Volume 6, Issue 4, 2020

ISSN 2522-1043
eISSN 2522-1051

Central Asian Journal of Social Sciences and Humanities

Al-Farabi Kazakh National University

Central Asian Journal of Social Sciences and Humanities *is a peer-reviewed academic journal covering all branches of social and humanitarian areas: historical; philological; philosophical, social, psychological, educational and legal sciences.*

The editors aim to maintain the publication of results of research faculty, doctoral and postgraduate students of Al-Farabi Kazakh National University, as well as scholars from various domestic and foreign universities and research institutes.

Proprietor of the Edition: Al-Farabi Kazakh National University
Editor-in-chief: K.S. Mukhtarova

Certificate № 15155-Ж Registered on March 12th, 2015 in the Ministry of Cultural and Information of the Republic of Kazakhstan.

Computer page makeup and cover designer: *A. Kaliyeva*

IB №14122
Signed to publishing 29.12.2020. Format 60x84 1/8. Offset paper.
Digital printing. Volume printer's sheet. Edition: 300. Order No15886.
Publishing house «Kazakh University»
www.read.kz Telephone: +7 (727) 3773330, fax: +7 (727) 3773344
Al-Farabi Kazakh National University
KazNU, 71 Al-Farabi, 050040, Almaty
Printed in the printing office of the Publishing house «Kazakh University».

IRSTI 06.52.41. https://doi.org/10.26577/CAJSH.2020.v6.i4.01

L. Statsenko

University of South Australia, Australia, Adelaide,
e-mail: larissa.statsenko@unisa.edu.au

CHANGE OF FACTORS OF POPULATION LIVING IN THE CONDITIONS OF USING DIGITAL TECHNOLOGIES

The transition to digitalization and the implementation by digital technologies in all aspects of the economic and social life of society as a whole and of a person separately is turning into a driving force that ensures efficiency in such areas as the economy, society and improving life standards. In a broad sense, digitalization is seen as a key trend effective global development. At the same time, digital communication technologies (ICT) and their transformation must meet such requirements as widespread introduction into business production, science, the social sphere and the daily life of citizens. The ubiquitous coverage of digital technologies must also be accompanied by their accessibility for both professionals and ordinary citizens, that is, we are talking about the need for the availability and development of skills in working with information and communication technologies. The great possibilities of presenting digital information lead to the fact that digitalization is associated with the formation of a huge layer of platforms, among which ecosystems are innovative and highly relevant, which provides the user with the creation of a favorable environment and thus solve whole groups of problems. Ensuring digital literacy of the population of any society is the key to its successful development, a priority task of the state. The implementation of a program for widespread development and provision of digital technologies in society is a guarantor and incentive to develop and increase the level and quality of life of citizens.

Key words: digital economy, transformation, efficiency, information and communication (ICT) technologies, quality of life of the population, informatization of society, employment.

Л.Г. Стаценко

Оңтүстік Автралия Университеті, Аустралия Университеті, Аустралия қ.
e-mail: larissa.statsenko@unisa.edu.au

Сандық технологияларды пайдалану шарттарында халықтың өмір сүру факторларының өзгеруі

Цифрландыруға көшу және цифрлық технологияларды тұтастай алғанда қоғамның және жеке тұлғаның экономикалық және әлеуметтік өмірінің барлық аспектілеріне енгізу экономиканың, қоғамның тиімділігін және халықтың өмір сүру сапасының жақсаруын қамтамасыз ететін қозғаушы күшке айналуда. Цифрландыру сөздің кең мағынасында, егер цифрлық түрдегі трансформация өндіріс, бизнес, ғылым, әлеуметтік сала және азаматтардың күнделікті өмірін қамту сияқты талаптарға жауап берген жағдайда ғана тиімді жаһандық дамудың тенденциясы ретінде қарастырылуы мүмкін; қолданушыларға түрлендірілген ақпараттың қол жетімділігімен және цифрландыру нәтижелерін мамандар ғана емес, қарапайым азаматтар да пайдаланған кезде; және цифрлық ақпаратты пайдаланушылар тиісті ақпараттық-коммуникациялық технологиялар (АКТ) дағдыларына ие болған жағдайда қарастыруға болады. Цифрлық ақпаратты ұсынудың үлкен мүмкіндіктері оның (цифрландыру) онсыз да интегралды технологиялық «тіршілік ету ортасын» (экожүйелер, платформалар) құрайтындығына әкеледі, оның шеңберінде пайдаланушы – технологиялық, аспаптық, әдістемелік, серіктестік және т.б. проблемалардың барлық топтарын шеше алу үшін өзіне қолайлы жағдай жасай алады. Әрбір қоғамның тұрғындарының цифрлық сауаттылығын қамтамасыз ету – оның табысты дамуының кепілі, мемлекеттің басым міндетінің бірі. Қоғамда цифрлық технологияларды кеңінен дамыту мен қамтамасыз ету бағдарламасын іске асыру азаматтардың өмір сүру деңгейі мен сапасын дамыту мен жақсартудың кепілі және ынталандырушысы болып табылады.

Түйін сөздер: цифрлық экономика, трансформация, тиімділік, ақпараттық-коммуникациялық технологиялар, халықтың өмір сүру сапасы, қоғамды ақпараттандыру, жұмыспен қамту.

Л.Г. Стаценко

Университет Южная Австралия, Австралия, г. Аделаида,
e-mail: larissa.stasenko@unisa.edu.au

Изменение факторов жизнедеятельности населения в условиях использования цифровых технологий

Переход на цифровизацию и внедрение цифровых технологий по всем аспектам экономической и социальной жизнедеятельности общества в целом и человека в отдельности превращается в движущую силу, обеспечивающую эффективность развития экономики, общества и повышения уровня и качества жизни населения. В широком смысле слова цифровизация рассматривается как ключевая тенденция эффективного глобального развития. При этом цифровые коммуникационные технологии (ИКТ) и их трансформация должны отвечать таким требованиям, как широкое внедрение в бизнес-производство, науку, социальную сферу и повседневную жизнь граждан. Повсеместный охват цифровыми технологиями также должен сопровождаться их доступностью как для специалистов, так и обычных граждан, то есть речь идет о необходимости наличия и развития навыков работы с информационно-коммуникационными технологиями. Большие возможности представления цифровой информации приводят к тому, что цифровизация сопряжена с формированием огромного пласта платформ, среди которых инновационными и высокоактуальными являются экосистемы, что обеспечивает пользователю создание благоприятной среды и, таким образом, решение целых групп задач. Обеспечение цифровой грамотности населения любого общества – залог его успешного развития, приоритетная задача государства. Реализация программы повсеместного развития и обеспечения цифровых технологий в обществе является гарантом и стимулом для развития и повышения уровня и качества жизни граждан.

Ключевые слова: цифровая экономика, трансформация, эффективность, информационно-коммуникационные технологии (ИКТ), качество жизни населения, информатизация общества, занятость.

Introduction. The adopted government program «Digital Kazakhstan» is aimed at digitalizing economic sectors, creating an innovation system and increasing and life standards. The modern economy is characterized by rapidly developing technological changes, the signs of which are determined by such concepts and terms as technology of virtual communication and communications, blockchain, artificial intelligence and other content and characteristics that penetrate into human everyday life.

Thus, in globalization era, digitalization is key factor of nation's global competitiveness. Based on the fact that strategically significant documents in most countries of the world remain documents on digitalization, which contain key development areas: for example, the digital transformation of the economy is proclaimed in such an innovatively developed country as Singapore, in which by 2050 50% of transport will be only electric.

In addition to the above unmanned taxis are already used in Singapore. In a European country like Germany, digitalization covers almost all sectors of the economy and spheres of human life – the broad scope consists from public administration, business, to areas such as education and science.

The peculiarity of Kazakhstan is that it is able to respond to global challenges both within international organizations and within the state, and the country is currently taking part in the process of digital transformation. (Website Global Center for Digital Business Transformation, 2018).

Kazakhstan is part of EUAU digitalization plan 2025. In wich the main directions for improvement of digital agenda of the EAEU were adopted; where «the government-for-citizens» state corporation was established nationwide, with 340 front offices providing over 38 million. services annually. There are 70 mobile Public Service Centers (PSC) in the republic to improve the availability of services to the population, including residents of remote settlements. The number of such services is about 500 thousand annually, with more than 12 thousand trips performed (Industry 4.0, 2016).

As of this year, public services registry can provide 746 public services. Implemantation of ICT in public services registy in the strategic plan will become Big Data, as a full-fledged base of new innovative technologies that fit into the concept of the digital economy and is characterized as a system for analyzing big data. In this regard, it is in modern social development that the following trend is observed as an increase in the volume of modern data, Big Data is universal and effective in concentrating a huge amount of services in a structured format in the public administration system. With the help of them, can study the tendencies of political views depending on the gender, age or profession of a person. (Gribanov Yu.I., Repin N.V., 2017: 33). In addition, big data systems can be used in trade, finance, real estate rental, and national security.

Literature review. There are numerous studies of problematic issues of digitalization and its impact

on science as a branch of knowledge of the laws of human development. Most foreign sources, when describing the digital economy, focus on digitalization technologies.

Special state programs the digitalization process is aimed at covering all sectors of the economy and social sphere, reflecting the policy of introducing digitalization into society as a guarantee of its innovative development (State Program, 2020; About the State Program "Information Kazakhstan – 2020", 2018).

Numerous works of foreign and Kazakhstan authors should be noted, including Varavin E.V., Ziyadin S.T., Kozhakhmetova S.G., Madiyarova A., Mukhtarova K.S., Potluri Rajasekhara Mouly, Sempl M., Tarasov V. V.V., Flanders J.I., Chebotareva E.E., Chernykh S.I. and others (Varavin EV, 2017; Ziyadin, S., 2019; Mukhtarova K.S. et al., 2020; Mukhtarova K.S. et al., 2017; Potluri Rajasekhara Mouly, 2020; Semple M., 2017; V.V. Tarasov, 2018; Flanders J., 2017; Chebotareva E.E., 2017; Chernykh S.I., 2018 and others).

The digitalization development processes are successfully reflected in the activities of various international organizations – the World Bank, European Commission, NRU HSE, The Economist, etc. (World Bank, 2016; European Commission, 2018; ISSEK NRU HSE, 2019; The Economist, 2014).

Materials and methods. The scientific article used the methods of marketing, economic and logical analysis, forecast estimates, statistical data processing and other general scientific and special scientific research methods.

This article uses legislation and special national programs of the Republic of Kazakhstan, data from government statistical agencies, as well as documents of state bodies, scientific and methodological and monographic works, author's publications of foreign and domestic scientists on the problems of digitalization and determining the quality of life of citizens, information and analytical materials, periodicals on the Internet, etc.

Results and discussion. Goals to be achieved in result of "Digital economy" program realization: improving the standard of living and improving the quality of life. These goals can only be achieved by digital technologies use, both now and in the future.

The state program "Digital Kazakhstan" has set five key areas, including the following:

According to the first direction, accordingly, through the use of breakthrough innovative technologies, the main feature of state programs is the digitalization of traditional sectors of the state economy.

Result of national program implementation should be an increase in capitalization and labor productivity. Under this program, the key sectors of economy for implementing the digitalization process are considered to be: industry, logistics, transport, electricity, agro-based industries. Evaluation of the implementation of the Industry 4.0 program in these sectors was carried out with the help of foreign experts. The greatest attention was also paid to the modernization of processing and mining industries.

According to the next second section of the state program, "Transition to a digital state" for the population and business provides for the provision of opportunities for using online in a transparent and comfortable access. The implementation of the program provides for the launch of an electronic health passport.

Innovative transformations such as electronic journals and diaries have been introduced in the field of education. The system of automatic electronic distribution of children to preschool organizations in 11 cities began earlier this year. The transfer of citizens to register in electronic form will eliminate the issuance of more than 2 million certificates.

According to the third direction, the section "Implementation of the Digital Silk Road" provides for high-quality mobile coverage of the entire territory of Kazakhstan, as well as ensuring fast and safe access to Internet resources. Thus, in 1249 rural settlements, the implementation of a national public-private partnership (PPP) project to provide broadband Internet access has begun. As part of the use of Big Data, work on cybersecurity has been strengthened, for this innovative analytical laboratories are being created.

According to the fourth direction, the section "Development of human capital" of the national program provides for the development of a program for increasing digital literacy of the population in the direction of providing new competencies, which is possible due to innovative transformations in education.

Thus, great attention is paid to the improvement of the new creative and critical thinking. We would like to add that technologies are currently used for the process of retraining all ages of the population. Training of young people and retraining of the population is being steadily carried out, with special attention being paid to unemployed citizens of the country.

"Creating an innovation ecosystem" is the fifth direction and is aimed at further development of technological entrepreneurship with reliable and safe interaction between 3 key elements: business, science and the state. Closer to 2022, it is planned

to create a large number of domestic technology companies that will have their success stories in this direction.

Digital Kazakhstan program is quite ambitious interms of results. In particular, by 2025, the program should bring to the budget 1.7-2.2 trillion tenge, which is planned to be returned on the basis of added value. This amount is also 4.8-6.4 times higher than the invested investment funds. The main goal of work to maximize the introduction of digitalization in the country is that as a result of these processes, the entire country should be digitized and this will ensure a third of the GDP growth of the economy through these measures.

In 2022, performance growth in key sectors of the economy will increase from 20% to 50%. This program will create 300 thousand new jobs (What is Industry 4.0? Figures and facts, 2016).

An international organization like the UN is developing a world-wide rating for ICT development-the ICT Development Index, which is calculated under the guidance of the UN. Since 2016, country has been ranked 52.

In the UN ICT ranking, country's goal is to take the 30th place. The implementation of the program's directions should provide 1.6-2.2% growth points closer to 2025. Another of the goals of the program is that in 2022, 5 cities of the country should appear among the smart cities.

It is also planned to change the provision of public services through online, so by 2022, 80 % of services will be provided in electronic form.

In order to fully implement the digitalization program, funds will be allocated annually from the budget, including 21.5 billion tenge in 2018, 33.1 billion tenge in 2019, 59.7 billion tenge in 2020, and 26.5 billion tenge in 2021.

At present, in Kazakhstan, the cost structure for information and communication technologies is as follows:

– payment for services rendered from third-party organizations that work in the field of IT – 52% ;

– software support – 37%,

– training workers to work with ICT-6%,

– software development processes by organizations themselves-5%.

The structure of expenditures on ICT in pruning sectors of the economy looks like this:

– 31.1% in trade;

–12.9% – in information and communication;

– 8.8% – in the manufacturing industry;

– 8.8% in the mining industry;

–8.4% – in construction;

– 8% – in professional scientific and technical activities;

– 7.2% – in general government;

– 5.6% – in the field of transport and storage;

– 0.3% – in agriculture;

– 8.8% – in other industries (Most enterprises do not have access to "Industry 4.0", 2018).

The digital economy requires digital skills in the population to reap its benefits. However, currently the population's ability to use new computer technologies is 76.2%. In this case, it is necessary to increase literacy in the near future.

Consider how the general situation and living conditions of the population have changed, taking into account the use of digital technologies in a pandemic.

For almost several months of forced quarantine, most of the population got used to the new rules of life. It turns out that many can work from home, cash is sometimes not needed at all, and purchases can be made online without even trying on. The question involuntarily comes to mind: Maybe after the pandemic a different world awaits us and how will life change after the quarantine ends?

1st aspect in everyday life – will cash disappear and will cashless payments be used? Scientists believe that cash and plastic cards can keep the virus on themselves for up to several days. That is why many banks are developing recommendations on keeping banknotes up to 3-4 days before issuing them through an ATM, which ultimately guarantees the death of the virus (Without cash and offices, 2020).

It is believed that banknotes contribute to the spread of the virus. "In recent years, cash has been inexorably declining, and there are all the conditions for this: a good level of online banking, simple affordable transfers by phone number even between banks, high penetration of terminals with contactless payments. Moreover, bank cards are available to all categories of the population – from teenagers to pensioners".

However, contrary to the logic, the quarantine caused an increase in the turnover of cash. "In early spring of 2020, there was a new surge in the popularity of cash. It was caused by the regime of self-isolation and uncertainty in the economy. In April alone, the amount of cash withdrawn doubled. People were afraid that banks would be closed, that their savings would be worthless. In conditions of financial instability, it is quite understandable that people want to keep money at home, to feel that they are real. For the same instinctive reasons, people stocked up on food".

A complete rejection of cash after quarantine is not to be expected, that is, there is no certainty that the pandemic will cause a wave of technological

breakthroughs in contactless payments, but it will certainly affect their popularity and contribute to the penetration of non-technology segments of the population. The development of payment by QR code will finally consolidate the success, which will be especially important for small and medium-sized businesses, a decrease in the commission for acquiring and the availability of services for self-employed, etc.

Aspect 2 – changing the format of employment, in other words, working from home, remotely. Since March 19 of 2020, when only enterprises providing livelihoods of the population have the right to keep work in offices, most organizations had to send workers on paid holidays or time off. But since the beginning of the epidemic, many companies have transferred employees to remote work.

Constant presence in the office is no longer a necessity. So, according to experts, at the time of the pandemic, employers, at least, had already thought and hypothesized which employees and business processes could switch to the format of remote work in the future so that the overall performance of the organization would not be affected?

Nevertheless, despite such work, there is a small number of information technology specialists in the domestic economy who have professional knowledge, skills and abilities.

The process of digitalization imposes higher requirements on the process of conducting work, including the process of functioning of entrepreneurs that existed in the modern market. The lack of communication and understanding between the employment sector and the workers ' sector can lead to retraining of personnel that the market does not need, and training of unnecessary workers. And this in turn can lead to imbalance between supply and demand, where the priority indicators are high-quality training of specialists.

In connection with this situation, it is important to radically revise the education system in terms of training modern specialists with digital skills (Most enterprises do not have access to "Industry 4.0", 2018).

3-aspect – changing the conditions for serving the population, in particular, the introduction of offline stores? Physical stores have long been under threat from the proliferation of online shopping. For example, in the first half of 2019, in a developed country like the United States, more than 7,000 traditionally operating offline points of sale have closed.

The situation with the pandemic only accelerated these processes: if before there were still fans of visiting shopping centers, touching everything with their hands and trying on, now there is simply no such opportunity. All purchases have to be done online. Online shopping is crowding out physical points of sale. The press service of the largest online store Wildberries confirmed that the demand for courier delivery has grown several times.

Since the beginning of the pandemic, we have noted a sharp – more than 3 times – growth in demand for the courier delivery service. The share of online purchases is growing due to an expanding audience and a more active transition to online. We note the growth of the 55+ audience in the online shopping segment: the older generation strives to minimize the number of social contacts. In addition, there is a significant increase in the number of online purchases among residents of small towns.

At the same time, the buyer can try on the goods at home and return them by calling a courier. In addition, the company is working on technological solutions: it launches 3D shoe fittings (selection of suitable shoe models, taking into account the characteristics of the buyer's foot), and plans its further development, for example, launching it in a mobile application. The work on the possibilities of virtual clothing fitting is also being updated. Another promising project is developing – these are automated points for issuing orders without employees – by analogy with stores without sellers. In the near future, the company expects the continued growth of online purchases (Without cash and offices, 2020).

It turns out that those technological trends that were only outlined in the past are progressing due to the pandemic. Probably, the processes that should have taken several years will take much less time.

Ensuring digital literacy of the population of any society is the key to its successful development, a priority task of the state. The implementation of a program for widespread development and provision of digital technologies in society is a guarantor and incentive to develop and increase the level and quality of life of citizens.

Using positive results of the digital economy is achieved only if all residents of the country have the skills to use digital technologies. In the current situation, the Ministry of education and science of the country is implementing new initiatives and proposals (Most enterprises do not have access to "Industry 4.0", 2018):

1) for the purpose to get acquainted with modern information technologies and training in information technologies, the subject "Information and communication technologies" was introduced for students of grades 3-4 who form general basic knowledge;

2) 372 circles on robotics are working, teaching General principles and basics of programming in the roar of robotics.

In addition, it should be noted that the new requirements and regulations younger generation in accordance with the passage of time, it is planned to rework the content of secondary education by developing their creative thinking and technical skills.

By decision the Ministry of Education and Science of the Republic of Kazakhstan, the system of vocational, technical, higher and postgraduate education should be revised. (Report of the Minister of MID RK at the international forum "Digital Agenda in the Age of Globalization", 2018):

1) in order to form students' basic knowledge of ICT and their application in practice, the

subject "Information and Communication Technologies" was introduced on the basis of in excerpt three specialties;

2) new professional norms and standards are being created, which will become the main basis for educational programs of technical and professional, higher and postgraduate education.

With the active participation and support of the Samruk-Kazyna Fund in all regions of the republic, the State Program has been developed and is being implemented, which is aimed at developing the competitiveness of the country's economy, such as improving the level and quality of life of citizens of the Kazakh population. It is expected that the implementation of the Samruk– Kazyna Fund project can bring the state income, which, according to rough estimates, will amount to over two trillion tenge. Thus, digitalization should cover all areas of the life of Kazakhstan's society, business and the state.

The main and far from all advantages of this innovation process (digitalization) are, first of all, this will lead to the following positive changes from the project implementation: reducing costs, having reality in decision-making, stopping corruption, etc.

The main Central element of the Smart City project is the person and their needs. The efficiency of city and municipal services in the country is intended to be achieved through the introduction of digital technologies.

In the near future, the cities of Nur-Sultan and Almaty will become "smart cities" with the status of Smart City, and later the regional centers of Shymkent, Aktobe and Karaganda. The result of the development of "smart cities" is an increase in environmental friendliness, comfort of life, the efficiency of all services and the safety of life of city residents. (Report of the Minister of MID RK at the international forum "Digital Agenda in the Age of Globalization ", 2018).

