car control assistants, etc. The trend towards the use of

artificial intelligence is also becoming apparent. This approach will free up the labor and creative resources of people, provide them with the opportunity to realize their own potential.

And those who are accustomed to working in other industries will have to adapt to the new era. In the United States, where society has become fully informational and the introduction of technology is ahead of many other countries, thousands of employees control machine production day after day. Activity, thus, moves to a new stage: from mechanical labor to monitoring. Such a transformation requires new skills: increased attention and concentration, knowledge of computer systems, the ability to use the necessary set of programs - along with the already existing knowledge in their field. Thus, an employee of an enterprise must constantly expand horizons, assimilate new information, learn and improve. Otherwise, the value of an employee's lifetime earnings will begin to decrease rapidly, which will affect his purchasing power, and on a national scale (and even more so globally) - on the economy in general.

The human factor cannot be left aside: everyone who is able to adapt, constantly increasing human capital and keeping up with the development of relevant technologies, will remain on the labor market. The rest will be ousted, which will inevitably lead to an increase in social tension.

Literature:

1. Czarniewski S. Quality Parameters of Human Capital in the Digital Economy [Electronic resource] / S. Czarniewski // International Journal of Academic Research in Accounting, Finance and Management Sciences. – 2014. – Vol. 4, No. 3. – pp. 193-198. – Mode access: http://hrmars.com/hrmars_papers/ Article_21_ Quality_Parameters_of_Human_Capital.pdf – 22.01.2019.

2. Winger A. Human Capital in the Digital Economy [Electronic resource] / A. Winger // Advisor Perspectives. – 2013. – Mode access: https://www.advisorperspectives.com/articles/2013/08/06/human-capital-in-the-digitaleconomy – 22.01.2019.
3. Скоблякова И.В. С44 Циклы воспроизводства человеческого капитала. – М.: «Издательство Машиностроение – 1» - 2006.