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DIGITAL AGE: NEW POSSIBILITIES FOR LABOR MARKET AND EDUCATION

Abstract. The article analyzes the impact of the development of digital technologies on the state of world labor market and education. According to experts, new technologies will be able to destroy many jobs, but also create new ones. The main driver of creating new jobs will be the service industry. It is considered the importance of developing new transversal skills in the digital era, taking into account generational special features and also new opportunities for various types of professions. The main characteristics of digital nomads are their mobility and permanent connection to the Network. In the face of new challenges of the modern world, such as the COVID-19 pandemic and the forced global social isolation of people, it is necessary to rethink the global labor market and move to new opportunities for remote work, including the education system. It is also specifies the legal and institutional prerequisites for the education system and professional activities in remote work pattern.

Key words: Digital Kazakhstan 2020, digital technologies, digital nomads, teleworking, remote professions, Coursera Campus, teleworking legislation

"The purpose of the "Digital Kazakhstan 2020" program is to increase the competitiveness of the sectors of the economy and quality of life with the active introduction of digital technologies. As for the key performance indicators of this program, it is planned to increase the share of IT-sector by 5% in the GDP, increase jobs in the IT-sector, productivity growth by 37%, and increasing the digital literacy of the population by 85%" [1]. The program will be the driver and impetus for the achievement of all goals of Kazakhstan in the framework of the Strategy of "Kazakhstan 2050 ", Plan of nation "100 concrete steps", "Nurly Zhol" state program and sectoral programs.

Digitalization is significantly ahead of the existing system of production requirements to the composition of occupations engaged in the labor market. Introduction of the "Digital Kazakhstan 2020" program will create additional 150 thousand jobs in the IT-sector. The digital economy requires the population to have digital skills that allow the use of its fruits. Currently, the level of

computer (digital) literacy of the kazakhstani population is 76.2%. But in order to achieve the goals, it is necessary to improve it not only in quantitative, but also in qualitative terms. In preparing specialists for the digital economy, it is necessary to focus primarily on skills in analyzing information and developing creative thinking, rather than on memorizing facts. To develop technical and professional, higher and postgraduate education in order to bring industry and education closer together, measures are envisaged to create IT departments of universities at enterprises, as well as competence centers on the basis of higher educational institutions of the country. In addition to achieving economic benefits and increasing competitiveness, digitalization will have a positive impact on social spheres. The effect of the qualitative development of education, health and the investment environment will be noticeable in the long term and will help to narrow the socio-economic gap with the developed countries [2].

A study of the McKinsey Global Institute has shown that by 2030, about 800 million workers worldwide may lose their jobs as a result of automation; this is more than one fifth of today's labor force [3]. There were analyzed 46 countries and more than 800 professions, and this trend will affect both developed and developing countries. Machine operators, fast-food workers and back-office employees are among those who will be most affected if automation quickly spreads. Even if the spread of robots is less rapid, about 400 million people may be left without work as a result of automation and they will need to find new jobs over the next 13 years.

The good news for those who are replaced by robots, that they will be able to take up other jobs, although in many cases they will have to learn new skills. The head of the World Bank, Jim Yong Kim, said that politicians should take action by investing in education and health [3]. According to Kim, investment in human capital, for example, in education, will be important for future economic growth, since robots crowd out millions of low-skilled workers. "The only thing that is known for certain is that whatever the economy may be in the future, we need people who can learn," - he said in an interview with the BBC.

New technologies will be able to destroy many jobs, but also create new ones. Are we ready for this and are we sufficiently qualified?

The head of the most expensive company in Asia, Jack Ma, claimed that for 19 years, Alibaba Group is planning to create 100 million jobs, which will provide 10 million businesses. At the same time, the total number of the company's clients will be 2 billion, of which about 800 million are Chinese [3]. Many people, referring to the increase in the number of jobs, mean production. But in the modern world, because of new technologies like artificial intelligence, robots, production will never regain this role. The main driver of creating new jobs will be the service industry. Speaking of production, we must stop using the phrases "made in China" or "made in the USA". In the future, this will be "done on the Internet." Small businesses will start to play a significant role; most companies from this niche will become global. Over the past 30 years, about 6% of companies have used the benefits of globalization. And in the next 30 years, at least 60% of small businesses will become global.

It is necessary to pay special attention to the education system. "Everything that we learn according to the old learning pattern, memorizing knowledge, learning to calculate, all these machines succeed better. We have to rebuild the education system. We must train our children to be innovative and creative. In the new world, to achieve success, you will need not only the "old-fashioned" IQ and the "new-fashioned" EQ emotional intelligence, but also LQ - the "coefficient of love," a unique property that distinguishes man from the machine" [4]. These competences are known today as transversal skills that include a combination of practical and theoretical knowledge, cognitive skills, behavior and values used to improve performance; or as the state or quality of being adequately or well qualified, having the ability to perform a specific role. For instance,

management competency might include systems thinking and emotional intelligence, and skills in influence and negotiation [5].