The development of the Smart City concept is the result of the development of modern society and progressive world experience, which is based on the development model of European cities. The constituent components of this model are six subjects – "smart people", "smart economy", "smart life", "smart management", "smart environment" and "smart mobility". In the direction of the effective development of urban social and economic infrastructure, European experts have achieved a global breakthrough by developing such a model. The European experience was thoroughly studied in Kazakhstan, possibilities of using the Western model were developed, taking into account the possibility of adaptation to national conditions – social specifics and infrastructural features. The process of introducing and developing digitalization shows that Kazakhstan has received an effective tool to reduce the cost of utilities, save energy and financial resources, create a safe environment and other areas.

According to the experts of the Samruk-Kazyna Fund project, it is assumed that by 2022 most 5 cities of the country should appear among the smart cities.

As a result of the implementation of the national program "Digital Kazakhstan", where the defining direction is the construction of an innovative ecosystem, further development and support of startups in various sectors of the innovative economy will become. The main goal is to provide optimal conditions for increasing the capitalization and, consequently, the income of start-up projects. In the republic, by 2022, it is planned to increase the volume of investments attracted to startups to 67 billion tenge (Industry 4.0, 2016).

Conclusion. Compared to the current period of economic development, digitalization in Kazakhstan will allow for significant outstripping growth. So, notes in the message of the President of the country to the citizens of Kazakhstan dated September 1, 2020, it was noted that: "Digitalization is not a fashion trend, but a key tool for achieving national competitiveness.

First of all, it is necessary to eliminate the digital divide, ensure maximum access to the Internet and high-quality communication for all citizens. Today, it is as basic a need as for drags and electricity. The development of the IT market, engineering and other high-tech services is not only the creation of added value and jobs within the country, more and more opportunities appear for the export of such services abroad. Interaction of the IT industry with the national business is seen as a promising direction" (Message from the President of RK Kassym-Jomart Tokayev to the people of Kazakhstan , 2020).

The development of the main branches of the digitalization economy, including processing

production, transport and logistics related to transportation, agriculture, a new direction of trade-e-Commerce, exchange of non-cash funds, application of new technologies in the financial sector. This is clearly evidenced by the world experience of industrially developed countries.

References

Chebotareva, E.E. (2017). Scientific research in the context of the digital economy // International Journal Of Open Information Technologies / Website: https: // cyberleninka. ru / journal / n / international-journal-of-open-information-technologies. – 3s. (Date of treatment 10.05.2020).

Chernykh, S.I. (2018). Digital economy and science // STAGE: economic theory, analysis, practice / Website: https: // cyberleninka. Ru / journal / n / etap-ekonomicheskaya-teoriya-analiz-praktika. – 5s. (Date of treatment 10.05.2020).

European Commission (2018). Shaping Europes digital future / https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-2018-report. – 6p.

Flanders, J. (2017). Fruitful Conflict: Digital Research in the 21st Century // Digital Humanities: Reader / ed. M. Terrace, D. Nyhan, E. Vanhutta, I. Kizhner. – Per. from English – Krasnoyarsk: Sib. Feder. un-t. – 352 p.

Gribanov, Yu.I., Repin N.V. (2017). Review of the prospects for the application of new methods and management tools in the era of the digital economy. Management development for the transition to a digital economy // Materials of the X All-Russian (with international participation) scientific and practical conference. – P.33.

Industry 4.0 // NAG.ru [Site]. 02/12/2016. URL: http://nag.ru/articles / article / 28705 /industriya-4-0.html (accessed: 10.11.2016).

ISSEK HSE (2019). What is the digital economy? Trends, competencies, measurement of Ch-80 [Text]: reports. to XX Apr. int. scientific. conf. on the problems of economic and social development, Moscow, April 9-12. 2019 / G. I. Abdrakhmanova, K. O. Vishnevsky, L. M. Gokhberg and others; scientific. ed. L. M. Gokhberg; Nat. issled. University Higher School of Economics. – M .: Ed. house of the Higher School of Economics. – 82, [2] p. – 250.

Loshkarev, A.V., Tarasov V.V. (2018). Foreign experience as a means of improving legislation on the regulation of the digital economy. // Scientific and practical electronic journal "Alley of Science" № 9 (25). – M .. – S. 34-44.

Message from the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan (2020). September 1, 2020. https: akorda. kz/ru/addresses/ addresses_of_president.

Mukhtarova, K.S., Kozhakhmetova A.K (2017). High-tech projects of Kazakhstan: problems and prospects // Bulletin of KazNU. Economic series. – No. 1. – Almaty: Kazak University. – S.26-32.

Most enterprises do not have access to "Industry 4.0" (2018). / https://abctv.kz/ru/news/bolshinstvu-predpriyatij-nedostupna-industriya-4-0. (date of treatment 05/07/2020)

On the State Program "Informational Kazakhstan – 2020" (2018) / Decree of the President of the Republic of Kazakhstan dated January 8, 2013 No. 464. Abolished by the Decree of the President of the Republic of Kazakhstan dated May 5, 2018 No. 681.

Potluri Rajasekhara Mouly, Mukhtarova K.S., Tovma N.A., Dabyltayeva N.E., Chukubayev Y.S., Baikushikova G.S. (2020). Digitalization in the socio-economic sphere: content of development, foreign practices and results // INTERNATIONAL RELATIONS AND INTERNATIONAL LAW JOURNAL. – Almaty: al-Farabi Kzakh National University. – No. 2. – 0.88 p.l.

Report of the Minister of MID RK at the international forum "Digital Agenda in the Age of Globalization" (2018). / http:// miid.gov.kz/ru/pages/doklad-ministra-mir-rk-na-mezhdunarodnom-forume-cifrovaya-povestka-v-epohu-globalizacii (date of access 07/05/2020)

Semple M. (2017). Digital humanities do not so much create as share knowledge // Digital Humanities: a reader / ed. M. Terrace, D. Nyhan, E. Vanhutta, I. Kizhner. – Per. from English – Krasnoyarsk: Sib. Feder. un-t. – 352 p.

State program "Strategy" Kazakhstan-2050 ". – the official information resource of the Prime Minister of the Republic of Kazakhstan. – Nur-Sultan, (2020) .– 63p. https: // primeminister. kz / ru / documents / gosprograms / stratplan-2025.

The Economist (2014). Technology Isn't Working. / https://www.economist.com/special-report/2014/10/02/technology-isnt-working. – 81 rubles.

Varavin E.V., Samusenko E.A. (2013). Analysis and forecasting of indicators of the effectiveness of the development of information and communication technologies in Kazakhstan // Digital Economy and Industry 4.0: state, problems, new challenges. – M. – 40 p.

What is Industry 4.0? Figures and facts (2015). // Holz Expert [Site]. URL: http://holzex.ru/chtotakoe-industriya-4-0-tsifryi-i-faktyi/ (date of access: 27.11.2016)

Website of the Global Center for Digital Business transformation (2018). URL: https: // www. imd.org / dbt / digitalbusiness-transformation (date accessed: 06.12.2018).

Without cash and offices: what will our life be like after the pandemic? (2020). // https://hi-tech.mail.ru/review/world_after_corona. (date of treatment 05/07/2020)

World Bank (2016). Digital Dividends / World Development Report. – 58 p. / https: // openknowledge. worldbank.org/bitstream/ handle/10986/23347/210671RuSum.pdf? sequence = 16.

Ziyadin, S., Koryagina, E., Grigoryan, T., Tovma, N., Ismail, G.Z. (2019). Specificity of using information technologies in the digital transformation of event tourism. International Journal of Civil Engineering and Technology Volume 10, Issue 1, January. – Pages 998-1010.

IRSTI 06.52.13 https://doi.org/10.26577/CAJSH.2020.v6.i4.02

M.U. Spanov, Zh. Kusmoldayeva*

Kazakh medical university of continuing education, Kazakhstan, Almaty
*e-mail: kusmoldaeva@mail.ru

INDICATORS OF ECONOMIC EFFICIENCY OF INNOVATIVE MANAGEMENT IN HEALTHCARE

Today, growing costs is one of the major problems limiting population's access to medical care. This problem is also reflected in many countries around the world. The objective reasons for the increase in health care costs are: the expansion and emergence of improved methods of diagnosis and treatment, the growth of health-related needs and care, and the process of population aging.

Under the influence of this trend, health care in the world is working to maximize the use of limited budget funds, develop and implement cost control methods in order to reduce current costs.

In order to solve this problem, in the 1980-90 years, health care began to talk about medical care, its convenience and effectiveness. A prerequisite for ensuring a decent level of quality in providing health care is implementation of policy methods for the assessment of medical technologies in everyday clinical practice.

Measuring cost-effectiveness in health care is quite hard, due to the lack of universal evaluation methods. Nevertheless, a certain methods were developed to determine economic efficiency. The scientific article examines and systematizes the methods for assessing the effectiveness in the system of innovative management in the industry, adopted in foreign and domestic practice.

Key words: innovative management, management, social sector, scientific potential, efficiency, globalization, scientific and technological progress, new technologies.

М.У. Спанов, Ж.Н. Кусмолдаева*

Қазақ медициналық үздіксіз білім беру университеті, Қазақстан, Алматы қ.,
*e-mail: kusmoldaeva@mail.ru

Денсаулық сақтаудағы инновациялық басқарудың экономикалық тиімділігінің көрсеткіштері

Бүгінгі таңда медициналық көмектің халыққа қолжетімді болуына кедергісін тудыратын мәселенің бірі – күнделікті шығыстардың өсуі болып табылады. Аталған мәселе әлемнің көптеген елдерінде де көрініс табуда. Денсаулық сақтауда шығындардың өсуінің объективті себептері ретінде: диагностика мен емдеу әдістерінің кеңеюі және жетілдірілген әдістерінің пайда болуы, халықтың денсаулық сақтау саласына байланысты қажеттіліктерінің және күтімінің өсуі, халықтың қартаю процесі болып табылады. Аталған тенденцияның әсерінен әлем елдерінің денсаулық сақтау саласы шектеулі бюджет ақша-қаражаттарын максимальді тиімді жұмсауға, ағымдағы шығындарды төмендету мақсатында шығындарды бақылау әдістерін дайындап, оны енгізуге жұмыс жасауда. Осы мәселені шешу мақсатында 1980-90 жылдары денсаулық сақтау саласында медициналық көмек және оның қолайлы болуы мен тиімді болуы туралы айтыла бастады. Медициналық қызмет көрсетуде сапаның лайықты деңгейін қамтамасыз етудің алғышарты – күнделікті клиникалық тәжірибеге медициналық технологияларды бағалаудың саясат әдістерін енгізу болып табылатындығын ерекше атап өтеді. Денсаулық сақтау саласындағы экономикалық тиімділікті өлшеу жалпыға бірдей бағалау әдістерінің болмауына байланысты өте қиындатылған. Соған қарамастан қазіргі таңда экономикалық тиімділікті анықтайтын бірқатар әдістер енгізілген. Ғылыми мақалада шетелдік және отандық тәжірибеде қабылданған өндірістегі инновациялық менеджмент жүйесіндегі тиімділікті бағалау әдістері зерттеліп, жүйеленген.

Түйін сөздер: инновациялық менеджмент, менеджмент, әлеуметтік сектор, ғылыми әлеует, тиімділік, жаһандану, ғылыми-техникалық үдеріс, жаңа технологиялар.

М.У. Спанов, Ж.Н. Кусмолдаева*
Казахский медицинский университет непрерывного образования, Казахстан, г. Алматы
*e-mail: kusmoldaeva@mail.ru

Показатели экономической эффективности инновационного менеджмента в здравоохранении

На сегодняшний день одной из проблем, препятствующих доступности медицинской помощи населению, является рост ежедневных расходов. Данная проблема находит отражение и во многих странах мира. В качестве объективных причин роста затрат в здравоохранении выступают: расширение и появление усовершенствованных методов диагностики и лечения, рост потребностей и ухода населения, связанных с здравоохранением, процесс старения населения. Под влиянием данной тенденции здравоохранение стран мира работает над тем, чтобы максимально эффективно расходовать ограниченные бюджетные средства, разрабатывать и внедрять методы контроля затрат с целью снижения текущих затрат. С целью решения этой проблемы в 1980-90 гг. в здравоохранении стали говорить о медицинской помощи, ее удобстве и эффективности. Необходимым условием для обеспечения достойного уровня качества предоставления медицинской помощи является внедрение методов политики по оценке медицинских технологий в повседневную клиническую практику. Измерение экономической эффективности в здравоохранении крайне затруднено по причине отсутствия общепринятых универсальных методов оценки. Тем не менее, в настоящее время выработаны методы по определению экономической эффективности. В научной статье рассмотрены и систематизированы методики оценки эффективности в системе инновационного управления в отрасли, принятые в зарубежной и отечественной практике.

Ключевые слова: инновационное управление, менеджмент, социальный сектор, научный потенциал, эффективность, глобализация, научно-технический прогресс, новые технологии.

Introduction

In the health sector, health care quality is one of key indicators of a country's social progress.

The first President of Kazakhstan N.A. Nazarbayev pays constant attention to the improvement of national medicine. And the implementation of the industry modernization program is an innovation or an attempt at widespread implementation.

Healthcare must constantly meet growing requirements, meet new innovative standards, which is repeatedly emphasized by the First President of our country (Innovations in Healthcare, 2017).

The report "Kazakhstani way – 2050: Common goal, common interests, common future" in the state importance of the report The First President of Kazakhstan N.A. Nazarbayev also emphasized that Kazakhstan in its development should keep up with global economic trends, "it is important to strengthen innovative industrialization trends to ensure nation's sustainable development on the basis of a knowledge-based economy" (The Address of the Head of State (2014)).

In foreign scientific research, in particular, the Global Innovation Economy Survey conducted by Cornell University, INSEAD and WIPO (2017), it was mentioned that the main areas where innovation is generated in the world are information technology and healthcare. Switzerland is an example of where pharmaceuticals ranks 7th among other countries in innovation. In comparison with a European country, Kazakhstan ranks 78th (according to national official statistics, the manufacturing industry is the most innovative area in Kazakhstan).

In the context globalization's scientific and technological progress, world's countries' development is directly related to transition to innovative economy. Such transition is determined by international integration in the scientific and industrial spheres, technological progress and the intensive implementation of R&D. This type of economic development is used in many countries around the world and is often actively developed in developed countries.

Economic development of this type is due to the innovative and technological factor: GDP growth is provided from 75% to 90%, which allows States to strengthen their competitive positions in the world markets of highly scientific products, and successfully solve socio-economic problems of society.

With this type, more than 90% of the world's scientific potential is concentrated in developed countries and 80% of the world's high-tech market is under control.

Annually, the volume of exports of high technology products, for example, in developed countries, the United States also receives $ 700 billion from technology exports, Germany – $ 530 billion, and Japan – $ 400 billion. (Bezdudny F.F., 1998; Lenchuk E.B., 2009).

The introduction of innovations is the main method and condition for increasing the competitiveness of enterprises, maintaining high rates of development and the level of their profitability. However, one should not forget that only under the condition of effective use and creation of a favorable environment for the introduction of innovations, innovative progress in society can be ensured.

Literature review. Number of international and Kazakhstan's economists made a significant contribution to the theory and practice of innovative development and management. However, for the effective applied functioning of innovative business, the current state of the domestic economy requires detailed specification of the main elements of innovative development and management (Kusmoldayeva Zh.N. et al., 2017).

The works of many foreign and domestic scientists and economists are devoted to the issues of innovative development. Among foreign researchers, the works of Schumpeter J., Santo B., Zavalin P.N. should be noted. Fatkhutdinova R.A., Trifilova A.A., Guseva A.F., Kazakova P.A. and others (Schumpeter YA, 2007; Santo B., 1990; Zavalin P.N. et al., 2014; Fatkhutdinov R.A., 2008; Gusev A.F. et al., 2012; Kazakov P.A. et al., 2012).

The research of Kazakh scientists-economists is related to difficulties of innovative development, among which are the works of Kupeshova S.T., Mutanov G.M., Mukhtarova K.S., Romanyuk A., Sabden O., Sadvakasova T., Spanov M.U., Sypabekova S.Zh. and others (Mutanov G.M., 2012 ;, Mutanov G.M., 2014; Mukhtarova K.S. et al., 2016; Romanyuk A., 2017, Sabden O., 2009), Sadvakasov T., 2017), Spanov M.U., Kusmoldaeva Zh.N., 2018; Sypabekov S.Zh. and others. 2015 and others).

In the listed works of practicing scientists, innovations are studied in various industries, enterprises, regions and in the country as a whole. However, in the healthcare system, a sufficient amount of research has not been related to difficulties of innovative development, especially in the economic context, scientific and methodological studies on the economic efficiency of innovative management are poorly presented, only fragmentary works and inventions are devoted to this topic.

Materials and Methods. The scientific article is based on the use of scientific-theoretical, informational material, including the works of foreign and Kazakhstani scientists-experts, as well as tools of cluster and regression analysis.

As an information base, the article used the materials of official national statistics, methodological materials of international scientific and practical conferences and seminars on the topic of research, industry methodological materials and other information retrieval systems posted on the global Internet.

In the course of the scientific research, scientific methods of comparative analysis, economic assessment, generalization, deduction and causation, forecasting, systemic and logical analysis were applied on statistics that determine the order and position development of healthcare in Kazakhstan.

The study is based mainly on the scientific theories of domestic and foreign authors on the methodology of increasing the efficiency of innovation at the micro– and meso-levels. The article covers such aspects as: topical areas of innovation; questions of innovation management effectiveness in the field of medicine; based on comparative analysis, the factors of innovative management in healthcare; the main factors in the innovation management system in the social sphere (health care), which facilitated identification of the quality aspects of innovation management in the industry and more.

Subject to the active introduction of innovative technologies in the social sector (health care), the authors tried to provide a generalized assessment and an effective model of innovative management in health care our country.

Results and discussion. According to a foreign expert, the assessment of effectiveness in health care comes down to the fact that it is the health of the consumer – the patient, which is a measure of the effectiveness of health care ... and such a measure should be the degree of improvement in public health and patient satisfaction, respectively (Danishevsky K. D ., 2015:14).

Efficiency in general is understood as the degree of achievement of the planned effect. An effect is understood as a specific end result efficiency that contributes to the country's development in the following sectors: social, medical and economic.

Effectiveness in the social sphere is determined by the achievement of goals set in the direction of improving demographic indicators. Indicators of social efficiency in the health sector are defined as indicators of average life expectancy, birth rate, mortality, natural population growth, etc. Social health outcomes largely depend on changes in the socio-economic situation within the state.

Effectiveness in the medical field is determined by the level of achievement of goals in the field of prevention, diagnosis and treatment of diseases.

The medical effect (result) of healthcare can be expressed by various statistical indicators that determine the level and trends of morbidity, the number of sick and healthy people, indicators characterizing medical care quality etc.

Economic efficiency in health care is characterized by the degree to which positive financial results are achieved due to improved health of the population. The economic effect (result) can be measured in national production losses due to such indicators as premature mortality rate increase; number of lives saved at working age; the level and dynamics of disability; the cost of eliminating or reducing certain diseases; timeliness of the use of material resources and the results obtained, and others.

The features of economic analysis existing in health care boil down to the following. Thus, the analysis of economic efficiency in health care corresponds to the concept of a methodology that makes it possible to estimate the cost of one unit of health obtained by one method or another, for example, by obtaining a certain amount of investment in the technology of health production.

Economic efficiency analysis requires solving two problems – measuring efficiency and costs. Each of the dimensions has its own characteristics and can be problematic, for example, when changes occur difficulties may arise due to the contradictions of the following features:

– namely, it is very difficult to calculate pain or life;

– how to measure and calculate the expenses of patients (for example, transportation costs), the time spent for treatment, and whether to include these expenses;

– what to do if a person's investment in a vaccine against the virus is required at a given time, and the result of prevention will be only in decades;

– whether to calculate marginal or average costs: such as, if a person is vitally needed to perform a single emergency surgical intervention and its cost expression may be much higher than when the operation was "put on the waiting list".

More correctly, expense calculation, and therefore obtaining economic benefits, is far from an easy task.

Therefore, the concept of economic assessment of health technologies is often used as synonyms for assessing economic efficiency.

Currently, there are methods and methods for calculating economic analysis in healthcare on the market, which includes measures such as minimizing costs; comparing costs and benefits; comparing costs with efficiency and benefits (see figure 1):

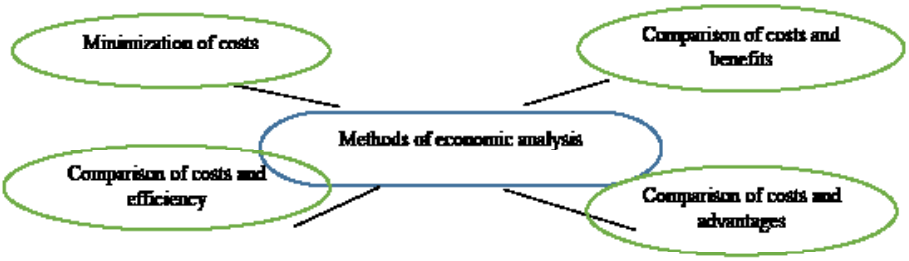

Figure 1 - Methods of economic analysis in health care *
* Note: made by author based on (Danishevsky K. D., 2015:15).

According to Figure 1 in the presence of many methods, there is a lack of one – universal.

Cost minimization (or cost estimation) can be used in cases when comparable technologies impose same influence on health without differences worth to statistically evaluate in their clinical effectiveness when costs of treatment and prevention compared. Because of different effectiveness this special methods frequently utilized by private entities. An example would be an estimate of the cost of a nursing home care service for the elderly and disabled, which shows a decrease in the comparative cost benefit of outpatient care as the severity of the patient's disability increases.

Cost-benefits and investments are expressed in monetary terms: costs are compared with savings. This method mostly used for evaluation of prevention programs in which evaluation of treatment effects may vary from paying no attention unto them to giving financial equivalent to life, health & pain. Widely known case is vaccine effectiveness studies.

Cost effectiveness or effective-cost evaluation methods allow separate cost of single health unit, single result such as death or disability prevented, prevented disease or disease complication, extra year of life. This method requires common result for alternatives and highly accurate evaluation of clinical effectiveness. Disadvantage of this method is impossibility of its application to comparison of technologies with no common result (such as blindness or death prevention). More important

problem limiting its implementation is the fact that most of diseases lead to multiple outcomes.

The method of cost – utility (benefit) is the most complex of the methods, the method differs in that it evaluates the value of a unit as the year of "quality" of life. An example of this method is the unit DALY (disability adjusted life year), which is determined by the disability of one year of life, with the treating nature of the disease. When measuring this unit: loss of n-the number of years of life due to disability, social preferences at different ages, and years that have passed through disability. The next unit of measurement is YHL (year of healthy life) – the year of life without defects and QALY (quality adjusted life year) – the year of a person's life with recovery (correction) for quality. Thus, the following functions are taken into account when calculating QALY. Among them: quality of life, mobility (the ability of a person to walk independently without assistance), fear, pain, manifestation of the soul (anxiety and depression), self-care, performance.

The effect of the intervention allows you to calculate the number of years of life added over a given amount; and for health deviations, a coefficient is determined from 0 to 1. People who had some health problems have a lower weight compared to those who did not have health problems in the study under the normal cost – benefit method (Danishevsky K.D, 2015: 17, 18).

According to the authors of the article, determining the effectiveness of the functioning of the order in the health care system is as follows associated with two main indicators. The first is the result orachievements in improving the health of citizens and the associated adequate level of financial(material) support. The second is effectiveness or efficiency, which is related to the achievementof improved medical outcomes that can be achieved with the same resources.

In this instance, it is necessary to take into account the44 attendance of two factors:

– the 1st factor of an objective nature, which medicine is not able to influence, or for which it cannot be responsible (for example, ecology, economic disasters, distribution total profit and income of citizens, etc.);

– the 2nd factor of a subjective nature, factors that characterize the effectiveness (efficiency) of the health care system (for example, the level and causes of death that could have been avoided – epidemic, congenital diseases, negligent or poor-quality medical assistance, etc.).

Weaknesses of economic analysis methods are shortcomings in the methodology, ethical and cultural barriers, even obstacles to talk about financial resources in health care organizations or give a negative statement to patients in need of medical care, which leads to the death of people in need, who could be given a helping hand, which would be allowed to invest money more advisable.

As we mentioned, if the economic analysis of efficiency is followed, it is not possible to determine a specific objective assessment of reliability from the results obtained from the analysis. In order to perform this examination, a sensitivity analysis is performed, but a special factor is the inclusion of different fluctuations in the initial parameters in the formula. For example, the prevalence of diseases, its cost of treatment, and of course the effectiveness of this treatment.

In this case, it will be appropriate to apply a correlation analysis, in which it is necessary to include the following indicators, such as the prevalence of the disease, its cost expression and the effectiveness of treatment of the disease. Correlation sensitivity analysis will allow you to get a realistic latitude (range), in which a realistic picture and an indicator of economic efficiency can be (Danishevsky K.D, 2015: 18).

Calculating and measuring results in the health sector is extremely difficult, since there are no universally accepted methods of evaluation. One way or another, a number of methods are currently being used to address the economic effectiveness of health sector activities. In foreign and domestic practice, other methods of evaluating effectiveness in the concept of advanced management in this industry are also adopted:

1) methods for measuring the economic performance of the health sector based on the calculation of the indirect economic effect, determined by the amount of prevented economic damage. The latter is due to a decrease in costs such as medical care, a decrease in the number of premature deaths, social insurance payments – payment of sick leave certificates, the number of working days, payment of pensions, etc. (Sorokina S.E, 2005: 3).

2) Calculating the cost-effectiveness of reducing the number of infectious and non-communicable diseases;

3) Calculation of the economic efficiency of the decline in the time period of workers ' inactivity in enterprises of the national economy;

4) Calculation of the economic result from the decline in disability (disability), as well as untimely death of a person;

5) Analysis of the economic result of saving and protecting life;

6) Calculation of the economic result of expenses: for research and scientific activities, medical (medical) and General health measures;

7) Analysis of the economic damage caused by incomplete use of medical beds;

8) Calculation of conditional savings in public finances as a result of reducing the period of treatment of diseases.

The difficulty and problem of calculating the economic efficiency of medical care and services provided is due to the complexity of calculating the cost of human life and harm to health, because when a patient dies, it concerns the emotional feelings and aspects of the treating patient and the lives of relatives, as well as their adaptation to this case (Sorokina S.E, 2005: 3).

Despite the inestimability of human life from the point of view of moral and ethical nature, in calculating the economic efficiency and effectiveness of health care as a system that regenerates and renews labor resources, it is necessary to develop economic characteristics and criteria for the cost of restoring health loss and evaluating the value of saved human life.

To date, these calculations and calculations are now carried out in such systems as: insurance and in court, while implementing measures to ensure the safety of the people in extremely dangerous situations.

Because understanding the cost of insurance (actual, objective) as for the life of humanity does not consist of semantic content inherent in different methods of determining the equivalent of a person's life in terms of money.

Individual's life cost made up from nation's life standards and country's social security spending. Human life value indicates characteristics of political system and economic development, legislation quality guaranteeing social security. You need to recognize this reality, in developed countries, medical care is more expensive.

We reviewed foreign experience in calculating and calculating the cost of living. For example, in a developed country like the United Kingdom, life damage compensation reaches 1.5 million pounds. In US Department of Transportation, estimated human life cost 3 million dollars during of transportation security calculations. Russian Air code establishes insurance cost for 2 million rubles (Rossiyskaya biznes-gazeta, 2009).

Life cost calculation is based on annual median gross income ratio to median death probability (Boyarintsev B.I., 2001) which in Russia is equal to 84 thousand US dollars in 2003, 453 thousand dollars in 2008, 2009-367 thousand US dollars. Also, this level depends on calculation methods, age, social status and profession.

A number of methods assess the lost income, while the equivalent of the cost of a person's life is his earnings for 5-10-15 years or 60-1000 times the minimum wage (Resolution of the Supreme Council of the Russian Federation, 1992; RF Law, 1996; RF Law, 1995; RF Law, 1993; RF Law, 1994; RF Law, 1995; RF Law, 1998; RF Law, 1997).

In countries such as the United States and great Britain, in the 50s and 60s of the twentieth century, the courts of these countries obliged employers and carriers of passengers to pay a person who died as a result of an accident or accident, an amount exceeding 6 times the salary received by this employee throughout his life (Harisov G.Kh., 1998).

In order to calculate the economic result of the health sector, the most appropriate method is to calculate the prevented loss and damage to the national economy from injuries (death) of people, i.e. the economic result from saving human health and life. Based on this method, the cost of life is determined equally by the economic loss and harm from injury or death of people, so the economic effect is equal to the prevented damage in the circumstances of the death of people.

The concept of universal methods for calculating economic losses from death or injury of people is based on the calculation of a person's contribution to social funds, taking into account society's expenditures on it. Thus, in Russia, the loss to the national economy from the death of a person is from 12 to about 391 thousand us dollars (Trunov I.L. etc., 2004). If we rely on classical methods and techniques, whereupon (Temporary guidelines, 1982) approaches to calculating losses in a broad sense can be divided into пeneral ones, where the loss is calculated using the example of averaged materials and information by country and industry; and also according to the second method (Methodology for determining economic loss, 1978) – based on the calculation of certain components of damage and loss.

In addition to the methods of measuring the cost of human life mentioned above, there are various other methods:

1) compensation of compensation funds to relatives based on a court decision;

2) monetary amounts for individual insurance cases;

3) the monetary amount of measures for the monetary funds necessary for the preservation of human life (Trunov I.L. etc., 2004).

In the field of neonatology, a method of measuring the amount of funds allocated by the state at the birth of a child can be used. In this case, the funds provided for the benefit and the income not received by the state are evaluated.

This method is used to calculate only state expenses related to pregnancy, childbirth and the birth

of a healthy child, but the peculiarity of this method is that sometimes gestational pressure complications are not taken into account during pregnancy or childbirth, as well as the cost of high-tech and innovative technological equipment necessary for a newborn and reproduction technology (IVF) (Sorokina S. E., 2005: 3).

In addition, many universal methods do not consider the moral damage of a person, it should be noted that these methods of calculation are more difficult (Erdelevsky A. M., 1998). Coverage changes cost-of-living, calculated in different ways, in Russia was 130 thousand US dollars to about 397,1 thousand US dollars. The United States, other foreign States – from 800 thousand US dollars to 9 million. US dollars , often the valuation of life, is equal to 250 thousand dollars US or 300 thousand US dollars (Trunov I.L. etc., 2004; Henley E.J. etc. 1984).

According to the Russian scientist, when measuring economic efficiency in the field of health care, it will be necessary to calculate how the industry as a whole is related to the preservation and restoration of labor resources within the state. As the basic equivalent of the cost of living for economic calculations, it is also possible to use a value of 250-300 thousand US dollars (Trunov I.L., 2004). With this approach, it is possible to apply the concepts of economic efficiency both to individual (new – author's note) technologies, and to the assessment of the health care system as a whole.

Only the use of economic calculations based on the assessment of the cost of life saved and restored health will allow health care to be considered not a costly sector of the national economy, but a profitable, economically efficient and thus take its rightful place (Sorokina S.E, 2005: 4)

The above considered various approaches and methods of increasing the efficiency of innovative management of the industry allowed the authors of the scientific study in a generalized form to include the analyzed results, which are included in the following table (see table 1):

Table 1 - Methods for assessing efficiency in the system of innovative management in healthcare*

Efficiency methods in the system of innovative management in healthcare	
Names	Values
1	2
Health technology assessments	There is a huge variety of technologies used in real Life, which include a large number of medications and surgical operations. Examples include the use of vitamin C as a prevention of colds that occur in normal daily life, or the use of various medications used to improve blood circulation in the brain
Cost minimization (or cost estimation)	This method compares the cost of treatment regimens, prevention programs, treatment and prevention programs, etc.
Cost-benefit assessment method	Comparison of costs with savings is made; costs-benefits, investments and outcomes are expressed in monetary terms
Calculation of the «cost – effectiveness» estimation method	The issued method requires the presence of a whole general solution for alternatives, as well as high purity and accuracy of the assessment of general clinical effectiveness.
Cost-benefit assessment method (benefit)	This method estimates the cost of such a unit as a year of a conditionally healthy, «quality» life.
Methodology for assessing the prevented economic damage	It is formed by reducing cost structure of medical care; reduction of social insurance payments (payment of certificates of incapacity for work, the number of working days, payment of pensions, etc.); decrease in premature deaths (number of employees)
Method for calculating the analog of human existence (*or cost expression*)	This method is an integral indicator that measures the quality of life within the state, and includes the cost of spending money necessary to ensure the security of the population of the state.
Method for calculating the economic efficiency of health care performance	The cost of health care treatment will be related to the calculation of the difference between saving lives and people's health.
Method of economic evaluation of health care performance	Measured as the ratio of the economic effect of treatment to the cost of health care costs
* Note: compiled by the author	

Thus, to improve the economic approaches of the state to the development and financing of health care, to increase its positive impact on the state and development of the country's demographic and

labor resources, it is necessary to further improve the calculations of economic efficiency in the health care system as an important social sphere of society as a whole and human life in particular.

Conclusion. In a scientific study, the authors came to the following conclusions:

1. Determination of the effectiveness of the functioning the system we are investigating belongs to authors of the scientific article, is associated with two main indicators. The first is the result or achievements in improving the health of citizens and the associated adequate level of financial (material) support. The second is effectiveness or efficiency, which is related to the achievement of improved medical outcomes that can be achieved with the same resources.

2. In this instance, it is necessary to take into account the fact of existence factors of an objective nature (which medicine is not able to influence or for which it is impossible to bear responsibility); and subjective factors (which characterize performance – the effectiveness of the health care system). At the same time, objective factors include ecology, economic disasters, distribution total profit and income of citizens, etc., and subjective factors include the level and causes of mortality that could have been avoided (for example, an epidemic, congenital diseases, negligent or poor-quality medical care, etc.).

3. There are features of economic analysis in health care, which boil down to the difficulties of finding a universal methodology for management efficiency in the health care system.

The authors of the study made an attempt to systematize various methods for measuring the effectiveness of health care, among which were noted such as assessing health technologies, minimizing or assessing costs, methods for assessing cost-benefit, cost-effectiveness, cost-utility, prevented economic damage, economic the effect of the health service, the economic efficiency of the industry, the method for determining the equivalent cost of human life, etc.

References

Bezdudny, F. F. (1998), The essence of the concept of "innovation" and its classification / F. F. Bezdudny, G. A. Smirnova, OD Nechaeva // Innovations. – No. 2 (13). – P. 12-14.

Boyarintsev, B.I., Gladyshev, A.A. (2001), Economics of Population Health. – M .: TEIS.

Danishevsky K.D (2015), Assessment of economic efficiency in health care // Zh-l. "Medicine". – No. 2. – M. – S. 11-19.

Erdelevsky, A.M. (1998), Moral Harm and Compensation for Suffering. -. M .: BEC.

Fatkhutdinov, R.A. (2008), Innovation Management. – SPb .: Peter. – 448p.

Gusev, A.F., Bedoreva I.Yu., Totskaya E.G., Kazakov P.A., Kan V.V. (2012), Improving the organization of scientific activity based on assessing its effectiveness / Innovations in public health and health care: economics, management, law / Materials of the international forum, Novosibirsk, November 30 – December 1, 2012: Under total. ed. AND ABOUT. Marinkina, M.A. Sadovoy. Novosibirsk: Sibmedizdat NSMU. – p. 233-237.

Henley, E.J, Kumamoto, X. (1984), Reliability of Engineering Systems and Risk Assessment. – M .: Mechanical engineering.

Innovations in healthcare Website (2017): geolike.ru/page/gl_8093.htm, 09.09.2017. – 4s.

Kazakov, P.A., Totskaya, E.G., Kan V.V., Gusev A.F. (2012), Sociological assessment of the state of the existing system of organizing inventive activity in health care / Innovations in public health and health care: economics, management, law / Materials of the international forum, Novosibirsk, November 30 – December 1, 2012: under total. ed. AND ABOUT. Marinkina, M.A. Sadovoy. Novosibirsk: Sibmedizdat NSMU. – p. 250-253.

Kharisov, G.Kh. (1998), Fundamentals of ensuring the safety of human life. – M .: MIPB of the Ministry of Internal Affairs of Russia.

Kusmoldayeva, Zh.N., Khudaibergenova S.S. (2017), Development of innovation in Kazakhstan: the main elements and direction // Bulletin of KazNU. – Almaty: Kazakh University. – p.36-41.

Law of the Russian Federation (1996). On state regulation of mining and use of coal, on the peculiarities of social protection of coal industry workers.

Law of the Russian Federation (1995). On state protection of judges, officials of law enforcement and regulatory bodies.

Law of the Russian Federation (1993). On additional guarantees and compensations for military staff.

Law of the Russian Federation (1994). On Fire Safety.

Law of the Russian Federation (1992). On emergency agencies.

Law of the Russian Federation (1998). On combating terrorism.

Law of the Russian Federation (1997). On industrial safety of hazardous production facilities.

Lenchuk E.B (2009), Management of innovations in the organization. Investment aspects of innovative growth. World experience and Russian perspectives: textbook, manual / EB Lenchuk, GA Vlaskin. – M .: Publishing house "Librokom". – 288 p.

Methodology for determining the economic damage from accidents and the economic efficiency of measures to prevent industrial injuries in the pulp and paper industry. (1978). – M .: "Timber Industry".

The Address of the Head of State (2014). The Kazakhstani way – 2050: Common goal, common interests, common future. // www.akorda.kz.

Mukhtarova K.S. et al. (2016), Analysis of the mechanism of state regulation of innovative projects in the regions of the Republic of Kazakhstan. KazNU Bulletin (economic series). – No. 2 (114). -FROM. 60-64.

Mutanov, G.M. (2014), Innovation Management / Textbook. – Almaty: Kazakh University. – 252 p.

Resolution of the Supreme Soviet of the Russian Federation of December (1992). Rules for compensation by employers for harm caused to employees by injury, occupational disease or other damage to health associated with the performance of their duties.

Romanyuk, A. (2017), Innovative technologies in healthcare. Site: vnauke.by/news / Innovacionnye-texnologii-v-zdravooxranenii. – 5s.

Russian business newspaper. -17.02 2009.

Sabden, O. (2009), Competitive Economy and Innovation. – Almaty: Exclusive. – from 151.

Sadvakasov, T. (2017), Innovations in healthcare. – Site: zdravkrg.kz / ru / glavnaya / vystupleniya / 23-innovatsii-v-zdravookhranenii. – 11.10.2017. – 5s.

Santo B. (1990), Innovation as a means of economic development / B. Santo; per. with Hung. B. V. Sazonova. – Moscow: Progress. – 295p.

Schumpeter, YA (2007), Theory of Economic Development. Capitalism, socialism and democracy / J. A. Schumpeter. – M .: Eksmo. – 864 p.

Sorokina, S.E. (2005), Determining the cost-effectiveness of health care as a way to optimize industry financing. Efficiency criteria in perinatology // Issues of organization and informatization of health care. – Minsk. – N 1. – 4s.

Spanov, M.U., Kusmoldaeva, Zh.N. (2018), Assessment of the effectiveness of innovative management of the healthcare system of the Republic of Kazakhstan // Bulletin of the Institute of Economics. – No. 4. – Almaty. – 0.68 pp.

Sypabekov, S.Zh., Tulembaev, A.N. (2015), Features of innovation in medicine // Neurosurgery and neurology of Kazakhstan. – No. 3 (40). – Almaty: Almaty Management University. – p. 3-8.

Temporary guidelines for determining economic efficiency (1982).

Trunov, I.L., Trunova, L.K. (2004), Vostrosablin A.A. Economic equivalent of human life / Bulletin of the Russian Academy of Natural Sciences.– №4.

Zavalin, P.N. et al. (2014), Fundamentals of Innovation Management: Theory and Practice / Study Guide. – M .: Economics. – 475 p.

IRSTI 06.52.41 https://doi.org/10.26577/CAJSH.2020.v6.i4.03

Z.S. Kenzhebaeva[1*], A.Y. Toiganbayeva[2]

[1] University NARXOZ, Kazakhstan, Almaty
[2] Kazakh Ablai Khan University of International Relations and World Languages, Kazakhstan, Almaty
[*]e-mail: zere.kenzhebaeva@narhoz.kz

DIGITAL ECONOMY AS A NEW THEORY OF DEVELOPMENT: CHALLENGES, OPPORTUNITIES AND PROSPECTS FOR DEVELOPMENT IN KAZAKHSTAN

The article discusses the concepts and directions of digitalization, digitalization of the economy and the penetration of digital processes into business, which are currently used in all areas,including especially in the economy. The transition from the traditional format of information exchange to an innovative digital one includes the goals and objectives of implementing digital processes in the economy, the most important of which are: improving the quality of life of the state's population, increasing the effectiveness and efficiency of business processes, maintaining the availability and security of information in the context of digitalization.

Currently, the state is implementing many programs aimed at digitalizing the national economy. In the course of work in this direction, it is necessary to specify the essence, goals and directions of digitalization of the digital economy. In order to effectively and quickly implement digitalization in the country, it is necessary, first of all, to study the experience of countries with developed digital processes, change it depending on the characteristics of our economy, and also determine the current state of this process in our country.

Digitalization of the national economy brings huge changes in more than 50 different sectors. This phenomenon is related to information technology and platforms are fundamentally changing business models, increasing their results by eliminating them through optimization. Realizing the importance and relevance of the topic the author pursues the following objective: to uncover the essence of the concept of digitalization of the economy; to analyze the process of digitalization the economy in Kazakhstan practice, to consider digital processes in the entities that have entered into economic relations, to identify the features of the digitalization of the economy as a whole to study domestic experience of digitalization of the economy in our country.

Key words: transformation of the information society, digitalization of the economy, digital economy, knowledge economy, world economy, factors of competitiveness, advanced technologies.

З.С. Кенжебаева[1*], А.Е. Тойганбаева[2]

[1]NARXOZ Университеті, Қазақстан, Алматы қ.
[2]Абылай хан атындағы Қазақ халықаралық қатынастар және әлем тілдері университеті, Қазақстан, Алматы қ.,
[*]e-mail: zere.kenzhebaeva@narhoz.kz

Цифрлық экономика дамудың жаңа теориясы ретінде: Қазақстанда дамудың мүмкіндіктері, қиындықтары және перспективалары

Мақалада қазіргі уақытта барлық салаларда, соның ішінде әсіресе экономика саласында қолданылатын цифрландыру, экономиканы цифрландыру және цифрлық процестердің бизнеске енуі туралы ұғымдар мен бағыттары қарастырылады. Ақпараттар алмасудың дәстүрлі форматынан инновациялық цифрлық форматқа өту барысында цифрлық процестерді экономика саласына ендірудің өзінің мақсаттары мен міндеттерін қамтиды, соның ішінде ең маңыздылары келесілер болып табылады: мемлекет тұрғындарының өмір сүру сапасын жақсарта түсу, бизнес процестерді жүргізудің нәтижелігін және тиімділігін арттыру, цифрландыру жағдайында ақпараттардың қолжетімділігін және қорғалуын сақтау.