In addition, Jack Ma believes that in the future, the most demanded employees will be those who have developed imagination. It is through creative thinking that humanity will ultimately come to solving many contemporary global problems, such as poverty, climate change and disease. At the same time, these problems will be solved not by people who are "over 50" and who are not too inclined to change, but representatives of the younger generation, who, as we know, are driven by the desire to change the world here and now. This idea echoes research related to the theory of generations: X (baby boomers), Y (millennial), Z (digital) [6].

In the period of globalization and the development of information and communication systems, new non-standard forms of employment are emerging, designed to meet the needs of modern society. One of these new flexible forms of employment is "telecommuting", which has already found legislative consolidation in most countries of the world. The definition of the term "telework" is found in the legislation of the CIS countries, including Kazakhstan and Russia [7].

Telecommuting, also called telework, teleworking, working from home, mobile work, remote work, and flexible workplace, is a work arrangement in which employees do not commute or travel (e.g. by bus or car) to a central place of work, such as an office building, warehouse, or store. Teleworkers in the 21st century often use mobile telecommunications technology, such as Wi-Fi-equipped laptop or tablet and smartphones to work from coffee shops; others may use a desktop computer and a landline phone at their home. According to a Reuters Polls, approximately "one in five workers around the globe, particularly employees in the Middle East, Latin America and Asia, telecommute frequently, and nearly 10 percent work from home every day". In the 2000s, annual leave or vacation in some organizations was seen as absence from the workplace rather than ceasing work, and some office employees used telework to continue to check work e-mails while on vacation [8].

Compared to the EU countries, the USA and Russia, teleworking in Kazakhstan is poorly regulated at the legislative level. The Labor Code of the Republic of Kazakhstan in 2015 [9] contains only one article on this issue. A common approach to teleworking in Kazakhstan and Russian legislation is that teleworking refers to work that is carried out outside the employer's location on an ongoing basis. That is, workers do not have the legal ability to combine "stationary" (work at the location of the employer) and teleworking, despite the fact that in practice this combination is very common. But, in the EU countries and the USA this possibility is legally fixed and the implementation of telework part-time is considered the norm [7].

Thus, we are moving to new opportunities for professionals, namely so called digital nomadism. The main reasons for the emergence of digital nomadism were the exponential growth of the electronic mobile device industry, the further development of the Internet, and the almost universal transition to wireless communications. As a result, already in the early 2000s, many workers and employers realized that they only needed a laptop to work effectively. And in some cases, a single cell phone is enough. And here you can bring this fact: in Japan in 2007, 5 out of 10 bestsellers were created on the phones. Indeed, why spend money on buying or renting offices, when you can contact your employees and customers via Skype? In the case of special need, you can meet with them in "third places" - cafes, libraries, co-working. Such an inexpensive, but effective way of organizing business communications began to spread rapidly, first in megalopolises, and then in other places covered by satellite communications. And when you begin to get acquainted with the phenomenon of digital nomadism in more detail, you realize that in 20 years on a world scale, it has truly become global.

Over the past decade, there has been a mass of programs and applications that unite nomads of all ages from all over the world, who work together, travel, live. Thematic sites for digital

nomads allow them to share information about the cities in which it is better to stay, about sites where you can buy airline tickets cheaper, and so on. The most important thing that digital nomads value in their chosen lifestyle is freedom, lack of attachment to a certain place, avoiding boring and predictable circumstances of living and working in the same type for many years. Digital nomads create their own world with well-established real and virtual communications; communicate only with those who are really interested in them, avoiding useless interaction with the world. For communication they use popular platforms. For example, for programmers there are such platforms as Google Hangouts, Slack, Skype, Speak and Github, and for calls using Viber, WhatsApp, and Telegram [10].

Like any employee, digital nomads have certain requirements for their workplace and it is worth noting a few basic conditions that affect the quality of remote work. First, of course, is well-chosen workplace. This should be a space with high-speed Internet and a good telephone connection in order to be able to work not only over the Network, but also, if necessary, answer the phone call. All these properties are provided by coworking centers, which are located in cities with a population of over a million, but sometimes cafes where there is good Wi-Fi can be a more optimal solution to the issue in terms of financial costs than renting a workplace in a coworking center.

The list of professions that can be done remotely and therefore are compatible with the digital nomad lifestyle is getting bigger and bigger every year, which is a definite advantage for everyone that wants to try it out [11]. Professions that can be done remotely: copywriting and writing, social media manager, affiliate marketing, translation, illustrating and graphic design, programming, virtual assistant, blogging, tour guide, transcribing, and education.