Қазіргі таңда мемлекет тарапынан ұлттық экономиканы цифрландыруға бағытталған көптеген бағдарламалар енгізілуде. Осы бағытта жұмыстар жүргізу барысында цифрлық экономиканың мәнін, мақсаттарын және цифрландырудың бағыттарын нақтылап анықтау қажет. Өз елімізде цифрландыруды тиімді және тезірек енгізу кезінде ең алдымен цифрлық процестері дамыған елдердің тәжірибесін зерттеп, өз экономикамыздың ерекшеліктеріне қарай өзгертіп, сондай-ақ аталған процестің еліміздегі қазіргі қай-күйін анықтаумен қатар жүргізілуі қажет.

Цифрлық экономика 50-ден аса түрлі салаларда үлкен өзгерістерді қамтиды. Бұл феномен ақпараттық технологиялар және платформалармен байланысты, бизнес-модельдерді түбегейлі өзгеріске ұшаратады, яғни оңтайландыру арқылы жойып, нәтижелерін арттырады. Тақырыптың маңыздылы,ғы мен көкейкестілігін түсіне отырып, авторлар келесі мақсатты көздейді: экономиканы цифрландыру түсінігін ашу; қазақстандық тәжірибеде экономиканы цифрландыру үдерісін талдау, экономикалық қарым-қатынасқа түскен субъектілер жұмысындағы

цифрлық процестерді қарастыру, өз еліміздегі экономиканы цифрландырудың отандық тәжірибесін зерттеу мақсатында жалпы экономиканы цифрландырудың ерекшеліктерін анықтау.

Түйін сөздер: ақпараттық қоғамды трансформациялау, экономиканы цифрландыру, цифрлық экономика, білім экономикасы, әлемдік шаруашылық, бәсекеге қабілеттілік факторлары, озық технологиялар.

З.С. Кенжебаева[1*], А.Е. Тойганбаева[2]

[1] Университет NARXOZ, Казахстан, г. Алматы
[2] Казахский университет международных отношений и мировых языков имени Абылай хана, Казахстан, г. Алматы
[*]e-mail: zere.kenzhebaeva@narhoz.kz

Цифровая экономика как новая теория развития: вызовы, возможности и перспективы развития в Казахстане

В статье рассматриваются понятия и направления цифровизации, цифровизации экономики и проникновение цифровых процессов в ведение бизнеса, которые в настоящее время используются во всех сферах, особенно в сфере экономики.

Переход от традиционного формата информационного обмена к инновационному цифровому включает в себя цели и задачи внедрения цифровых процессов в сферу экономики, важнейшими из которых являются: улучшение качества жизни населения государства, повышение результативности и эффективности ведения бизнес-процессов, сохранение доступности и защищенности информации в условиях цифровизации.

В настоящее время государством внедряется множество программ, направленных на цифровизацию национальной экономики. В ходе работы в данном направлении необходимо конкретизировать сущность, цели и направления цифровизации цифровой экономики. При эффективном и скорейшем внедрении цифровизации в страну необходимо, прежде всего, изучить опыт стран с развитыми цифровыми процессами, изменить его в зависимости от особенностей нашей экономики, а также определить текущее состояние данного процесса в нашей стране. Цифровая экономика несет в себе большие перемены для более чем 50 различных отраслей. Этот феномен связан с информационными технологиями и и платформами, которые коренным образом и меняют бизнес-модели, увеличивая их результаты за счет элиминации посредством оптимизации.

Понимая важность и актуальность темы, автор преследует следующую цель: раскрыть сущность понятия цифровизации экономики; проанализировать процесс цифровизации экономики в казахстанской практике, рассмотреть цифровые процессы в работе субъектов, вступивших в экономические отношения, выявить особенности цифровизации экономики в целом с целью изучения отечественного опыта цифровизации экономики в нашей стране.

Ключевые слова: трансформация информационного общества, цифровизация экономики, цифровая экономика, экономика знаний, мировое хозяйство, факторы конкурентоспособности, передовые технологий.

Introduction

In the era of globalization, economists and politicians note that the process of digitalization will become one of the actively used areas of development of the economy and other industries. A significant number of studies have been devoted to this issue (Babkin, 2018; Golovina, Polyanin, Rudakova, 2017; Vertakova Yu. V., Tolstykh T. O., Shkarupeta E. V., Dmitrieva V. V2017).

The main direction of the global world economy is digitalization of all aspects of economic activity, as well as public life.

The significance and relevance of digitalization of subjects of economic relations is determined by the following distinctive features of the development of the current economy

– in the production and distribution of these products, it has become possible to use economies of scale through the use of IT technologies under the influence of modern integration of economic communication systems.

– using the opportunities provided by technologies under the influence of the development of information technologies has reduced time and financial costs both in the economy and in the work of the company;

– Information technologies that standardize and automate the work processes of individual manufacturers and unify the current tasks of manufacturers contribute to the solution of individual production tasks. Thus, it allows to scale the results caused by the use of IT technologies;

– increased competition in economic and market relations increases the economic efficiency of organizations in all sectors of their activities, as a result as a result, the organization, the firm can maintain its competitiveness in the market.

The main direction of the global market is global market is the transition from the knowledge

economy to the digital economy. What does the transformation of the information society into a digital one mean? This process, of course, is associated with the processes of globalization and integration, the growth of which identifies new trends in the development of the world and sets new standards for economic development.

The world economy consists of important ingrained factors of competitiveness (such as natural resources) are disappearing, and such factors as the level and dynamics of develop new ones advanced technologies, the point of human capital development process and stages of development of digital infrastructure deserve increasing importance. As a result, it can be concluded that the global competitiveness of the economy is determined by the level and dynamics the development of information and communication technologies (hereinafter – ICT) and the speed of their implementation in all spheres of public life, which forms the so-called digital economy.

One of the main goals of this article is to solve the problems of digitalization development in the domestic economy. When forming the the development concept`s of the national digital economy and the development of its structure, a clear knowledge of the definition and meaning of the digital economy and the factors shaping it in the future that determine its development is necessary. Also the development of national economy digital economy is possible due to the borrowing and adaptation of foreign experience.

Literature review. The digital economy creates new opportunities for economic development, but at the same time creates new risks and threats. For example, the expansion of the range and individualization of digital entails an increase in number of unauthorized transactions with financial consequences, including transfers of funds, by persons who do not have the appropriate rights, in addition, ethical risks increase – the risks of leakage of confidential information. ... It is necessary to find a balance between supporting technological innovations and the need to protect society from possible risks associated with their implementation.

Economic science identifies the main stages of human development: agrarian, from an industrial point of view industrial, post-industrial and most recent modern digital. The transition of human development from one stage to another is associated with the development of resources and technologies, as well as with a change in culture in society, a change in the political system.

To understand the procedure of development of the information society into a digital one, the knowledge of the concept is important the definition of “digital economy”. The founder of this concept is Nicholas Negroponte (1995).

The definition of computer science is given by many scientists, including an American scientific figure in the field of activity computer science gives the definition as: “moving from the movement of atoms to the movement of bits (Negroponte N, 1995).

It is necessary to emphasize that there is still no single term. So, along with the explanation of words, such us “digital economy “, “electronic economy”, “new technological order of the world”, “creative economy”, “API economy”, etc. are often used.

At that time, it should be noted that the European scientific community in many cases uses the term “digital economy”. In turn, the American one predisposed closer to the technological definition of “API economy”.

Therefore, at present, the concept of “digital economy” is not fully fixed. In the structure of the concept, we can include the following concepts and basics, as a high-quality process of a technological nature, are software, information and computer technologies. Together with the above concepts, we can include existing Internet programs. These include: services provided on the internet, internet services and messengers.

Since the digital economy, which has become a global trend, has just arrived in Kazakhstan, this direction is gradually developing on our territory. A new priority for the country’s economic development is the transition from traditional information exchange in all sectors of the economy to digital.

There are many technologies (cognitive, cloud, Internet of things, big data, etc.) that will actually affect our lives directly in the future. One of the main factors in the development of the international economy is the active participation of digitalization in our life and economy.

According to the given information, McKinsey Global Institute, in China, up to 22% of the increase in GDP by 2025 may be due to Internet technology. In the United States, the expected increase in value from digital technologies is equally impressive – here it could reach $ 1.6-2.2 trillion by 2025. (Tarasov I. V., 2018).

Consider the views of individual authors on the digital economy category. So, for example, Yudina T.N. believes that “this concept is associated with the intensive development of information and communication technologies (ICT), the beginning of the second generation informatization process, which is the basis of the emerging VI technological order. In fact, all spheres of human life (economic,

political, cultural, and social and others) have changed to one degree or another due to the discovery and development of ICT. More and more industries and sectors of the national economy – finance, trade, mechanical engineering, agriculture, construction, transport, communications, medicine, education, etc. – are included in the electronic and digital economy" (Yudina T. N. 2016.). Based on the author's research, in the world economy and in general, digital technologies lead to optimal improvement of technical, economic and economic paradigms. It should be noted that its influence covers all spheres of life.

Authors Evtyanova D.V. and Tiranova M. the. digital economy is explanation such as "automated management of the economy based on advanced information technologies; way, based on effective information management of the production system " (Evtyanova D.V., Tiranova M.V., 2017).

In this definition, the authors came to the following conclusions: the main component of the modern information economy is the high level of existing technologies that rebuild relations between economic entities. This changes the development paradigm in the direction of applying flexible economic organization schemes, i.e. formulates coordination using digital technologies.

Author N. Vasilenko in the article "Digital economy, concept and reality" noted the main components of the digital economy:

– hardware, software, communication transmission devices, and other infrastructure components;

– interconnection and relationships between entities using virtual networks include electronic business transactions carried out through computer networks;

– the biggest part of the digital economy that has become a modern trend is e-Commerce, which in turn involves selling and delivering goods over the Internet.

Thus, in the course of development and improvement of this area of the digital economy, must provide it with an accompanying infrastructure, which explains the provision of the economy with effective software products and network structures of the Internet.

One of the new concepts emerging from this is infoculture, this term explains the integration of information technologies into people's lives. One of its features is that it includes everyday habits and customs. All these characteristics are considered in the research paper "Digital future or the economy of happiness". (Chernovalov A., Tsekanovsky., Shimansky Z., and others, 2018).

Materials and methods. The methodological basis is a review of scientific works on the topic of digitalization of the national economy. Additionally, in this article general scientific methods of cognition were used, in particular: analysis and synthesis.

Results and discussion. Economy our county today, humanity is faced with a whole galaxy of different kinds of challenges: a decrease in the share of employed in industrial production in developed countries, the transition to an economy of action, a change in educational models, personalization and flexibility of production, the increasing role of networking, the rapid growth of firms investing in capital, based on knowledge and included in global value chains.

The existing galaxy of global challenges largely determines not only how the economy will develop, but also what our society will be like. Here, the so-called "digital economy" comes to thefore, that is, an economy based on data, an economy that is a cardinal breakdown of traditional economic models. The formation and development of the digital economy is largely based on a whole class of completely new technologies based on cyber-physical principles, that is, on the junction of the physical world and the virtual world.

In modern conditions, in various countries of the world economy, the strategies "Industry 4.0", "Internet +" are being implemented. For example, in 2010 the European Union adopted the Digital Europe initiative aimed at shaping the Internet economy. In 2011, a developed country like Germany initiated a strategic program for Industry 4.0, proclaiming the transition to "Internet-based manufacturing". In China, in 2015, the Internet + concept was adopted, which is based on "smart manufacturing". The goal of creating "smart" industrial production was also reflected in the "Cloud Strategy" initiative, adopted in 2009 in the United States. (Moavenzadeh J., 2015).

An international organization like the UN is developing a world-wide rating for ICT development-the ICT Development Index, which is calculated under the guidance of the UN. Since 2015, our country has been ranked 52 out of 175 positions. Thus, our country has set a goal in which it plans to reach the 30th place in 2020, the 25th place in 2025 and the 15th place closer to 2050.

Economy our country today inferior in this rating to the majority of developed countries and countries with fast growing economies. Undoubtedly, this situation does not create real opportunities for successful competition on a global market innovative technologies and explains the lag of Kazakhstan quality of life of the country's citizens in comparison with developed countries.

In the digital technology market, which to a certain extent is distinguished by its "depersonalization",

economy and transparency, virtuality acquires a huge multiplicative effect and becomes a real productive force.

The novelty of the phenomena occurring with new digital technologies, as well as the distinctive features of information technologies cardinal changes in the psychological perception of people and their consumers now require resource support for special ways to form of new thinking, methods of education and technological renewal.

Currently, around the concept of the digital economy, scientific interest in the study of socio-economic effects of the introduction of digital technologies in scientific circles has increased. This interest is largely related to the development of proposals to accelerate the process of integration of States into a large global network with minimal risks to the economy, politics, and society.

In the scientific field, one of the main interests of researchers in the humanitarian field is characterized by the penetration of digitalization into our life community and social environment. (Sivukha, 2012).

One of the new programs introduced by the state "Digital Kazakhstan", unlike others – the program is aimed at spreading digitalization covering all sectors of the economy, development and development of new innovative technologies, improving the quality of life of citizens.

The main and main aspiration is programme is increase the pace of development in priority and main areas of the economy for a period of time in the medium term and work to improve and further develop the quality of life of the population, and in the long– term development of Kazakhstan's economy in a new direction will be achieved with the integration and development of digital technology on the market."

Columbia University professor Raul Katz identifies 3 waves of digital technology development. The first stage is characterized by total computerization and automation of processes, the spread of mobile communications, as well as the development of wired and wireless broadband Internet access. The features of the second wave are the development of online platforms (such as search engines, marketplaces, distance learning, social networks) and cloud computing. The third wave is predictive Analytics of big data, as well as the Internet of things, robotics, and new high-tech technologies. 5 (including 3D printing), artificial intelligence (including machine learning) (Katz R, 2017). Social and economic impact of digital transformation on the economy (ITU, GSR-17 Discussion paper, 2017).

These waves of technological innovation successively replace each other, coexisting for a while in the same time period. In Kazakhstan, work is being implemented to overcome technological gaps in the digital economy.

Thus, the nationwide program "Digital Kazakhstan" was approved by the Decision of the Government of our country No. 827 dated December 12, 2017.

Now all States have entered the era of information technology, which has changed rapidly and radically. The industrial Internet of things, artificial intelligence, blockchain, virtual and advanced technologies began to penetrate deeply into the life of mankind. Through the process of digitalization, the economy of States develops and becomes competitive. Most developed countries at this time in the current situation many countries around the world want digitalization to spread in all sectors of the economy by implementing digitalization programs. An example of this is Singapore, which reflects the transformation of the state's digital economy. According to the plan, 50% of all modes of transport in this country will be electric by 2050. Today, self-driving taxis are already used in Singapore. (Rashid K., 2018.)

Our country is dynamically participating in developing a program on the digital agenda within the framework of the EAEU. Heads of state of this organization plan to implement the digitalization process until 2050. There are about 340 front offices throughout the country that make up the state Corporation "Government for citizens". This program provides more than 38 million services to citizens every year. In order to increase the accessibility of remote localities for citizens of our country, 70 mobile PSCs are engaged in providing services each year, which make more than 12 thousand calls. they provide more than 500 thousand services. Under this program, established and operational list for the provision of public services, the hallmark of this program is the point that it runs constantly. Today, with the help of this program, citizens of our country can apply for and receive 746 public services.

The use and introduction of technologies such as Big Data, it will help we expand the list of services provided.

In addition, such technologies fully form the information technology base. The concept of the digital economy is based on analytical systems and programs that contain large and large amounts of data (Big Data). Since such programs have a growing volume of modern data, and the same data is characterized by a not particularly structured format.

In this regard, the provision of public services through such technologies is effective. With the help of them, we can study the tendencies of political views depending on the gender, age or profession of a person. (Gribanov Yu. I., Repin N. V., 2017). In addition, big data systems can be used in trade, finance, real estate rental, and national security.

As part of the new program for the development of digitalization in Kazakhstan, the state program "Digital Kazakhstan" has been created and operates since this year.

The main goals of this program are aimed at improving degree and standard of living of citizens through integration and exploitation digital technologies.

Development and execution of the program "Digital Kazakhstan" focuses on five most important aspects. Let's get acquainted with these directions in more detail. Under this program, the key sectors of our economy for implementing the digitalization process are considered to be: industry, logistics, transport, electricity, agro-based industries.

Evaluation of the implementation of the Industry 4.0 program in these sectors was carried out with the help of foreign experts. The greatest attention was also paid to the modernization of processing and mining industries.

One of the following directions is the direction "transition to a digital state", the content of which is the smooth exchange of public services for the population and business of the country through online networks, ensuring the security of information, the availability of existing technologies, and the availability of reliable information.

The technology for providing e-health passport services has been launched since June this year. Electronic journals and diaries have been introduced in the field of education. The system of automatic electronic distribution of children to preschool organizations in 11 cities began at the beginning of this year. The transfer of citizens to register in electronic form will eliminate the issuance of more than 2 million certificates.

The third direction of the program is called "implementation of digitalization of the great silk road", the main goal of which is to provide mobile communications covering the entire territory of the state, and to ensure high-speed and stable operation of the network without any interruptions in Internet access. As a result of the implementation of this direction in 1249 rural localities, measures have been initiated to create the possibility of using permanent, uninterrupted global Internet networks.

High-tech laboratories specifically designed to ensure information cybersecurity for Big Data analysis are being developed and implemented, especially increased attention is given to malicious code and cyber incidents. "Human capital development" is the fourth direction of the program, this direction provides improvement of literacy and awareness of digital processes among the population. Implementation will only be possible thanks to the introduction of innovations in education.

Thus, much attention is paid to improving creative and new critical thinking. We can add that now technologies are used for process of retraining all ages of the population: children, youth, students and employees.

Young people are being trained and retrained population is being steadily carried out, with special attention being paid to the unemployed citizens of the country.

"Organization of the innovation ecosystem" is the fifth direction and is aimed at further development of technological entrepreneurship with reliable and safe interaction between 3 key elements: business, science and the state. Closer to 2022, it is planned to create a large number of domestic technology companies that will have their own "success stories" in this direction.

As a result of the implementation of the Digital Kazakhstan program, it is planned to achieve great results. In particular, by 2025, the program should bring to the budget 1.7-2.2 trillion tenge, which is planned to be returned on the basis of added value. This amount is also 4.8-6.4 times higher than the invested investment funds. The main goal of work to maximize the introduction of digitalization in our country is that as a result of these processes, the entire country should be digitized and this will ensure a third of the GDP growth of the economy through these measures.

In 2020, performance growth in key sectors of the economy will increase from 20% to 50%. This program will create 300 thousand new jobs (such as industry 4.0, 2016). In the UN ICT ranking, our country's goal is to take the 30th place. The implementation of the program's directions should provide 1.6-2.2% growth points closer to 2025.

Another of the goals of the program is that in 2022, 5 cities of our country should appear among the smart cities. In order to fully implement the digitalization program, funds will be allocated annually from the budget, including 21.5 billion tenge in 2018, 33.1 billion tenge in 2019, 59.7 billion tenge in 2020, and 26.5 billion tenge in 2021 (Korolev, 2018).

If we analyze the cost of ICT by country, we get the following information. These include: information technology-5%, software support

– 37%, training workers to work with ICT-6%, software development processes by organizations themselves-5%.

If we look at the costs in the context of 1 ICT sector, we will find the following points: trade – 31.1%, information and communications –12.9%, manufacturing – 8.8%. Mining – 8.8%, construction – 8.4%, highly qualified scientific and technical work – 8%, national management and management – 7.2%, logistics and warehouse – 5.6%, agriculture – 0.3%, other sectors – 8.8%.

Using positive results of the digital economy is achieved only if all residents of the country have the skills to use digital technologies. However, currently the population's ability to use new computer technologies is 76.2%. in this case, it is necessary to increase literacy in the near future.

In the current situation, the Ministry of education and science of our country is implementing new initiatives and proposals. (Decree of the Government of the Republic of Kazakhstan, 2017).

1) for the purpose to get acquainted with modern information technologies and training in information technologies, the subject "Information and communication technologies" was introduced for students of grades 3-4 who form general basic knowledge;

2) 372 circles on robotics are working, teaching General principles and basics of programming in the roar of robotics.

In addition, it should be noted that the new requirements and regulations younger generation in accordance with the passage of time, it is planned to rework the content of secondary education by developing their creative thinking and technical skills.

1) in order to develop information technology skills, students have introduced the discipline 'information and communication technologies' in excerpt three specialties;

2) new professional norms and standards are being created, which will become the main basis for educational programs of technical and professional, higher and postgraduate education.

Nevertheless, despite the implementation of such works, there is a small number of information technology specialists in the domestic economy who have the necessary knowledge and skills, professional experience.

The process of digitalization imposes higher requirements on the process of conducting work, including the process of functioning of entrepreneurs that existed in the modern market. The lack of communication and understanding between the employment sector and the workers ' sector can lead to retraining of personnel that the market does not need, and training of unnecessary workers. To prevent this from happening, it is necessary to prepare the population of all ages with digital technologies.

The state program to develop the economy our contry and improvement and developing the quality of life of citizens of the country with the participation of the Samruk-Kazyna Fund is being implemented in all cities of the state.

According to the agreed plan, as a result of the program execution, this project brought more than 2 trillion tenge to the state budget. Digitalization will cover all sectors of our state, which will lead to the following positive changes from the project implementation: reducing costs, having reality in decision-making, stopping corruption, etc.

The efficiency of city and municipal services in Kazakhstan is intended to be achieved through the introduction of digital technologies. The main central element of the Smart City project is the person and their needs.

Plan for half a year, the cities such as, Nur-Sultan and Almaty will fully turn into a "smart city", and in the future, Karaganda, Aktobe, Shymkent will be transformed into a Smart CIty. With the improvement of these cities, new infrastructure will be created, which will improve the quality of life of citizens, safety, environmental cleanliness, and the work of all existing sectors.

This isn`t a domestic invention of our country, this is the experience of advanced countries of the world. The main directions of the Smart City provisions of the regulations are developed depending on the experience of developing cities in European countries and are based on the inter actions of 6 subjects : "smart economy", "smart management", "smart life", "smart mobility", "smart people" and "smart environment". Thanks to the construction and application of this model, European countries and their residents have achieved great success in developing the social and economic environment of the city. Our country has studied the experience of European countries, analyzed foreign experience depending on the characteristics of the society and infrastructure of our country.

We can talk about positive results for a long time, there are a lot of them.

According to the state's plan, the following changes will occur through the digitalization of the economy: saving energy and money in the electricity sector; the main ways to reduce costs in the activities of utility networks, reducing incidents related to crime in society and improving the life of the population as a whole.

According to the plan of the Samruk-Kazyna Foundation for 2022, all cities on the territory of

our state will be included in the number of "smart cities". Another direction of this program is to Create an innovation ecosystem on the territory of the state and support new startups in the innovation sphere by creating it. One of the main goals of the program is to create maximum conditions for capitalization and revenue generation of these projects. To achieve this goal, the state will invest about 67 billion tenge in startups in 2022. By 2022, the country plans to increase the volume of investments that will be attracted to startups to 67 billion tenge.

Conclusion

The introduction and improvement of digitalization in the market will lead to faster economic growth in Kazakhstan compared with the present current positions.

As notes in the addresses of the President Kassym-Jomart Tokayev to the people of Kazakhstan dated September 1, 2020: "Digitalization is not only a trend of the new economics at the present stage, but also, in General, the development and competitiveness of the national economy.»

Basically, in the future it is necessary to eliminate digital inequality, ensure maximum access to the Internet for the population and high-quality and effective communication for all citizens. This is now becoming a basic need, such as electricity and electricity that is used daily.

In order to create new jobs in the labor market within the country, as well as to export digital technologies and provide them to the world market, it is necessary to develop the market for engineering, IT and high – quality technological services in the country's market.

In order to develop the economy, we will have great prospects through the interaction of business and IT technologies. (President of Kazakhstan Kassym-Jomart Tokayev's State of the Nation Address, 2020).

As a result of execution of the integration of civilization into all economic spheres, economic development is accelerating. This can be seen in practice in many developed countries.

The development of the main branches of the digitalization economy, including processing production, transport and logistics related to transportation, agriculture, a new direction of trade-e-Commerce, exchange of non-cash funds, application of new technologies in the financial sector, will increase the stability of capital to the rapid payback and cost-effectiveness of implemented projects in the economy.

Thus, we managed to establish that the most important thing in the economy of the future is the digital economy, which is focused on human needs. And if it is focused on a person, will satisfy our needs, help in everyday life, then humanity will have the opportunity to positively develop and special attention is paid to improving life.

References

The digital economy and industry 4.0: new challenges: proceedings of the scientific and practical conference with international participation (2018) / ed. by A.V. Babkin. SPb.: Publishing house of Polytechnical Institute.UN-TA,. – 573 p.

Golovina, T.A., Polyanin, A.V., Rudakova O.V. (2017). Development of the system of state strategic management of business structures based on the capabilities of the new digital economy model // Bulletin of the Voronezh state University. Series: Economics and management.– No. 2. P. 13-18.

Evtyanova, D.V., Tiranova, M.V. (2017). Digital economy as a mechanism of effective environmental and economic policy // Science. – T. 9. No.6. – https://cyberleninka.ru/article/n/tsifrovaya-ekonomika-kak-mehanizm-effektivnoy-ekologicheskoy-i-ekonomicheskoy-politiki/viewer

Gribanov, Yu.I., Repin, N.V. (2017). Review of the prospects for the application of new methods and management tools in the era of the digital economy. Management development for the transition to a digital economy. Materials of the X All-Russian (with international participation) scientific-practical conference,. – C.33

Holz, Expert (2015). What is Industry 4.0? Figures and facts 08/14/2015. URL: http://holzex.ru/chtotakoe-industriya-4-0-tsifryi-i-faktyi/ (date of access: 27.11.2016)

Korolev, A. (2018). Digitalization VS Unemployment. November 23, / https://abctv.kz/ru/news/bolshinstvu-predpriyatij-nedostupna-industriya-4-0 18.https: // abctv. kz / en / news / bolshinstvu-predpriyatij-nedostupna-industriya-4-0

Katz, R. (2017). Social and economic impact of digital transformation on the economy. / ITU, GSR-17 Discussion paper. – URL: https://www.itu.int/ en/ITU-D/Conferences /GSR/ Documents/GSR2017/Soc_Eco_impact_Digital_ transformation_finalGSR.pdf

Moavenzadeh, J. (2015). The 4th Industrial Revolution: Reshaping the Future of Production. DHL Global Engineering & Manufacturing Summit. Amsterdam, October 7, 2015. Available at: / https://www.eiseverywhere.com/ file_uploads/fe238270f05e2dbf187e2a60cbcdd68e_ 2_ Keynote_John_Moavenzadeh_World_Economic_ Forum.pdf (accessed 11.02.2019).

President of Kazakhstan Kassym-Jomart Tokayev's State of the Nation Address on September 1, 2020 / https: akorda.kz/ru/addresses/ addresses_of_president

Negroponte, N. (1995) Being Digital/– New York –/kupdf.net

Sivukha, S.V. (2012). Social capital / http://bourdieu.name/content/social-capital

Rashid, K. (2018). Digitalization on the agenda in Kazakhstan 05/03/18 /ttps://digitalkz.kz/v-kazahstane-na-povestke-dnja-cifrov/

Tarasov, I.V. (2018). Industry 4.0: concept, concepts, development trends // Business strategy №6 (50). – P.12-16

Vasilenko, N.V. (2017). Digital economy: concepts and reality // Innovation clusters in the digital economy: theory and practice: Proceedings of a scientific and practical conference with international participation. May 17-22 / Ed. A.V. Babkina. SPb. : Publishing house of Polytechnic. un-ta. – 592 s

Vertakova, Yu. V., Tolstykh, T. O., Shkarupeta E. V., Dmitrieva V. V. (2017). Transformation of management systems under the influence of digitalization of the economy: monograph. Kursk: SWSU publishing House, – 156 p.

Yudina, T.N. (2016). Understanding the digital economy // Theoretical Economics. -No. 3. – P.12-16

Rashid, K. (2018). Digitalization is on the agenda in Kazakhstan 03.05.18/18 /https://digitalkz.kz/v-kazahstane-na-povestke-dnja-cifrov/)

Decree of the Government of the Republic of Kazakhstan (2017). http://adilet.zan.kz/rus/docs/P1700000827)

IRSTI 16.31.51 https://doi.org/10.26577/CAJSH.2020.v6.i4.04

A. Seidikenova[1*], M. Malshy[1], A. Akkari[2]

[1]Al-Farabi Kazakh National University, Kazakhstan, Almaty
[2] University of Geneva, Switzerland, Geneva
*e-mail: almash.seidikenova@kaznu.kz

LANGUAGE ANXIETY IN ONLINE EDUCATION

Anxiety on the lessons of a foreign language – is a notion that is studied from the 1980s, but little research was conducted on the topic Language Anxiety distance and online learning. In the literature review were considered the following issues: (a) What is language anxiety in the classroom of a foreign language? (b) What are the main results of studies of the level of anxiety in foreign language lessons? The article discusses a test system for determining the level of linguistic anxiety in foreign language lessons, which was developed by Horwitz and Cope (1986). Language anxiety on the classes of foreign language may have negative impact on process of the second language acquisition. Current article refers to the problem of language anxiety in teaching foreign language at distance and possible solutions of decreasing language anxiety. Psychological aspect is a crucial part of educational process that leads to successful learning. Recommendations provided in the following article may help students to feel less isolated, less anxious and to establish contacts with their teacher and peers. The article concludes with suggestions for future research on online language anxiety.

Key words: language anxiety, online learning, distance learning, language learning, online technologies, teaching methods, online pedagogy, methodology, teaching foreign languages, remote learning.

А.С. Сейдикенова[1*], М. Малшы[1], А. Аккари[2]

[1]Әл-Фараби атындағы Қазақ ұлттық университеті, Қазақстан, Алматы қ.
[2]Женева Университеті, Швейцария, Женева қ.,
*e-mail: almash.seidikenova@kaznu.kz

Языковая тревожность в онлайн обучении

Шетел тілі сабақтарындағы үрей – бұл 1980 жылдардан бері зерттеле бастаған тұжырымдама, бірақ қашықтықтан және желілік оқыту тұрғысынан «Тілдік үрей» тақырыбында аз зерттеулер жүргізілген. Әдеби шолуда келесі сұрақтар қарастырылды: а) шет тілі сабағындағы тілдік үрей дегеніміз не? б) шет тілі сабақтарындағы үрей деңгейін зерттеу нәтижелері қандай? Мақалада Хорвитц пен Коуп (1986) жасаған шетел тілі сабақтарындағы тілдік қорқыныш деңгейін анықтауға арналған тест жүйесі талқыланады. Тілдік үрей екінші тілді меңгеруге кедергі келтіруі және оқу процесіне кері әсер етуі мүмкін. Қазіргі уақытта ғаламдық пандемия аясында стресс пен студенттерге қысым күшейді, бұл өз кезегінде жаңа материалды игеруде қиындықтар туғызды. Бұл мақалада шет тілін қашықтықтан оқытудағы лингвистикалық үрей мәселесі және лингвистикалық алаңдаушылықты төмендетудің мүмкін шешімдері қарастырылған. Психологиялық аспект – бұл білім беру процесінің маңызды бөлігі, ол табысты білім беру процесіне әкеледі. Келесі мақаладағы кеңестер студенттерге оқшауланууды, қорқынышты сезінуге, мұғалімімен және құрдастарымен байланыс орнатуға көмектеседі. Мақала қашықтықтан білім берудегі тілдік үрей туралы болашақ зерттеулерге арналған ұсыныстармен аяқталады.

Түйін сөздер: тілдік қорқыныш, желіде оқыту, қашықтықтан оқыту, тілді оқыту, онлайн-технологиялар, оқыту әдістері, онлайн-педагогика, әдістеме, шет тілдерін оқыту, қашықтықтан оқыту.

А.С. Сейдикенова[1*], М. Малшы[1], А. Аккари[2]

[1]Казахский национальный университет имени аль-Фараби, Казахстан, г. Алматы
[2]Женевский университет, Швейцария, г. Женева
*e-mail: almash.seidikenova@kaznu.kz

Онлайн білім берудегі тілдік үрей

Тревога на уроках иностранного языка – понятие, которое изучается с 1980-х годов, но мало исследований было проведено по теме «Языковая тревога» с точки зрения дистанционного и онлайн-обучения. В обзоре литературы были рассмотрены следующие вопросы: (а) Какова языковая тревога на уроках иностранного языка? (б) Каковы результаты исследования уровня тревожности на уроках иностранного языка? В статье обсуждается тестовая система для определения уровня языковой тревожности на уроках иностранного языка, разработанная Хорвицем и Коупом (1986). Языковая тревожность может повлиять на процесс усвоения второго языка и оказать негативное влияние на процесс обучения. В данной статье рассматривается проблема языковой тревожности на дистанционных занятиях иностранным языком и возможные решения по снижению языковой

тревожности. Психологический аспект – важнейшая часть учебного процесса, ведущая к успешному учебному процессу. Рекомендации, приведенные в данной статье, могут помочь учащимся чувствовать себя менее изолированными, менее тревожными и установить контакты со своим учителем и сверстниками. Статья завершается предложениями для будущих исследований языковой тревожности в дистанционном образовании.

Ключевые слова: языковая тревога, онлайн-обучение, дистанционное обучение, изучение языков, онлайн-технологии, методы обучения, онлайн-педагогика, методология, преподавание иностранных языков, дистанционное обучение.

Introduction

Currently, in the context of a global pandemic, changes are taking place in the usual way of life and in the field of education. Students and schoolchildren around the world are forced to study remotely. While some teachers are proficient in teaching technologies and pedagogical skills, many of them were not prepared for distance teaching. In addition to the lack of devices and poor Internet connection, teachers also faced with the problem of online pedagogy. The interaction of three components, how to teach language (language pedagogy), educational technologies and online teaching (pedagogy for educational technology) and knowing how to teach online (online pedagogy) can lead to the successful implementation of the educational process of a foreign language in the context of distance education.

Given the large number of students currently pursuing online or distance education for language learning due to COVID-19, it is important to consider how external factors such as anxiety can hinder learning. In addition, foreign language teachers and their students had to move quickly and adapt to learning in an online environment without sufficient time or prior preparation and training. This problem is an additional cause of stress for both students and teachers. Remote learning can take different forms according to the type of the lessons, technological devices of learners, connection of the internet etc. Universities try to provide their students with various books and textbooks, however, many educators are operating in a triage mode, they try to conduct the most important outcomes of learning the subject and provide instructions using different tools that are available.

Scientists distinguish following strategies as factors that increase students` language level:

– motivation to learn the target language;
– being calm and relaxed on the lessons;
– choosing the exact form of language;
– being attentive to the context and meaning;
– making predictions and guessing;
– competence and control of speech;
– communication.

It is known that cognitive processes are associated with the brain functioning and the mind. However, it is not the only factor that affects the process of language acquisition, affective sphere which related to feelings and emotions have impact on this process as well. Individual's mental health and wellbeing affects to the quality of life in general and may cause negative outcomes.

Psychological factors (self-esteem, motivation, anxiety, etc.) are relevant to the process of second language acquisition. Motivation is one of the psychological factors that might be trigger to learn a language. Self-esteem of learners may affect to the results of the educational process. For educators it is important to courage their learners, while low self-esteem may lead to stiffness of student, which is often caused by the fear of making mistake or being corrected. Nevertheless, students that are not afraid to make mistakes are not supposed to make greater results and vice versa.. furthermore, students that tend to be more active on lessons could encourage less active students not to be afraid to perform.

Individuals in different situations manifest anxiety in different ways; its display is also influenced by the success of educational activities. Among the three levels of anxiety: high, medium and low – the optimal level of anxiety is medium. With a very low or very high level of anxiety, the success of the activity is significantly reduced.

Literature Review

The research by Krashen (1981) indicates that when language learners become anxious, a filter is raised in their minds that blocks linguistic input from entering; this is known as the hypothesis of "affective filter" (Krashen, 1981). Studies showed that anxiety may lead to poor performance in a language classes and have negative impact on the process of learning the language.

It has to be mentioned that the research of language anxiety has difficulties in variety of interpretation of different types of anxiety; for example: situational anxiety and anxiety as a personality trait. Horwitz and Young (1991) present evidence that more than half of the students who begin to master a foreign language, experiencing the so-called " debilitative" level of language anxiety, in which there is a significant reduction in cognitive abilities (Horwitz, Young, 1991). Referring to different studies, authors noted the fact that linguistic anxiety has roots in the difficulties that individual experienced in learning his native language.

E. Horwitz , M. Horwitz and J. Cope (1991, 1986) noted that researchers have not yet given an adequate definition of the concept of "linguistic anxiety" and have not described its specific influence on the process of mastering a foreign language. The concept of "anxiety when learning a foreign language" (Foreign language anxiety while learning) sometimes replaces the term "language anxiety", the use of which emphasizes the connection between learning a foreign language with the anxiety that can accompany the process of learning a mother tongue (Horwitz, Horwitz, Cope, 1986). E. Horwitz and D. Young (1991) also point out that there are two parallel approaches to the identification of language anxiety: 1) language anxiety is a form of reflection of personal anxiety that about to appear in other areas, for example, in the exam situations; 2) linguistic anxiety is a unique form of anxiety that does not occur when mastering other disciplines (Horwitz, Young, 1991). These two approaches are not, however, contradicting to each other, because they contain different views on the definition division of language anxiety.

Language Anxiety can be defined as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz, Horwitz, Cope, 1986). Such anxiety is a type which occurs while the process of language learning is happening in classroom conditions, and it does not occur in naturalistic settings, such as: immersion while traveling or moving abroad. Researcher Horwitz and colleagues (1986), summarized two major races considered above directions of studying the relationship of language anxiety with other kinds of anxiety, says that language anxiety has three main sources. Horwitz created a scale that measures the level of language anxiety in instructional settings, Foreign Language Classroom Anxiety Scale (FLCAS). This test system is appropriate to measure language anxiety in any type of class. Research by Pichette in 2009 and Russel in 2018 showed that online learners experience significant level of language anxiety (Russel, 2014).

Some learners who experience high level of language anxiety may choose online classes in order to conduct the lessons anonymously, however they need to engage in speaking and interaction with teacher or a group. Language learners usually need to interact with their peers, as language is a communication tools and integrating speaking skills is a crucial part of the educational process. Apart from this, learners might face anxiety related both to the language and to the use of instructional technologies that are used in order to communicate in the target language. In current situation, when all the learners are forced to have online lessons, this became even harder for the students who lack self-discipline and are not able to manage their personal time. Moreover, students having online lessons should be able to seek for help when needed and feel less isolated from their groupmates.

In the research by Pichette (2009) face-to-face learners and online learners of different levels were compared, in order to determine if online learners experience language anxiety less. Three measures were employed to make a profile of learner: FLCAS to measure general anxiety level, Foreign Language Reading Anxiety scale, Daly-Miller Writing Apprehension Test (Pichette, 2009). Quantitative analyses found no difference on anxiety levels of online and face-to-face learners. However, studies showed that advanced students conducting lessons online tend to feel less anxious after the first semester of studies, when they get used to the process of online education. However, it is unclear if lower level students experience less level of anxiety during online classes.

According to particular number of scientists, there is an interconnection between the level of language anxiety that students experience and their gender identity. According to the data of research conducted by Ilyin and Pasynkova, female learners at the age of 16-17 tend to be experience higher level if anxiety (Pasynkova, 1996). Due to the data obtained by Kuzakova that was conducted among adult learners showed that male learners experienced greater amount of anxiety (21%), while female learners showed lower level of anxiety (14%)

Psychologists differentiate the anxiety at the global notion which is inherent character trait, from the situational anxiety which is related with a particular situation, including language anxiety

which occurs in the process of learning foreign language.

Well balanced communicational process between teachers and students is a specificity of the process of teaching foreign language as a subject. For learners, the process of second language acquisition and getting used to a foreign language and speech is important. Conducting the lessons via creating an language environment and teaching the specificities of the culture might also be important. This will contribute to the generation of outer motivation to learn the language. Nevertheless, a gnostic barrier might appear, where students may experience higher levels of language anxiety.

Language anxiety refers to a condition when learners might focus on the possible mistakes and failures of the speech, which leads to a negative impact on the process of education. In some cases it might be a consequence of individual features of a learner`s personality as being anxious; there is a situational anxiety in other cases. In the first case, it exhausts the body, in the second; it promotes competition, providing intellectual tension. It is known that empathy, which is an ability of person to put himself to a position of a speaker. Empathy is important in maintaining successful communication in native language. However, it is not the fact that learners with a higher level of empathy will lead to greater results and vice versa. One of the important tasks for teacher is to establish comfortable interpersonal relationships with students which will contribute to lessen the level of anxiety,and help to increase learner`s self-esteem and empathy. “Move away from the role of an “all-knowing” teacher, becoming only an advisor and helping the student to make a “choice” of the form of this or that communication intention” (Arshava, 2006). It means that students need to have freedom of speech and thought.

Language anxiety mainly appears from the following three key sources: the anxiety that the students experience while communicating interpersonally, the fear of making a mistake and getting negative assessment; and the anxiety which appears while making the test works and checking.

Following points show main reasons that lead to increase of the language anxiety:

– Social factors; that are related to individual`s confidence of self-presentation. This is caused by learner`s proficiency in target language and his/her behavior.

– Personal factors of a speaker: introverted or shy learners and their self-esteem.

Significant level of anxiety can be seen on subjects where learners need to make a presentation and they are constantly being interrupted and each mistake of the student is under the control. Other sources show that student`s with a higher-level competency tend to compare themselves to other students. “Students with a high level of linguistic anxiety are characterized by a very high level of fear of making a mistake, which generates anxiety” (Perevozchikova, 2005).

“An important aspect of language anxiety, which predetermines the relevance of its study in the context of an implicit assessment of emotional human stability, is that the latter has a negative impact on both the success of mastering academic activities, and on the processes of cognition and social interaction” (Horwitz, 2010). In order to reduce foreign language anxiety, it is crucial to create a specific program for learning a foreign language, which will reflect carious speech activities as speaking, listening, reading, and writing. It is crucial for this program to create pedagogically and psychologically relieve condition where the impact of outer stressors would be decrased and taken into account. Such kind of classes would encourage learners to adapt to online environment faster and increase learners` level of knowledge.

Results show that students who are having online classes may experience significant levels of language anxiety – especially in their first online course and that total level of language anxiety among learners are likely to rise due to the global pandemic and their rapid transition to online or distance learning, educators should consider introducing pedagogical interventions aimed at reducing the perceived level of students’ language anxiety. Several studies – methods based on language relief anxiety can be gleaned from the literature; and since very few studies have examined language anxiety among online learners, it is useful to examine the pedagogical implications in the classroom - based research. Nevertheless, it is important to take into account that some of the concerns that online language learners have may be the result of the online environment and / or the use of new learning technologies. To reduce concerns about the technical aspects of language learning, Gertler recommended analyzing language development and digital literacy of learners at the start of a course, which can help teachers identify

the types of support that learners need. be successful in the online learning environment. Goertler and Gacs, Goertler and Spasova have also suggested that instructors help students navigate the course so that they provide immediate feedback and develop coherent teacher and student roles (Goertler, 2011). While it may be difficult to provide immediate feedback to students, who can work at any time of the day and night, high-quality online language design and development includes the creation of the module " Getting Started ", which shows students how to navigate the course, where to find technical assistance and explore the educational technologies used to deliver the course, among many other key elements of targeting online learners. Using the same technologies throughout the course and from one course to the next will help students get used to them and are likely to reduce the anxiety associated with the technical aspects of language learning (Russel, 2020).