What is the role of higher education institutions in the changeable digital world? The university is a community of free creative individuals. People of this kind of warehouse become digital nomads. Especially if they are young and are also digital natives, able to take advantage of all the technical advances of the modern networked information society. They know foreign languages; they have no problems in building intercultural communications. For such people, the orientation towards the highest degree of self-realization is characteristic. They are looking for themselves, looking for new types and places of activity.

Are there any technical issues hindering online learning and high quality learning? Is it possible to get an education in the most prestigious universities in the world from eminent professors and specialists? You can not only advise students, undergraduates and doctoral students, but also conduct full-fledged lectures online, give assignments to the audience and evaluate its work. There have been no special technical problems for a long time. There are many programs and applications that allow the teacher to maintain high-quality two-way communication with his students, even if they are on the other side of the planet.

The COVID-19 pandemic and the forced self-isolation of people have led to a surge in interest in online and non-formal education. In the spring of 2020, the Ministry of Education of the Republic of Kazakhstan recommended that Kazakh educational organizations switch to distance learning so that schoolchildren and students can complete educational programs without losing hours [12]. However, some Kazakh universities thought about their digital transformation even earlier. One of these universities is the International Information Technology University in Almaty. Since the 2019-2020 academic year, the university has rebuilt the educational trajectory and changed the design of educational programs. IITU has moved from the so-called specialties to educational programs. This step, implemented with the support of the World Bank and the Ministry of Labor and Social Protection, was made for the first time in Kazakhstan. The university has developed 40 educational programs in various areas of IT, and for the first time in the Republic of

Kazakhstan such interdisciplinary specialties as IT genetics, IT biology, IT medicine have appeared [13].

Taking into account the fact that distance courses and educational platforms are becoming more and more popular, a completely new, unique project has been implemented for MITU students. They will be able to independently take courses on the Coursera platform and receive the appropriate certificates, and the university will provide a credit transfer. IITU became the first university in Kazakhstan and Central Asia to partner with Coursera and introduce a special university product "Coursera for Campus". This product allows you to integrate platform content into the university ecosystem.

Coursera is Stanford University's massive online education project that partners with more than 200 leading universities in the world's top university rankings and renowned international companies. The platform contains more than 4,200 training courses in 430 specialties and specializations, more than 65 million users are registered on it [14].

"All this suggests that Coursera is already a strong leader in the mass market for open source online courses. I also want to note that due to the fact that during the pandemic Coursera opened free access to all of its courses on a university subscription, we were able to test the experience of introducing such courses into the MITU educational environment. This experience has shown us that, in general, students are interested in obtaining internationally recognized certifications. All these factors influenced the choice of the Coursera platform as the implementation of non-formal education at IITU," - said the vice-rector for scientific and international activities of the university [15].

Coursera provides unique opportunities to improve the academic courses of domestic teachers through the competent use of the methodological framework, resource base, methodological principles and interactive approaches. At the same time, Coursera courses are initially aimed at individual development and continuous improvement of personal competencies: knowledge, abilities and skills. The most effective model for teaching students in a group can be the use of a blended type of learning: facilitation / moderation using the Courser platform, development and assessment of practical tasks by the teacher himself, including using modern information technologies.

In the face of new challenges of the modern world, such as the COVID-19 virus pandemic and the forced global social isolation of people, we must rethink the global labor market and move to new opportunities for remote work, including the education system. But there is another problem along the way - the imperfection of the domestic Labor Code, developed and approved in the pre-digital era. The good news that the Labor Code of the Republic of Kazakhstan in 2015 [9] has already been supplemented by a new chapter on telecommuting: "Remote work is a special form of the labor process outside the employer's location with the use of information and communication technologies in the work process" (paragraph 1 of Article 138 of the Labor Code of the Republic of Kazakhstan). The interest in teleworking is increasing every year from both the employees and the employers. However, one should not forget that remote work requires high self-discipline, personal responsibility of the employee and, accordingly, is not suitable for everyone. In order to avoid conflict situations with employees engaged in remote work, employers are advised to clearly stipulate all the conditions "on the shore" and prescribe them in an employment contract for remote work, which will clearly facilitate tracking the implementation of agreements reached by a remote worker.

Is remote work sustainable? Today in Finland, the third time of remote work is taking place. The main goal is to make people think about various forms of work and the environmental burden of daily commuting and back. In the first year, 10,300 workers took part in the campaign; last year, 17,300 people from 270 organizations. This year, 23 thousand participants and 700 jobs are

expected. Last year there were no work trips of 568 thousand kilometers. This corresponds to fourteen revolutions around the Earth at the equator. A year ago, such a day reduced carbon dioxide emissions by 90 tons compared with a normal working day [16].