Materials and methods

Foreign Language Classroom anxiety scale was created by Horwitz in 1986 on the basis of scales that tested learner`s anxiety (Sarason), Fear of negative evaluation (Watson and friends), and personal report of communication apprehension (McCroskey). FLCAS is still used to measure learner`s perceived level of anxiety equally in online education and traditional face to face classes. The FLCAS consists of 33 questions rated in five levels from strongly agree (5 points) to strongly disagree (2 point). Score of anxiety is scaled by summing the scores of 33 questions. In order to assess the efficiency of the educator`s interventions lead for reducing the level of foreign language anxiety of student`s, it is useful for educator`s to measure student`s anxiety both at the beginning and at the end of the conducted course. FLCAS can be used in complex with a survey on student`s context and needs. Results section of the current article provides information on the ways to implicate the current knowledge by suggesting techniques and methods that could be done to reduce the level of foreign language anxiety in terms of online education.

Results and discussion

Pedagogical implications. Several methods and interventions have been proposed in the literature to help reduce general language anxiety in students. Instructors can check out some of these educational events - using FLCAS as pre - and post-test – to determine their effectiveness in their online or distant learning languages.

- Remember that students studying in the online environment may also experience the same high levels of anxiety as students studying in traditional form, in addition they are required to download the tasks and recordings of the project works that were conducted with their groupmates. Make sure that you provide directions and instruction sessions before students need to download the tasks. This may also involve first a sequence of activities with lower cognitive load requirements.
- Ask students to express their concerns; they can do so orally (in pairs or small groups) or through journaling (Gregersen, 2014). On an online platform, this can also be achieved through written discussion forums or oral voice forums.
- Involve students in relaxation activities, the exercises such as special deep breathing while listening to music in the target language may be helpful. It is also important to ask students about their concerns or the reason of low attendance. It could be done through the written or oral forms.
- It is better to let students know about the cases of language anxiety and let them know that their anxiety will decrease over time and with language practice. Remind students that they are not alone and that you are here to support and encourage them during this stressful time.
- Increase interaction in the target language through the planned role - plays, thinks – a pair of conversations and group discussion; ask students to practice in pairs or small groups before asking them to speak to the whole class. Increased interaction and pairing can also help students cope with feelings of social isolation and loneliness during a pandemic.
- Practice makes perfect and repetition is important in helping students to overcome the language anxiety. Give students enough time to practice before oral presentations. Remind students that you don't expect excellence and that everyone makes mistakes when learning another language.
- Build student support systems where students would be able to discuss the process of language acquisition and teachers could make corrections misconceptions about language learning.
- Encourage students to immerse themselves in the language environment by reading or watching films / TV shows in the target language. Online teachers may consider setting up a language exchange for their students to provide additional exposure to the language being studied.
- Bare in mind the fact that students who do not complete the assignment, for example those who seem unprepared or they are being unresponsive, might be experiencing language anxiety; keep in mind that "... extremely anxious

students have a strong motivation to avoid the classroom activities they fear most" (Horwitz, 2012).

In terms of the tools for online education, al-Farabi Kazakh National University provided their students and teachers with the online library where more than 4500 books are available online, provided free access to the Microsoft programs and signed their accounts. These tools made the process of online education more convenient, when everyone have access to the platform.

However, students who live in rural are, economically disadvantaged students, learners without access to hardware are in a greater disadvantage. As we move to the future, this gap should be fulfilled. Since the beginning of the process of remote education educators and learners more or less got used to the process of online education. UNESCO provided the list of available tools and different application on their website, where they provide with the online education solutions for online education (https://en.unesco.org/covid19/educationresponse/solutions). Another resource available is American Council on the teaching of Foreign Language, where they offer online instruction.

Solutions and resources provided are only part of the story. Another aspect is the fact that learners and educators were not prepared for the new learning environment and conducting the lesson from lockdown is causing significant stress. Apart from the problem of lacking the knowledge, many learners might also lack motivation, self-discipline and anxiety related to new technologies or general anxiety related to their home situation (lack of the available rooms, children, noisiness, no personal space, etc.). In this context, examining foreign language anxiety and steps instructors can take to reduce their students feeling of anxiety is very important. Despite the fact that alleviating all the anxiety related to the online education may not be possible, educators can help reduce the anxiety that students are feeling as a result of learning language online.

Conclusion

As online and distance language learning is currently taking place on a large scale across the country and the world, educators should consider implementing one or more of the research – based, pedagogical activities listed above to help ease their students' perceived levels of language anxiety. Teachers should select activities that they believe will be most appropriate for their students and for their own unique learning context. Given that most of the universities and the schools were largely unprepared for distance learning and training in the first school closing in 2020, it is crucial to language teachers to seek professional development in the online language pedagogy, as well as scientific – research – methods based on effective online language course design and delivery, if distance learning continues for a long period of time or that the schools are forced to close again from – for a pandemic after re – opening. Reach out to students with difficulty and offer advice on effective language learning strategies. This is especially important during distance learning when students are going through a series of life events in addition to learning a language. It may be necessary to telephone students who are completely disconnected from the course as they or their family members may be directly affected by COVID – 19. In these cases, students will require additional time and support to complete the course.

While most online educators and learners are integrating into the process of studies, researchers are seeking various ways and methods that would help to reduce the level of stress, increase the outcome of study and lessen the level of language anxiety on the classes of foreign language. Further studies on the topic of online learners and language anxiety will help educators and learners to overcome the problems related to language studies and anxiety related to the topic.

References

Goertler, S. (2011). Blended and open/online learning: Adapting to a changing world of language teaching. Present and future promises of CALL: From theory and research to new directions in language teaching, 471-502.

Gregersen, T., Macintyre, P. D., & Meza, M. D. (2014). The motion of emotion: Idiodynamic case studies of learners' foreign language anxiety. The Modern Language Journal, 98(2), 574-588

Horwitz, E. K. (2010). Foreign and second language anxiety. Language Teaching, 43(2), 154.

Russell, V., & Murphy-Judy, K. (2020). Teaching Language Online: A Guide for Designing, Developing, and Delivering Online, Blended, and Flipped Language Courses. Routledge.

Horwitz, E. (2014). Becoming a language teacher: A practical guide to second language learning and teaching. The CATESOL Journal, 25(1), 163-192.

Horwitz, E. K., & Young, D. J. (1991). Language anxiety: From theory and research to classroom implications. Pearson College Div.

Krashen, S. D. (1981). Second language acquisition and second language learning. University of Southern California.

Pichette, F. (2009). Second language anxiety and distance language learning. Foreign Language Annals, 42(1), 77-93.

Russell, V. (2016). Promoting online language learners' perceptions of connectedness through pedagogical innovations. In Computer Assisted Language Instruction Consortium (CALICO) Conference, Michigan State University, East Lansing, MI.

Russell, V. (2016). Promoting online language learners' perceptions of connectedness through pedagogical innovations. In Computer Assisted Language Instruction Consortium (CALICO) Conference, Michigan State University, East Lansing, MI.

Arshava, I.F. (2006). Emocional`naya stoikoist` cheloveka b ego giagnostika. Dnepropetrovsk: Izd-vo DNU.

Pasynkova, R.N. (1996). Svyaz` urovnei trevozhnosti podrostkov s effektivnostiu ih intellectual`noi deiatel`nosti. Pshychologicheskii zhurnal, 17(1), pp. 169-174

Perevezchikova, V.N. (2005). Psychologicheskie uslovya razvitya motivacii inoyazychnoi rechevoi deyatel`nosti studentov (Doctoral dissertation, Habarov. gos. pegagog. un-t).

IRSTI 06.51.51 https://doi.org/10.26577/CAJSH.2020.v6.i4.05

S.K. Kondybayeva[1]*, G.K. Sadykhanova[1], Katarzyna Czerewacz-Filipowicz[2], Li Zengrong[3]

[1]Al-Farabi Kazakh National University, Kazakhstan, Almaty
[2]Bialystok University of Technology, Poland, Bialystok
*e-mail: saltanat.kondybaeva@kaznu.kz

THE ROLE OF FOREIGN ECONOMIC RELATIONS OF CHINA ON THE MODERN STAGE AND ITS IMPACT ON KAZAKHSTAN

The article is dedicated for analyses cooperation of China with world economy, because as statistics shows PRC has powerful position. In the article, important historical periods were analyzed, as these historical moments had significant influence on China's economy formation after World War II. Nowadays, the growth of the global economy growing fast. For PRC one of the main features of economic growth is the foreign economic activity. In this regard, the cooperation with overseas countries and neighbor countries is the most sufficient task. Partnership between countries, especially in the trade form are effective for both sides, the reason is that countries have opportunities for rising economies. The model of acting foreign economic relations for China is economic zones. Such zones attract for partnership as create favorable conditions between countries. PRC's economic zones concentrated on the territories with industrial structures and these areas are integrated with international relations. As history of Silk way shows, China is a country with rich experience in trading and nowadays world recognize PRC as a power in the world. This article analyzes the foreign economic activity of China. The article describes international relations as a crucial part of the transformation of the national economic system. The work considers literature review of the formation of the worldwide division of labor from the side of theory and methodology. On an example of China explains the development of the national economy with an excess of one of the factors. The article analysis a regression model of influence economic relationships between Kazakhstani and Chinese companies within in the context of the project "One Belt – One Way".

Key words: government policy, international relations, trade, regression model.

С.К. Кондыбаева[1*], Г.А. Садыханова[1] Ч.Ф. Катаржина[2], Цзэнжун Ли[1]

[1]Әл-Фараби атындағы Қазақ ұлттық университеті, Қазақстан, Алматы қ.
[2] Белосток технологиялық университеті, Польша, Белосток қ.,
*e-mail: saltanat.kondybaeva@kaznu.kz

Қазіргі кезеңдегі Қытайдың сыртқы экономикалық қатынастарының рөлі және оның Қазақстанға әсері

Мақалада Қытайдың қазіргі әлемдік экономикадағы орны мен рөлі талданады, өйткені бұл ел тұрақты ұстанымға ие. Жұмыста Қытайдың Екінші дүниежүзілік соғыстан кейінгі экономикалық негізі мен модернизациясымен тығыз байланысты маңызды тарихи кезеңдер талданады. Экономикалық реформаларды бастау, бәсекеге қабілетті экономикалық жүйені құру ҚХР үкіметі үшін басты міндет болды. Соңғы жылдары әлемдік экономика қарқынды дамуда. Бұл міндеттің маңызды бағыты басқа мемлекеттермен сыртқы экономикалық байланыстар болды. Мұндай ынтымақтастық екі жаққа да тиімді, өйткені елдерге өз экономикаларын дамытуға мүмкіндік берді. Қытай шетелдік серіктестерге қолайлы жағдай жасайтын экономикалық аймақтар құрды. Экономикалық аймақтар негізінен әлемдік экономикаға интеграцияланған өндірістік құрылымдардың аумақтарынан тұрды. Сыртқы экономикалық қызмет барған сайын экономикалық дамудың негізгі факторларының біріне айналуда. Қытай әлемдегі ежелгі сауда державаларының бірі. Бұл мақалада Қытайдың сыртқы экономикалық қызметі талданады. Мақалада халықаралық қатынастар ұлттық экономикалық жүйені қайта құрудың шешуші бөлігі ретінде сипатталған. Жұмыста халықаралық еңбек бөлінісінің қалыптасуына теория мен әдіснамалық тұрғыдан шолу қарастырылған. Қытай мысалында ұлттық экономиканың дамуын факторлардың бірінен асып кетуімен түсіндіреді. Мақалада «Бір белдеу – бір жол» жобасының аясында Қазақстан мен Қытай компаниялары арасындағы экономикалық қатынастарға әсер етудің регрессиялық моделі талданады.

Түйін сөздер: мемлекеттік саясат, халықаралық қатынастар, сауда, регрессиялық модель.

С.К. Кондыбаева[1]*, Г.А. Садыханова[1], Ч.Ф. Катаржина [2], Цзэнжун Ли[1]

[1]Казахский национальный университет им. аль-Фараби, Казахстан, г. Алматы
[2] Белостокский технологический университет, Польша, г. Белосток
*e-mail: saltanat.kondybaeva@kaznu.kz

Роль внешнеэкономических связей Китая на современном этапе и его влияние на Казахстан

В статье анализируются место и роль Китая в современной мировой экономике, поскольку эта страна занимает все более твердые позиции, а также анализируются важные исторические периоды, тесно связанные со становлением и модернизацией экономики Китая после Второй мировой войны. Начало экономических реформ, создание конкурентоспособной экономической системы было главной задачей правительства КНР. Важнейшим направлением этой задачи были внешнеэкономические связи с другими государствами. Такое сотрудничество эффективно для обеих сторон, поскольку позволяет странам развивать собственную экономику. Китай построил экономические зоны, которые создали благоприятные условия для иностранных партнеров. Экономические зоны в основном состояли из территорий промышленных структур, интегрированных в мировую экономику. В последние годы развитие мировой экономики стремительно растет. Внешнеэкономическая деятельность все больше становится одним из основных факторов экономического развития. Китай – одна из старейших торговых держав мира. В статье исследуются внешнеэкономическая деятельность Китая, при этом международные отношения рассматриваются как важнейшая часть трансформации национальной экономической системы. В работе рассматривается литературный обзор становления международного разделения труда со стороны теории и методологии. На примере Китая объясняется развитие национальной экономики с превышением одного из факторов. В статье анализируется регрессионная модель влияния экономических отношений между казахстанскими и китайскими компаниями в рамках проекта «Один пояс – один путь».

Ключевые слова: государственная политика, международные отношения, торговля, регрессионная модель.

Introduction

Beginning the economic reorganizations, the construction a competitive economic structure was one of the important mission for the Chinese authority. The overseas economic cooperations with other neighbor countries were the greatest and vital course of this mission. Partnership between countries, especially in the trade form are effective for both sides, the reason is that countries have opportunities for rising economies. The model of acting foreign economic relations for China is economic zones. Such zones attract for partnership as create favorable conditions between countries. PRC's economic zones concentrated on the territories with industrial structures and these areas are integrated with international relations.

The economic reorganizations has had a progressive consequence. Currently, several states attempt to repeat this practice, because this model of economic development proved values the PRC expected. The inheritance of Western economic scientists' works inspired China, as the impression of the opening the doors of the nationwide to the whole world was engaged from the works of classical and neoclassical economic concepts. The first project of economic zone by PRC was the "Shannon" in Iceland. This project of economic zone afforded to attract the interests of investors' funds. The building of entities in the territory of the PRC was probable because of growing export sizes, taxes, and customs duties.

The PRC had closing economic structure for the period of the overall integration of countrywide economic movement with the overseas countries' economies. China's government accepted a totally new reform in the late 1970s. The expansion of a policy aimed at the inclusive expansion of overseas economic relationships was a significant and essential share of the direction of deep economic reorganizations. The course directed the steady integration of China's countrywide economy to the world economy. This direction of the strategy was to growth the possible of economic, research and technical relations with overseas states. The goal involved the operational building of the economy, the strengthening of production process, the overview of active procedures of organization and management, and the development of municipal relationships in PRC.

The PRC's overseas economic strategy has different ways. From side to side, the modification of guidelines, it is possible to study detailed native circumstances more completely and to deliver particular tackles for resolving convinced priorities.

Literature Review

The working of the worldwide trade structure, monetary and credit procedures, and the establishment

of services are the basics and essences of the world economic structure. The principal suggests around the growth of the economy we can realize in the papers of classical economists. The member of classical school A. Smith (Smith, 1904) was the leading economist, who presented thought around an examination of the organization of the worldwide division of labor. According to the scientific literature, his method is identified as the principle of absolute advantage.

The Swedish economists Eli Heckscher and Bertil Ohlin generated a natural resource abundance concept the end of the nineteenth century and the beginning of the twenties century. From side to side, this novel theory tried to clarify the details and instrument for the worldwide trade in manufacturing outputs. In 1919, E. Heckscher assessed trade practices and expressed the key requirements of the natural resource abundance concept. In the 20s and 30s, Bertil Ohlin widespread and advanced these requirements (Ohlin, 1933).

Agreeing to the Heckscher-Ohlin idea, nations transfer those properties, which they can maximum resourcefully and abundantly produce. The three main factors labour, capital and land are recognized to the classification in economic theory. Nevertheless, the Heckscher-Ohlin concept is two-factor that relates only two factors labor power and capital investment. Therefore, a nation has in abundance certain of the two factors. Certain properties are labor demanding, whereas others are capital demanding. Therefore, in a state, which surplus of labor factors and lack of capital factors, the labor factor will be comparatively inexpensive, and capital factor will be costly. Furthermore, vice versa, a state with limited labor assets and there is appropriate capital, labor will be expensive and capital cheap. Nations will select exporting or importing depending on present assets they have. The economies will export outputs, which are comparatively inexpensive to produce, by more of the "cheap factor of production." This is precise significant to include the influence of redundancy of one of the factors on the expansion of the economic movement. T. M. Rybczynski (Rybczynski, 1955) is recognized as an economist examined this problem. T. M. Rybczynski made a statement constructed on the consequences of his papers. The statement is Rybczynski theorem. According to the theorem, a rise in the supply of one of the factors of production, all the factors remain equal, will cause a rise in the production produced with the active use of this factor and to a reduction in the output of other outputs.

The applied meaning of the theorem can be shown through the experience of the PRC's economic expansion. It proves that the high proportion of the "labor" force in the economy needs the fascination of the extra economic features "capital" and "land".

The next theory is "product life cycle", which is the most widely held theory of the neotechnological course. R. Vernon (Vernon, 1966) created this theory in 1966 and interested practically all economists. The cause such attractiveness was that it more precisely describes the existent condition of the worldwide division of labour in the current time. Consistent with this theory, every innovative output has phases. A phase includes the periods of application, development, maturity and ageing.

In agreement with this theory, economies' concentration and exporting on the same good, nevertheless at not the same periods of maturity.

An instance is the state's growth of the Asia-Pacific region. These countries have a continuous process of the fruitful way of definite stages of economic growth by high-industrial States, new industrial countries (NIS) and ASEAN countries (Czerewacz-Filipowicz and Konopelko, 2016). For instance, ASEAN states in the sphere of technology nowadays are doing the same as NIS did in the recent past and embark on the identical way of "quality of specialization."

The concepts study the growth process of IER (Czerewacz-Filipowicz and Konopelko, 2016). As we mentioned steadily, the IER academics involved an increasing amount of factors included in the formation of a countrywide economic structure. Study of the relationship of these factors illustrates the likelihood of expansion of the countrywide economy if it is joined into the world system.

As said by Yuan Peng, Director of the Institute of the USA of the Chinese Academy of Modern International Relations, the PRC is at the current on a great period of development. In conjunction with other countries, in the condition of self-determining and shared renovation. The PRC should be defined as an important dynamic force for transformations in the frame of international system that defines the place of China in the modern world. The PRC nowadays reproduces four not the same units, and so-called "four in one" (Peng, 2014):

– Developing nation;
– Growing power;
– *W*orldwide power;
– Quasi – superpower.

In the up-to-date world, well-known are four types of states – superpowers, strong, medium, and weak (Ling, 2014).

The first set of superpowers contains only one nation – the USA. By way of U.S. strategy, the concept of realism, along with the geopolitical and

sea power of Mahan theories are being realized. The American policy is worldwide, the USA's position in defining the guidelines of the game in the world is leading, besides is the author of basic concepts of international relationships.

The next group of robust countries consist of Great Britain, France, Germany, Japan, China, Russia, India, Brazil, etc. These states are involved in worldwide matters, guiding key exertions to their areas. The set of strong states practice the value of "balance of power" that attends as the determination of concluding coalitions as a path to counter the PRC to USA.

The third set of states contains "medium countries". In the outline of global political architectonics, these states are the member of the middle class, together with the countries of Northern and Eastern Europe, the Middle East, Central and Southeast Asia, Africa and Latin America. Not every of these states has the measurements to have a self-governing influence on worldwide policy as well as on local matters. Two-sided and boundary issues are the key difficulties addressed by the states of this set (Czerewacz-Filipowicz, 2019). Unions of medium-sized states involve of more than 10 states, only in this circumstance the group is actual.

The fourth set of states contains small and very small "weising" states, like Luxembourg and Andorra in Europe, Bhutan and Brunei in Asia. Intended for the most part, states have its place in this set are external viewers in the application of global policy. These states be able to join great powers.

According to Wang Honggang, an expert at the Chinese Academy of Contemporary International Relations, the part of USA in PRC has been overvalued ever since the 2008 worldwide economic crisis (Honggang, 2014). The PRC has expressed its place by means of respect to the United States and China did not consider the America as the single global arbitrator.

Materials and methods

Foreign economic relations of China

The processes of the worldwide division of labour and internationalization of manufacture, the speeding up of global research and technological development have caused China to have an objective need to pursue a policy of foreign economic openness in the interests of its own development at the step of changeover to a market economy.

The 3rd Plenary Session of the Central Committee of the Communist Party of PRC of the 11th convocation (December 1978), proclaiming "openness" as a long-term policy, a necessary condition and an essential prerequisite for the modernization of the economy (Liu and etc., 2020). This provision was included in the manuscript of the new-fangled Constitution of China of 1982.

Having defined a general course for the expansion of external relations and having taken the first steps towards its implementation, the PRC has gone very consistently. The ways: the establishment of a free economic zone in the south-east of the country in 1980, the opening of port cities for foreign capital along the coastline in 1984, the creation of special areas of technical and economic development in 1985. All these decisions gave opportunity to create a base for attracting foreign capital and, most importantly, the latest technologies (Czerewacz-Filipowicz, 2019).

For the duration of the years of reorganization, the PRC's integration to international economic relationships has enhanced markedly, particularly in the Asia-Pacific area. The part of the overseas economic issue in the nationwide economy has improved. The normal yearly growing rate of overseas trade through the first half of the 1990s (19.5%) was well ahead of the general economic development. In 2002, overseas trade income raised to $ 510 billion, and in 2018 amounted to $ 4.5 trillion (Lalwani and Chakraborty, 2020). The amount of trade associates of China raised meaningfully in the 1990s: since 173 in 1990 to 227 in 2002.

Consistent with formal statistics, three hundred biggest transnational corporations (TNCs) in the world decided to invest in China. Twenty major companies of Japan, around 19 decided to choose Chinese market as a new place. Surrounded by European TNCs Germany's ten major companies, nine invested in PRC. Even, among the twenty biggest businesses in the USA and South Korea, sixteen decided to invest in China.

At the beginning of the 1980s, TNCs invested numerous million dollars in single capacity in PRC. Nowadays investments into single item in PRC on ordinary raised to ten billion dollars, items with the amount over 100 billion dollars give the impression more and more. The plan of the German company BASF and the petrochemical plant Yangtze (China) delivers on behalf of the attraction of investment from foreign countries of 3 billion dollars.

Exports raised by 7.1% in yearly terms to 16.42 trillion Yuan, imports – by 12.9% to 14.09 trillion Yuan in 2018. The trade excess was therefore concentrated by 18.3% to 2.33 trillion Yuan.

Furthermore, the whole size of imports and exports in the outline of conservative trade presented a growth of 12.5%, amounting to 17.64 trillion Yuan, otherwise 57.8% of the nation's overseas trade income, which is 1.4 proportion points greater than the level of 2017.

The PRC's trade income with the European countries, United states and ASEAN nations raised by 7.9%, 5.7% and 11.2%, correspondingly. They accounted for 41.2% of the nation's full overseas trade.

At a rate overhead normal, trade income with states along the "Belt and Way" improved, which amounted to 8.37 trillion Yuan that is 13.3 percent greater than in 2018 (Jaros and Tan, 2020).

In spite of a comparatively little portion of global trade of 2.9% in 1995, PRC in several years of reorganization has become a great world trading power, which shows ranking the 11th place in the global in overseas trade and export in the 1990s, taken place in 1978 only in 32. In 2001, the PRC was amongst the highest trading powers in the world (Yang and Liang, 2019). China's important part in the global economy is also because of the extra-fast development of countrywide production, the interests of foreign capital in local market, the aggregate size of gross national product, which is lower in actual positions only to the USA and Japan.

Analysis of economic relationships of Kazakhstan with Chinese companies in the context of the project "One Belt – One Way"

By 2015, in connection with the application of the project "One Belt – One Way," direct Chinese investments in the Republic of Kazakhstan achieved to $ 23.6 billion. In the frame of the Chinese FDI, Kazakhstan has the 3rd ranks in the worldwide after Australia and the USA (**Maochun**, etc., 2015; Official website of Ministry of national economy of the RK Statistics Committee). The key investment assignments of Chinese businesses in the nation are connected to the fuel complex, primarily oil and gas manufacture (greater than 25 percent of Kazakhstani oil is made by Chinese corporations), the building and operation of gas and oil pipelines. Of the whole FDI, $ 21.2 billion of investment (is 90%) was directed in fuel and energy complex and pipelines, with $ 17.2 billion in the taking out and processing of energy resources and around $ 4 billion in the transference of oil and gas. The foremost Chinese investor in Kazakhstan is the biggest Chinese oil and gas corporation, China National Petroleum Corporation (CNPC).

Presently, further 2,600 Chinese companies function in Kazakhstan, and the amount is continuously growing (Official website of Ministry of national economy of the RK Statistics Committee).

In this scientific work, the authors are guided by the theoretical method of research – comparative analysis of scientific literature, articles, interview records and conferences on the issue, processing and synthesis of obtained data, analysis of economic and diplomatic treaties and agreements between China and Kazakhstan, and use the method of building regression dependence.

In order to determine the level of influence of Chinese companies on the economy of Kazakhstan, we will build a model of panel regression, reflecting dependence:

Kazakhstan's GDP (in billions of US dollars) during the period from 2014 to 2018 from such indicators as total assets of Chinese companies (Total Assets – TA – in billions of dollars), Total liabilities of Chinese companies (Total Liabilities – TL – in billions of dollars), tax payments (Taxes, billions of dollars), return on equity of Chinese companies (ROE,%), return on assets of Chinese companies (ROA,%), project profit (Profit, billion dollars), the number of employees – citizens of Kazakhstan in the analyzed Chinese companies (KZ, thousand people), the number of workers – citizens of China in the analyzed Chinese companies (China, thousand people), investment volume (Investments – Inv,% of Kazakhstan's GDP), import volume (Import, billion dollars), export volume (Export, billion dollars), Tenge to US dollar exchange rate (Exchange rate – EX).

The model for studying the dependence of Kazakhstan's GDP in the period from 2014 to 2018 is as follows:

$$GDP_t = \beta_0 + \beta_1 TA_t + \beta_2 TL_t + \beta_3 Tax_t + \beta_4 ROE_t + \beta_5 ROA_t + \beta_6 Profit_t + \beta_7 KZ_t + \beta_4 CH_t + \beta_4 Inv_t + \zeta \quad (1)$$

where, GPD – dependent variable,

TA – total assets of Chinese companies (Total Assets – TA),

TL – total liabilities of Chinese companies (Total Liabilities – TL),

TAX – tax payments (Taxes),

ROE – return on equity of Chinese companies (ROE),

ROA – return on assets of Chinese companies (ROA),

Profit – project profit (Profit),

KZ – the number of employees – citizens of Kazakhstan in the analyzed Chinese companies (KZ),

CH – the number of workers – citizens of China in the analyzed Chinese companies (China),

Inv – investment volume (Investments),

Import – import volume,

Export – export volume,

ER (exchange rate) – exchange rate and ζ – error.

The following hypotheses are put forward as part of the study:

H_1: The GDP of Kazakhstan in the context of the plan "One Belt, One Way" is positively influenced by such indicators as total assets of Chinese companies (TA), tax payments (Taxes), return on equity of Chinese companies (ROE), the number of employees – citizens of Kazakhstan in the analyzed Chinese companies (KZ), the number of workers – citizens of China in the analyzed Chinese companies (China), investment volume (Inv), import volume (Import).

H_2: The GDP of Kazakhstan in the context of the plan "One Belt, One Way" is negatively influenced by such indicators as Total liabilities of Chinese companies (TL), return on assets of Chinese companies (ROA), project profit (Profit), export volume (Export) and exchange rate (ER). Let us construct a matrix of observed values of t-statistics for all coefficients r_{ij} (table) for α=0,01 = α=0,1 = 2,578764163.

Table 1 – Matrix of observed t-statistic values (α=0,01 = α=0,1 = 2,578764163)

	GDP Kazakhstan (Y), billion dollars	TA, billion dollars	TL, billion dollars	Taxes, billion dollars	ROE, %	ROA, %	Profit, billion dollars	KZ, the number of employees	Chin, the number of employees	Invest, % from GDP of Kazakhstan	Import, billion dollars	Export, billion dollars	ER– Tenge to US dollar exchange rate
GDP Kazakhstan (Y), billion dollars		0,407	-1,596	1,645	-1,507	-2,192	-0,787	0,847	**-4,573**	1,293	-0,734	**3,575**	**-83,406**
TA, billion dollars	0,407		**60,354**	**22,385**	**-6,392**	**-6,217**	**19,142**	**54,566**	**12,190**	**10,047**	1,725	**-2,658**	0,728
TL, billion dollars	-1,596	**60,354**		**25,750**	2,443	0,650	**21,994**	**33,901**	**34,070**	**7,976**	1,896	-2,483	2,140
Taxes, billion dollars.	1,645	**22,385**	**25,750**		**11,567**	1,046	**24,588**	**13,091**	**12,993**	**17,272**	1,529	0,011	-0,912
ROE, %	-1,507	**-6,392**	2,443	**11,567**		**110,827**	**39,822**	**-10,233**	**14,271**	**33,378**	**-12,229**	**-10,547**	0,870
ROA, %	-2,192	**-6,217**	0,650	1,046	**110,827**		**37,395**	**-10,044**	**12,190**	**32,596**	**-14,430**	**-12,702**	1,403
Profit, billion dollars	-0,787	**19,142**	**21,994**	**24,588**	**39,822**	**37,395**		**5,717**	**17,983**	**71,514**	**-8,634**	**-10,345**	0,776
KZ	0,847	**54,566**	**33,901**	**13,091**	**-10,233**	**-10,044**	**5,717**		**6,415**	**-4,015**	**11,486**	**7,433**	-0,122
China	**-4,573**	**12,190**	**34,070**	**12,993**	**14,271**	**12,190**	**17,983**	**6,415**		2,374	2,386	-0,105	**4,391**
Invest, %	1,293	**10,047**	**7,976**	**17,272**	**33,378**	**32,596**	**71,514**	**-4,015**	2,374		**-17,831**	**-13,270**	-1,080
Import, billion dollars	-0,734	1,725	1,896	1,529	**-12,229**	**-14,430**	**-8,634**	**11,486**	2,386	**-17,831**		**16,208**	0,593
Export, billion dollars	**3,575**	**-2,658**	-2,483	0,011	**-10,547**	**-12,702**	**-10,345**	**7,433**	-0,105	**-13,270**	**16,208**		**-7,083**
ER	**-83,406**	0,728	2,140	-0,912	0,870	1,403	0,776	-0,122	**4,391**	-1,080	0,593	**-7,083**	

Note – compiled by the authors on the Excel. Statistical data source (Official website of Ministry of national economy of the RK Statistics Committee).

By the results presented in table 1, the observed value of t-statistics is more than critical t_{cr}=2.578764163 on the module for the pair coefficients of correlation highlighted in bold type in the above-stated table. Consequently, the hypothesis that these coefficients are equal to zero is rejected

with a probability of error of 0.01 and 0.1, i.e. corresponding coefficients are significant.

For the remaining coefficients, the observed value of the t-statistic is less than the critical value modulo, hence the H_0 hypothesis is not rejected, i.e. the coefficients not shown in bold are insignificant.

We construct a matrix of observed values of t-statistics for all coefficients r_{ij} (table) for α = 0.05 = 1.961379532.

Table 2 – Matrix of observed t-statistic values (α=0,05 = 1,961379532)

	GDP Kazakhstan (Y), billion doll.	TA, billion dollars	TL, billion dollars	Taxes, billion dollars	ROE, %	ROA, %	Profit, billion dollars	KZ, the number of employees	Chin, the number of employees	Invest, % from GDP of Kazakhstan	Import, billion dollars	Export, billion dollars	ER– Tenge to US dollar exchange rate
GDP Kazakhstan (Y), billion dollars		0,407	-1,596	1,645	-1,507	**-2,192**	-0,787	0,847	**-4,573**	1,293	-0,734	**3,575**	**-83,406**
TA	0,407		**60,354**	**22,385**	**-6,392**	**-6,217**	**19,142**	**54,566**	**12,190**	**10,047**	1,725	**-2,658**	0,728
TL	-1,596	**60,354**		**25,750**	**2,443**	0,650	**21,994**	**33,901**	**34,070**	**7,976**	1,896	-2,483	**2,140**
Taxes	1,645	**22,385**	**25,750**		**11,567**	1,046	**24,588**	**13,091**	**12,993**	**17,272**	1,529	0,011	-0,912
ROE, %	-1,507	**-6,392**	**2,443**	**11,567**		**110,827**	**39,822**	**-10,233**	**14,271**	**33,378**	**-12,229**	**-10,547**	0,870
ROA, %	**-2,192**	**-6,217**	0,650	1,046	**110,827**		**37,395**	**-10,044**	**12,190**	**32,596**	**-14,430**	**-12,702**	1,403
Profit,	-0,787	**19,142**	**21,994**	**24,588**	**39,822**	**37,395**		**5,717**	**17,983**	**71,514**	**-8,634**	**-10,345**	0,776
KZ	0,847	**54,566**	**33,901**	**13,091**	**-10,233**	**-10,044**	**5,717**		**6,415**	**-4,015**	**11,486**	**7,433**	-0,122
China	**-4,573**	**12,190**	**34,070**	**12,993**	**14,271**	**12,190**	**17,983**	**6,415**		**2,374**	**2,386**	-0,105	**4,391**
Invest, %	1,293	**10,047**	**7,976**	**17,272**	**33,378**	**32,596**	**71,514**	**-4,015**	**2,374**		**-17,831**	**-13,270**	-1,080
Import,	-0,734	1,725	1,896	1,529	**-12,229**	**-14,430**	**-8,634**	**11,486**	**2,386**	**-17,831**		**16,208**	0,593
Export,	**3,575**	**-2,658**	**-2,483**	0,011	**-10,547**	**-12,702**	**-10,345**	**7,433**	-0,105	**-13,270**	**16,208**		**-7,083**
ER	**-83,406**	0,728	**2,140**	-0,912	0,870	1,403	0,776	-0,122	**4,391**	-1,080	0,593	**-7,083**	

Note – compiled by the authors on the Excel. Statistical data source (Official website of Ministry of national economy of the RK Statistics Committee).

The strongest correlation is observed between TA and TL, as well as Investments and Profit, ER and GDP.

Estimation of regression model parameters

We will build regression models based on GDP (on three levels of significance 90, 95, 99).

Due to the results of these tables, we can get the beta coefficients in our model. According to the tables, almost all variables have a p-value less than 0.05, which means that the variables are of great importance.

As a result, the equation is as follows:

$$GDP = 318{,}616 + 0{,}286TA - 7{,}198TL + 3{,}053TAX + 1{,}759ROE - 4{,}253ROA - 4{,}289Profit + 0{,}001KZ + 0{,}001CH + 1{,}337Inv + 0{,}901Imp - 4{,}404Exp - 3{,}539ER. \quad (2)$$

Thus, in the framework of the "One Belt, One Way" project, indicators such as current assets of Chinese companies (PV = 0,286), TAX (PV = 3,053), ROE (PV=1.759), number of employees – citizens of Kazakhstan involved in the project implementation (PV = 0,001), CH (PV = 0,001), Inv (PV=1,337), Imp (PV=0,901) have positive effects Kazakhstan's GDP.

The following indicators provide the negative impact on the GDP of Kazakhstan at the level of significance 90 within the project implementation: TL (PV=-7,198), ROA (PV=-4,253), Profit (PV=-4,289), Exp (PV=-4,404), ER (PV = -3.539).

Conclusion

In the framework of openness, the global trade is the one of the factor and reason of the economic progress and expansion of the states. From the time when worldwide relationships create conditions for availably usage a chance to appreciate the benefit of the nationwide economic structure. It is important to high point the role of the government. As shows the history of economic development of China, the new economic reforms have significant effect. China's Government is generating advantageous surroundings for export expansion. The PRC is producing the compulsory portions for assembly inside of the state, which is measured as strategies to protect currency and make an excess in trade (Kondybayeva etc., 2018).

The manufacture processes, scientific research, computerization are fields that requires maximization of efforts. Because focusing to these spheres can lead to economic growth of the nation. Any country should develop all industries equally and try to avoid the consequences as excessive development of one industry in relation to another, as it can lead to imbalance and crisis in the economy as a whole.

Chinese Government started their policy from of attracting foreign investment. Nowadays, they are focusing on science development and searching ways to attract new technologies to China. Because novelty and innovations are, not only source of science growth, but also conditions for attracting further investment. This applies mainly to direct investment by entrepreneurs, large corporations and TNCs.

After 1991 when Kazakhstan gained independence, political, cultural and economic ties with foreign countries began to develop actively. Especially, relations with China: bilateral trade is rapidly gaining momentum, and areas of cooperation are constantly expanding. The volume of foreign direct investment (FDI) from China to RK also reflects the degree of trade and economic cooperation.

Trade and economic cooperation between Kazakhstan and China are characterized by complementarity. However, these complementary benefits are not fully utilized, and the investment climate needs to be improved.

References

Czerewacz-Filipowicz, K. (2019) The Eurasian Economic Union as an Element of the Belt and Road Initiative. Comparative Economic Research, vol. 22 -2, pp. 23-37. DOI: 10.2478/cer-2019-0010

Czerewacz-Filipowicz, K., Konopelko, (2016) A. Regional Integration Processes in the Commonwealth of Independent States: Economic and Political Factors. Book. Springer (2016). Pages 348. DOI: 10.1007/978-3-319-47563-9

Honggang, W. (2014) How can the U.S. and China build a "Cooperative partnership". Contemporary International Relations, vol. 21 – 4. Source// http://www.cicir.ac.cn/english/ArticleView.aspx?nid=2934

Jaros, K.A., Tan, Y. (2020) Provincial power in a centralizing china: The politics of domestic and international "development space". China Journal, vol. 83 – 1, pp. 79-104. DOI: 10.1086/706256

Kondybayeva, S., Nurgazy, S., Ospanov, S., Mukhamediyev, B., Sadykhanova, G., (2018) Food Market of Kazakhstan: Current State and Innovative development Directions. Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020, P. 4312-4317.

Lalwani, V., Chakraborty, M. (2020) Aggregate earnings and gross domestic product: International evidence. Applied Economics, vol. 52 – 1, pp. 68-84. DOI: 10.1080/00036846.2019.1640859

Ling, J. (2014) "Silk Roads"– China Marshall Plan. (China Science Center for International Studies) http://www.cnki.com.cn/Article/CJFDTOTAL-GJWY20150 1008.html

Liu, S., Dong, Z., Ding, C., Wang, T., Zhang, Y. (2020) Do you need cobalt ore? Estimating potential trade relations through link prediction. Resources Policy, vol. 66

Maochun, H., Jibing, Z., Yapeng, Z., Bin, T. (2015) Center of Research in Economic Diplomacy. Journal of Xinjiang Normal University (Edition of Philosophy and Social Sciences), vol.36 – 3. P. 44.

Official website of Ministry of national economy of the RK Statistics Committee/ Official statistics/ Monitoring of the sustainable development goal until 2030. Source: https://stat.gov.kz/official/sustainable_development_goals

Ohlin, B., (1933) Interregional and International Trade, Cambridge, Mass.; Harvard University Press.

Peng, Y. (2014) China's strategic choices. Contemporary International Relations, vol. 20 – 1. pp. 17-32

Rybczynski, T. M. (1955) Factor Endowment and Relative Commodity Prices. Economica, New series, vol.22-88, pp.336-341. DOI:10.2307/2551188

Smith, A. (1904) An Inquiry into the Nature and Causes of the Wealth of Nations. London: Methuen and Co., Ltd., ed. Edwin Cannan, Fifth edition.

Vernon, R. (1966) International Investment and International Trade in the Product Cycle. The Quarterly Journal of Economics, 2, pp. 190-207. DOI:10.2307/1880689

Yang, Y.E., Liang, W. (2019) Introduction to China's Economic Statecraft: Rising Influences, Mixed Results. Journal of Chinese Political Science, vol. 24 – 3, pp. 381-385. DOI: 10.1007/s11366-019-09614-1

IRSTI 03.61.91 https://doi.org/10.26577/CAJSH.2020.v6.i4.06

S.N. Abashin [1], G.A. Meirmanova [2*], K.B. Baudiarova[2]

[1]European University in St. Petersburg, Russian, St. Petersburg
[2]Al-Farabi Kazakh National University, Kazakhstan, Almaty
*e-mail: meirmanovaga@gmail.com

STATUS OF THE KAZAKH BRIDAL: TRADITIONS AND MODERNITY

In the article, the author clearly describes the role and etiquette of brides in Kazakhstani society. Ethnocultural education of Kazakh brides has entered their daily life. This has been the case in nomadic society for centuries. In the morning, they show respect by welcoming their parents and doing their daily routines – making tea early in the morning, setting the table, serving tea, cleaning the house, cooking, milking cows, entertaining guests, farming, and so on. The tradition of greeting is the respect and greeting of brides to their parents and in-laws. She greetings to other family members too. The bridegroom bowed down to greet the bridegroom's relatives. Shemakes tea and sets the table. The one who greets the bride expresses her gratitude to the bride. The bride wears a scarf in front of adults. It is also respect to adults.Forgiveness, understanding, helping each other in difficult momentare the tips that lead to happiness. As they say, "from the very beginning, the wife, from the age of the child," the boy's mother and father pay great attention to the bride's behavior, ability to do something and character. Because the customs in each country are different.

Key words: etiquette, big house, shanyrak, mother-in-law.