Conclusion

Digital nomadism as a socio-cultural phenomenon belongs exclusively to the modern networked information-communicative society; since it originated primarily due to the development of the Internet, the emergence of the latest digital and mobile technologies, and the widespread use of wireless communications. The main characteristics of digital nomads are their mobility and permanent connection to the Network. In addition, remote work meets the principles of sustainable development of a society: economic feasibility, environmental efficiency and social benefits that improve the quality of life of people who have embarked on the path of digital nomadism.

After a global pandemic, traditional education is unlikely to remain the same. This situation shows how quickly a person can adapt to the new conditions of society. "IUIT, as a leading university in the country, is ready for new changes and is ready to provide its students with the best opportunities in the modern educational market,"- the university administration emphasized [15].

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Нурмуханбетова Г.А.
Цифровая эпоха: новые возможности для рынка труда и образования

Аннотация: В статье анализируется влияние развития цифровых технологий на состояние рынка труда и образования в мире. По мнению экспертов новые технологии смогут уничтожить множество рабочих мест, но и создадут новые. Основным драйвером создания новых рабочих мест станет сфера услуг. Подчеркивается развитие новых трансверсальных навыков в цифровую эпоху с учетом особенностей поколений, а также создания новых возможностей для различного рода профессий. Основными характеристиками цифровых кочевников являются их мобильность и постоянное подключение к Сети. Перед лицом новых вызовов современного мира, таких как пандемия COVID-19 и вынужденная глобальная социальная изоляция людей, необходимо переосмыслить глобальный рынок труда и перейти к новым возможностям удаленной работы, включая систему образования. Также отмечены правовые и институциональные предпосылки для развития образования и профессиональной деятельности в режиме дистанционного обучения и работы.

Ключевые слова: Цифровой Казахстан 2020, цифровые технологии, цифровые кочевники, дистанционная работа, дистанционные профессии, платформа Coursera, законодательство о дистанционной работе

Нұрмұханбетова Ғ.Ә.
Сандық дәуір: білім беру және еңбек нарығындағы жаңа мүмкіндіктер

Аңдатпа. Мақалада әлемдік еңбек және білім беру нарықтарына цифрлық техно-логиялардың дамуының әсері талданады. Сарапшылардың пікірінше, жаңа технологиялар көптеген жұмыс орындарын жойып қана қоймай, жаңа жұмыс орындарын құра алады. Қызмет көрсету саласы жұмыс орындарын құрудың негізгі драйверіне айналады. Цифрлық дәуірде ұрпақтың ерекшеліктерін ескере отырып, көлденең жаңа дағдыларды дамытуға, сонымен қатар әртүрлі мамандықтарға жаңа мүмкіндіктер жасауға ерекше көңіл бөлінеді. Сандық көшпенділердің негізгі сипаттамалары олардың ұтқырлығы және тұрақты желі байланысы. COVID-19 пандемиясы және мәжбүрлі жаһандық әлеуметтік оқшаулану сияқты заманауи әлемнің жаңа сын-қатерлері алдында әлемдік еңбек нарығын қайта қарастырып, қашықтықтан жұмыс істеудің, оның ішінде білім берудің жаңа мүмкіндіктеріне көшу қажет. Білім беру мен оқытудың құқықтық және институционалды алғышарттары, қашықтықтан оқыту және жұмыс уақыты.

Түйінді сөздер: Цифрлық Қазақстан-2020, цифрлық технологиялар, сандық көшпенділер, қашықтықтағы жұмыс, қашықтықтағы кәсіптер, Coursera платформасы, қашықтықтағы жұмыс туралы заңнама

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ФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ СОЦИАЛЬНЫХ МЕДИА (БЛОГОВ) И ТРАДИЦИОННЫХ СМИ

Аннотация. В статье рассматриваются функциональные особенности социальных медиа и сравниваются с основными функциями традиционной журналистики. Материал носит теоретический характер, но подтвержден практическими примерами из публикаций в соц. сетях и масс-медиа. В ходе компаративного анализа удается показать основные точки соприкосновения между деятельностью журналистов и блогеров на функциональном уровне, а также выделить локальные отличия.

Ключевые слова: функции журналистики, масс-медиа, социальные сети, блогеры, средства массовой информации и коммуникации, идеология

Введение

Революционное развитие информационных технологий привело по сути дела к тому, что традиционные институты журналистики стали практически на глазах трансформироваться и приобретать новые формы. Публицистика стала перерастать в блогерство, а блогерство из любительского хобби превращается в серьезную профессиональную стезю. Мы попытаемся разобраться, насколько сильно произошло это сближение и как оно выглядит в свете реализации основных функций. Обратим внимание на изначальные ключевые отличия и базовые точки соприкосновения.

Прежде чем поднимать данную тему необходимо сказать пару слов о том, что понимание природы любого явления возможно лишь через представление степени его реальной свободы и того, чем обусловлены рамки, ограничивающие эту свободу.