С.Н. Абашин[1], Г.А. Мейрманова[2*], Қ.Б. Баудиярова[2]

[1]Санкт-Петербургтегі Еуропалық Университет, Ресей, Санкт-Петербург қ.
[2]Әл-Фараби атындағы Қазақ ұлттық университеті, Қазақстан, Алматы қ.,
*e-mail: meirmanovaga@gmail.com

Қазақ келіндерінің мәртебесі: дәстүр мен жаңашылдық

Мақалада авторлар қазақ қоғамындағы келін әдебін зерттейді. Әр елдегі әдет-ғұрыптар әртүрлі. Авторлар қазақ келінінің әдеп ерекшеліктеріне назар аударып, оны басқа халықтармен салыстырады. Сондай-ақ, ерлі-зайыптылардың, келіндердің этикетіне және бала тәрбиесіне маңызды көңіл бөлінеді. Полигамия, ажырасу мәселелеріне қатысты мінез-құлық нормалары, сонымен қатар күнә, қылмыс және оларды шешу жолдары туралы дәстүрлі ұғымдар нақтырақ талданады. Авторлар қазақ қалыңдығының күнделікті өміріне енген этномәдени тәрбиесін сипаттайды. Бұл ғасырлар бойы көшпелі қоғамда болған. Таңертең олар ата-енесіне сәлем салып, ізет көрсетіп, күнделікті іс-әрекеттерді орындайды: таңертеңгілік ас дайындау, үйді тазалау, тамақ дайындау, сиыр сауу, қонақ қарсы алу, шаруашылықпен айналысу және т.б. Қазақ дәстүрінде келінге қатысты ең қатаң этикет нормалары бар. Жас келін шаңырақ табалдырығын оң аяқпен (бұл некенің сәтті басталғанын көрсетеді) аттағанынан бастап, отқа май құйып, күйеуінің жанұя мүшесі атанады. «Келінді босаға аттағаннан, баланы бесіктен бастап тәрбиелеу» дегендей ата-ене келінді отбасы заңдылықтарымен таныстырып, үй шаруашылығына бейімдейді.

Түйін сөздер: этикет, үлкен үй, шаңырақ, қайынене, отағасы.

С.Н. Абашин[1], Г.А. Мейрманова[2*], К.Б. Баудиярова[2]

[1]Европейский университет в Санкт-Петербурге, Россия, г. Санкт-Петербург
[2]Казахский национальный университет имени аль-Фараби, Казахстан, г. Алматы
*e-mail: meirmanovaga@gmail.com

Статус казахской невестки: традиции и современность

В статье авторы исследуют роль этикета невестки в казахстанском обществе. Обычаи в каждой стране разные. Авторы акцентируют внимание на особенности этикета каахской невестки, сравнивая ее с другими народами. Важное внимание также уделено этикету супругов, невестки и воспитанию детей. Освещены также поведенческие нормы, связанные с проблемами многоженства, развода, а также этническим осмыслением традиционных понятий о грехе, преступлений и способах их разрешений. Авторы описывают

этнокультурное воспитание казахских невест, вошедшее в их повседневную жизнь. Так было в кочевом обществе на протяжении веков. Утром проявляют уважение, приветствуя родителей, и выполняют повседневные дела – заваривают чай рано утром, накрывают стол, подают чай, убирают в доме, готовят, доят коров, развлекают гостей, занимаются сельским хозяйством и так далее. В традиции казахов именно по отношению к невестке были разработаны наиболее жесткие этикетные нормы. Как только молодая переступала порог юрты мужа правой ногой (это предвещало благополучие в браке) и наливала масло в огонь, она становилась членом его семьи, рода. Как говорится, «с самого начала жена, с возраста ребенка», мать и отец мальчика уделяют большое внимание поведению невесты, умению заниматься хозяйством, воспитанию.

Ключевые слова: этикет, большой дом, шанырак, теща, конное расследование, глава семьи.

Introduction

Bride etiquette is a code of conduct that is an essential principle for the bride, who is exposed to a new environment after the wedding. The bride's house is a link of coexistence, which includes the qualities of dignity, politeness, decency, compactness, harmony, flexibility, morality, foresight, purity and strict adherence to the norms of kindness in society and the community, focuses on upbringing in accordance with moral norms.

Materials and methods. Using methods of field ethnographic research. The actions of Kazakh brides were carried out by the method of external observation; dialectical methods of cognition of natural phenomena and society were used as a methodological basis for the study. The research used general scientific and private historical methods. Among the general scientific methods were analysis, synthesis, logical methods. In the category of special-historical methods, historical-retrospective, historical-typological, historical-systematic methods can be distinguished.

Results and discussion. Before becoming a bride, she must be under the care of her mother andsister-in-law. Not only his family, but the whole village sympathizes her on the principle of "forty norms" and wishes her to settle down and become a good bride, contributes to good upbringing. (Abashin, 2001: 87). The upbringing of a bride in a new environment begins with the song "betashar", accompanying the rite of the blanket covered the face of the bride.

The "betashar" provides guidance on the bride's new life activities, behavior, attitudes, and relationships, as well as tips that will help her in her daily life(Meirmanova, 2009: 13) . Having been brought up by her parents, cousin, and village, the young bride, guided by the advice given at the "betashar", gets up earlyin the morningafter the wedding and opens"tundyk" of a big house which is called Kara Shanyrak, where her husband's parents live. Then she opens the "tundyk" of brothers-in-law, and finally her own. In order to light a fire in the house, she goes to get firewood from a big house. Then, before performing duties, she greets parents in the morning with respectand does her daily chores such asmaking tea early in the morning, setting the table,tidying the house, cooking, milking the cows, livestock, and so on. etc. deals with peasants. She gets up early and goes to bed late In order to finish domestic chores on time.

Kazakh people say, "A good bride is like your daughter, and a good husband is like your son" (Argynbaev, 1962: 122).

The tradition of greeting is the respect and greeting of brides to their parents and in-laws. She greetings to other family members too. The bridegroom bowed down to greet the bridegroom's relatives. Shemakes tea and sets the table. The one who greets the bride expresses her gratitude to the bride. The bride wears a scarf in front of adults. It is also respect to adults.

It is better to give up bad behaviors when she becomes a bride. Does not speak rudely, does not behave rudely. If the clothes which she wears are pleasing to adults, it is also a gift to their parents and spouse. It is better to consult with them about what to do. To respect a spouse whether in public or in private, is a blessing to honor. Forgiveness, understanding, helping each other in difficult momentare the tips that lead to happiness.

As the saying goes, "from the beginning of the wife, from the age of the child", the boy's mother and father pay great attention to the bride's behavior, ability to do something and character. Because the customs of each country are different. Adapting a bride to a new environment requires a great deal of responsibility from the adults in the home. It depends on where the bride is. There exist saying: "A bride in a good house is a bride, and a bride in a bad house is a pestle. "According to the Kazakh tradition, a married man does not receive an inheritance immediately and he is not separated from the family he grew up in. For some time, they control the bride, and her mother and uncles told her about the responsibilities of the new bride, what she is supposed to do, what she said, and so on. Teaches and monitors. The advice of mothers-in-law from the life experience is very important for

the bride to fulfill her duties perfectly and contribute to the formation of a dignified, hard-working bride, a respectful mother, to be a good family in the future.

The bride also needs to know the basic qualities of her future husband:

- Character,
- habits,
- thought and culture,
- knowledge and decency,
- requirements and tastes,
- health
- It is important to know about good and bad habits (smoking, alcohol, drug addiction), misconduct, etc.

The main qualities of a bride are:

- Politeness
- kindness
- honesty
- sensitivity
- diligence
- responsibility
- good character
- ability to cook delicious food
- Do not lie
- care for her husband
- Respect mother-in-law as her own mother

Wise mothers, who have seen a lot in the country and become mothers of the country, say, «Treat your bride like a daughter, will your daughter be a bride?» The proverbs "A good bride is like your daughter, a good husband is like your son", "A good bride is like gold" (Larina, Naumova, 2008: 224). These sayings have too deep meaning. Such folk wisdom tells how to receive a new bride. That is why it is necessary to help yesterday's girl, today's young bride, to adapt to the new environment of housekeeping and mastery from the very beginning, to recognize the right and the left as soon as possible. The commandment of our ancestors "From the beginning of the wife, bring up the child from the age" was born out of such compassion and good intentions for the bride (Dobromyslov, 1900: 63).

Due to this adaptation from the beginning, due to changes in the social status of the former girl, the current bride, her behavior, actions, relationships, manner of her speech, style of clothes, etc. changes are made, their appearance as a girl is restricted and forbidden. The bride obeys the traditions of her ancestors. One of them is the ancient Kazakh tradition of naming brides without mentioning the names of their in-laws and ancestors, it is called "at tergeu". According to the established tradition, the bride usually gives her husband's older sisters such names as: Jakem, Atyteris, Arailym, Shyraylym, Zharkynym, Suluym, Bikesh; To his younger brothers: Myrza bala, Kenzhetai, Akzhigit, Myrza zhigit, Erkem, Aktore, Kishkenem. Even though the name of the object corresponds to the name of that relative, he also gives a conventional name. She considered it a sign of respect for her husband to call her husband's relatives by alternative names.

In the investigation of the name, which is rational and appropriate, the bride's ingenuity, knowledge of the world around her (eloquence in metaphors), intelligence, and even a good sense of humor are recognized. The custom of greeting the bride and groom with their parents and other people, who in the past called their husbands "the man of the house" and "the head of the family", is also one of the norms of mutual respect and prosperity between the bride and groom (Levshin, 1996: 32).

The bride's greeting (bowing) is the bowing and greeting of young brides to their parents with respect. The bride greets her parents every morning and when they come from a trip. Parents or other adults who get greeting of the bride say, "May you prosper!", "Be happy!", "Give birth toa son", etc. and express their gratitude. The bride greets not only in the Kazakh tradition, but also there are various ways of greeting.

Types of greetings of the bride – the bride bows in different situations. In some parts of Kazakhstan, such as Syr Darya, there are two types of greetings that are still intact, one is for brides to greet their husband's older brothers, and the other is for Kazakhs to greet after eating a meal (PMA). – 1). The tradition of greeting the bride begins with the betashar. Usually, the bride and groom bow down and greet each other after the betashar dedicated to each of her husband's close relatives. From the day the bride's face was opened and she stepped on the threshold, when the bride saw her husband's brothers, she crossed her arms on her knees in front of them, says "hello" "Salem berdik!" and bowed. Her husband's brothers greet her in the same way when they meet on the road. The elders respond to the bride's greeting with "do more", "be happy". This tradition symbolizes the bride's respect for her husband's brothers. The second kind of greeting is performed upon receive of the plate. When the eldest man at the table offers to take a plate after eating meat, the bride should greet him silently. Brides from Syr region are ready to receive a plate as soon as they feel that they finish eating, according to the traditions of the region. At the big feast, when food and divine food are served, the brides of the village line up one by one according to the number of plates served, and each of them bows and greets them. In the family, without a guest, they sit down and take plate after eating. This is due to the respect for the

elders and the shanyrak, who consider meat dishes to be a great Kazakh dish.

There are many well-meaning actions, measures and customs associated with the adaptation of the bride to the traditions of the new environment and the formation of a new form, as well as prohibitions on actions to prevent evil (Levshin, 1996: 68).

Good rituals are performed from the moment the bride arrives. In the Kazakh`s tradition there is a ritual connected with pouring oil to the fire by the belief of "Don't let the fire go out". When the bride enters the house for the first time, it is a good ritual to step on the right foot. On the contrary, it is superstitious to believe that leaning on your sideways is a sign of sadness and leaning on your jaw is a sign of grief, and this is prohibited as a sign of immorality. The abundance of superstitions and taboos against the bride is due to their educational value, and on the other, to the health of the expectant mother, the health of the offspring.

As for the bride's dress, the pattern of the dress that distinguishes the girl from the women, the customs and traditions of the brides are reflected in the features of their dress. According to the ancient tradition of the Syr region, the bride wear a dress with long sleeves. Brides did not go home without a headscarf. The tradition of brides not to go without a headscarf continues to this day. The information provided indicates that the cream of the Kazakh tradition along the Syr Darya has not yet been broken.

The bride's dress is one of the conditions that determine her social status in the new environment. They are – after saukele – "zhelek zhamylu", followed by "kimeshek". After becoming a bride, the bride, who has kept her saukele wrapped in a box which is called "sandyk", sometimes covers the "zhelek" until finds her first child, and in some places until she has 2-3 children. The zhelek is a type of ceremonial garment made of light purple fabric, which covers the whole body, forehead leaving only the face. At the appointed time, the bride "takes the flag and puts on a kimeshek" by slaughtering cattle, inviting the village elders and uncles. It is a ritual that marks a young, social initiative, which proves that the bride became a full member of this dynasty and became a mother, a faithful spouse, a housewife. The young bride wears a colorful, embroidered, beaded, and embroidered kimeshek.

Thus, mothers who have gone through life, who have had a lot of experience and fell in love with their grandchildren, have become influential in the village, and it is normal for men to do business, slaughter animals and invite guests.

There are many superstitions about the bride. The types of customs that make sense to the bride. Such superstitions say that the bride should be safe from harm, slander, healthy offspring, luck, and so on. appearing from good intentions. The bride is offered "ultabar"in order to have a son. The mother-in-law twists the bride's skirt to prevent an abortion. The mother puts in her pocket sweets or wrapped in a towel so that she can taste it when she returns from a party. (because if the bride wishes it, her problem cannot be returned, her breasts are swollen). When a young bride is invited as a guest or when she goes for a walk in the village, older women and grandmothers give her things like rings and earrings by saying "itayagyna sal". Later, when the woman gives birth, she puts the same things while washing the baby. After washing, they are shared by the local women as a ritual. This is called "Itayagyna salu" (Grodekov, 1889: 45). In order to avoid evil eye, on the carpet, and on the curtains an owl or an amulet is placed on the bride's bed.

When the bride enters a house in the village, she has to bend her knees and sit down, even if she is hurried. It is respect for the family, and on the other hand, it is believed that the cow will give birth. So when the bride or someone else tells something by standing and goes out of the house, the householder says, "Why don`t you kneel down, do you want our cow give birth by standing?"

Some of the superstitions concerning the bride are as follows: If the bride's a state of fastidiousness, taste whims (in a pregnant woman) does not be full during the pregnancy, then water flows from the mouth of the child born from her; When the bride before giving birth empties the box (sandyk) at home, she will give birth quickly; If a person's leg on the side where the bride is sitting is numbed, it is interpreted that the bride is pregnant; As the day of the bride's birth approaches, she walks barefoot, saying, "Mother Earth, give me strength"; a pregnant woman or the woman who gave birth must not go to the river at night; The pregnant bride does not hold such objects as knife, scissors and hacksaw as she will give birth prematurely; When the bride is unable to give birth, a sword is played on her head, a stallion is tied around her waist, salt is thrown into the fire, men enter the house, slap her skirts with both hands, and sometimes shoot a gun; if someone puts freshly boiled soap on top, then new coming bride will be arrogant; the threshold of the housesmears with oil so that the family`s table will be plentiful; If the bride gathers up thefurnace in the house, the husband will fall in love with another woman; in order to get rid of evils "arasha" smoke is used; If she doesn't give the "bride's tongue" "kelin tili" as a souvenir, the girl will bumble; if the young bride's breasts swell, the dead man is washed gloves

covered; the bride gives birth to many children at the birth of the new moon; If two young people have a lot of stars on their wedding night, they will have many children (Haruzin, 1888: 45).

Prohibitions related to the bride – actions, movements, gestures that the bride should not do. Such prohibitions are imposed to protect the bride from bad superstitions. There are two types of prohibitions against the bride: one is the ban on the bride's personality (the bride does not sit on her parents-in law' bed, all the time she has to wear a headscarf, etc.), and the other is the prohibition of other people, young and old, to be on the alert from bad superstitions. (it is prohibited another woman sit on the bride's bed because they are afraid that woman will do a bad ritual. ; if a woman who can`t have a baby will sit on the new coming bride`s bed, it is believed that she will have a baby soon, however, a new coming bride will have less babies, that is why, they did not used to do t; adults do not speak rudely in front of the bride, etc.) (Kittary, 1889: 211).

Due to ancient superstitions, Kazakh brides try to avoid certain things and try to avoid them, and these superstitions still exist. The bride does not laugh inappropriately; does not cross in front of adults; does not call the names people older than her; does not look inside the curtain where strangers are sitting; does not sit on someone's bed; does not pour dirty water on the walkway; does not speak loudly among crowded people; does not stand while others are working; inside the village, the bride walks outside the yurt; does not speak against his parents-in-law; enters the house with the right foot; does notgo to the toilet in a barn or in a collapsed house; the bride does not walk without headscarf; does not cross the dishes, rope, shanyrak, hat, Koran; does not look at the sun, the moon, the graveyard, the village and go to the toilet on the road; ; do not run in or out of the house; does not itch in public; does not lean sideways; does not go beyond customs and manners; does not call"mybaby" in front of parents-in-law, says "the child of grandparents"; does not lie, gossip; does not look at someone's barn, does not beat the baby at the breast; young brides do not sit in the place of honor if there is elder people; does not stare at anyone's face; the bride does not doubt her mother's words; does not sit in front of a person, sits on one side; Kazakh brides do not name their husbands and do not argue with them; the bride does not go to her parents housetill one year; when driving a car, she does notwalk in the cross section in front of the car, she passes behind; the bride does not speak loudly in front of parents, elders, in-laws; adults usually do not look at young bride; when the guest arrives, the bride does not sweep the house, shout at her child or anyone else; The pregnant bride does not eat camel meat. It is believed that if she eats, she will carry her baby like a camel for a long time and will not be born on time. If the baby is notforty days yet, she must not throw ashes on the bride's house at night. A young woman, who gave birth must not say to go away to the dog, so she loses her teeth; a pregnant woman or a young woman who gave birth does not go to the river at night; If the bride is pregnant, she must not hold a needle or thread, thinking that the child will return to the umbilical cord at birth; It is believed that the bride does not eat rabbit meat when she is pregnant, because her child will be cowardly as a rabbit (Krasnov, 1887:63).; it is said that the a pregnant bride does not jump on the rope, but if she does, the baby's umbilical cord will be wrapped around her neck; does not sweep the house at night, does not pick up nails; on Friday she does not do laundry because the ghosts are offended; the surface of the water and food in the container must not be opened; does not re-export the fuel brought into the house; a pregnant woman does not eat "tolarsak", because it will be hard for her to give birth; the bride and her husband must not have a sexual contact at dawn, at sunset, at the eclipse of the sun or the moon, because it is believed that the child will born with defect; does not borrow water or lend water; does not step on the ash, the feet of the person who steps on them numbs; she does not blow out the lamp because she will be forgetful; she must not pour white things on the ground, Animals are not tied with rope, the bride must not speak before elders speak (Levshin, 1996: 105).

Conclusion.

Nowadays, the attitude to the bride is not traditional in Kazakh society. There are many other prohibitions that young brides take into account (Grodekov, 1889: 88). Many of them depend on traditional society. The Kazakh people are very rich in traditions. Not only Kazakhs, but any nation has its own customs, rituals and way of life. You can also learn about the culture of the country from their own traditions. And the national tradition of the rich Kazakh people – investigation of the name "at tergeu" – seems to be forgotten today. Thus, tradition speaks so, that our tradition will live forever in our minds.

According to the national tradition, brides do not name their grandfather, father-in-law, sister-in-law, but give them a proper name: "Mr. brother-in-law", "rich grandfather", and so on. Also for a woman , "White grandmother", "syrgalym", "shashbaulym", "kulymkozym". They could put any funny names. For example, for short stature is called "sungagym", for those who walks slowly is called "zhuyrigim"

(who walks fast). All of this is truly a sign of respect and esteem. Such actions are not part of the bride's etiquette. In the Kazakh tradition, the use of actions that signify a happy situation (for example, throwing the turban in the air, slapping the back, etc.) is considered a bad superstition and is not allowed to be repeated. Some superstitions and prohibitions are also found in proverbs.

References

Abashin, S.P. (2001). Chaj v Srednej Azii: Istorija napitka v XVIII – XIX. // Tradicionnaja pishha kak vyrazhenie jetnicheskogo samosoznanija. – M., 156 s.

Argynbaev, H. (1962). Kratkij ocherk material'noj kul'tury pereselencev iz Rossii v Kazahstan: po materialam Vostochnogo Kazahstana, vtoraja polovina HIH– nachalo HH veka // Voprosy jetnografii i antropologii Kazahstana. – Alma-Ata.

Dobromyslov, A.N. (1900). Turgajskaja oblast'. Istoricheskij ocherk. – Orenburg. – Vyp. 1. – S. 33, 111.

Gurulev, S.A. (1996) Chaj po-sibirskij. // Chaj v Sibiri. – Irkutsk. – S 16.

Grodekov, N.I. (1889) KirgizyikarakirgizySyr-Dar'inskojoblasti. T.1. Juridicheskij byt.. Tashkent: Tipo-Litografija S.I. Lahtina.

Haruzin, A.N. (1888). Stepnye ocherki (Kirgizskaja Bukeevskaja orda). Stranichki iz zapisnoj knigi. – M.,– S. 69, 74, 115, 143.

Kittary, M.Ja. (1849). Kirgizskij tuj // Zhurnal ministerstva vnutrennih del. – SPb., – Ch. 25. – S. 34.

Krasnov, A.N. (1887). Ocherki byta Semirechinskih kirgizov // Izvestija IRGO. – SPb., – T. 23. – Vip, 4.

Larina, E.I. Naumova O.B. (2008). Tradicija chajpitija u kazahov // Hmel'noe i inoe: napitki narodov mira (otv. Red. S:A. Arutjunov, T.A. Voronina). – M.: Nauka, – S. 221-248.

Levshin, A.I. (1996). Opisanie kirgiz-kazach'ih ili kirgiz-kajsackih ord i stepej. – Almaty. – S. 306.

Meirmanova, G.A. (2009). Kul'tura obshhenija u kazahov: transformacija tradicionnogo jetiketa: Avtoreferat dis. ... k.i.n. – M.,– 24 s.

Nebol'sin, P. (1850). Zametki na puti iz Peterburga v Barnaul. – SPb., – S. 178, 179.

Nebol'sin, P. (1835). Statisticheskie zapiski o vneshnej torgovle Rossii. – SPb., – Ch. I. Gl. 2. – S. 173;

Potanin, G.N. (1868) Okaravannoj torgovle s dzhungarskoj Buhariej v HVIII stoletii. – M.

Pohlebkin, V.V. (2000). Chaj. Ego tipy, svojstva, upotreblenie. – M.,. – S.9.