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Social protection under conditions of economy digitalization

Abstract. One of the priority tasks of the state is to ensure the well-being of citizens by organizing the activities of the social system, in particular, the development of a system of social protection. The main goal in the activities of social work organizations is to establish stable and arranged relations between the various levels of the system, designed to provide people in need with life necessities and benefits, to normalize the socio-psychological relations between them and society. The administration bodies of social protection and their subordinate enterprises, institutions, organizations make a unified state system of social protection of the population, thereby providing government assistance to the family, elderly people, veterans and disabled, people retired from military service and their families, development of the social services system, the implementation of state policy in the field of pension provision and labor relations. Nowadays the country decided to introduce a new development strategy called the «digital economy». Therefore, this article considers the level of development of social protection, as well as the possibility of its modernization using present-day technologies.

Key words: social protection, digital economy, information and communication infrastructure, informatization.

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Introduction. The transition to the digitalization of the economy in developing countries, called the «digital economy», has revealed the need to bring the arrangement of activities in all spheres of public life to a new level. One of the priority tasks of the state is to ensure favorable conditions for the life of citizens, in particular - the development of the social sphere. The condition of the system of social protection is one of the main factors affecting the country's sustainable economic growth amid political and social stability. Therefore, the question of modernization of the social protection system and the social sphere as a whole by improving its information and communication infrastructure is relevant. There is a need to introduce information single space of the social sphere and a single intersectoral information system.

Problem formulation. Under social protection researchers traditionally understand «a system of public relations to create and ensure conditions for normal human life, including social, economic and legal measures authorized by the state in order to support citizens who need it» [1]. This approach conditionally refers to a narrow view of social protection.

In a broad sense, social protection may include social protection of the family, motherhood and childhood, health care, environmental protection, medical care, education, employment, labor protection, provision of certain types of social security, provision of educational services, regulation of a minimum wage rate, government price and taxation control, etc.

The aim of the study is to analyze the digitalization of social protection in the Republic of Kazakhstan and future development.

To achieve this aim, the data reflecting the number of subscribers with Internet access, Kazakhstan's place in the ranking of countries and regions in terms of fixed Internet connection, developed and implemented programs intended for information cooperation and exchange in the field of social protection, as well as factors affecting the distribution of digital services have been studied in the country.

Research Methods. The methods of verification, comparative analysis, and monitoring of the main empirical approach have been applied. The official statistical data and information

potential of the Internet have been used.

The need for informatization of social protection and its digitalization is determined by the time as assistance to various categories of the population calls for processing of a huge amount of information, and the latest digital technologies will facilitate the prompt and high-quality provision of services. The organization of social protection work has many problems, which consists in the application of a new principle of work. This will require expenses associated with personnel training, time for mastering new tools and also technical and information re-equipment will be of great importance. The Constitution of the country prescribes the rights of citizens of the Republic of Kazakhstan to receive social protection. This Constitution has declared our country to be a social state; the policy is focused on the formation of conditions that guarantee a decent life and free human development. Confirmation of this is written in the Constitution: every citizen is guaranteed social security in case of disability [2].

Together with the development of society and the state, social assistance is provided not only by moral responsibility, but also by the legal principles enshrined in the country's regulatory sources. In this regard, changes are taking place in the form, methods and concept of the implementation of social policy, which is being carried out and regulated by the state authorities.

The ability of the population to have access to the Internet and its speed is of great importance in the timely and high-quality provision of social assistance. Figure 1 shows the number of subscribers with access to the Internet.

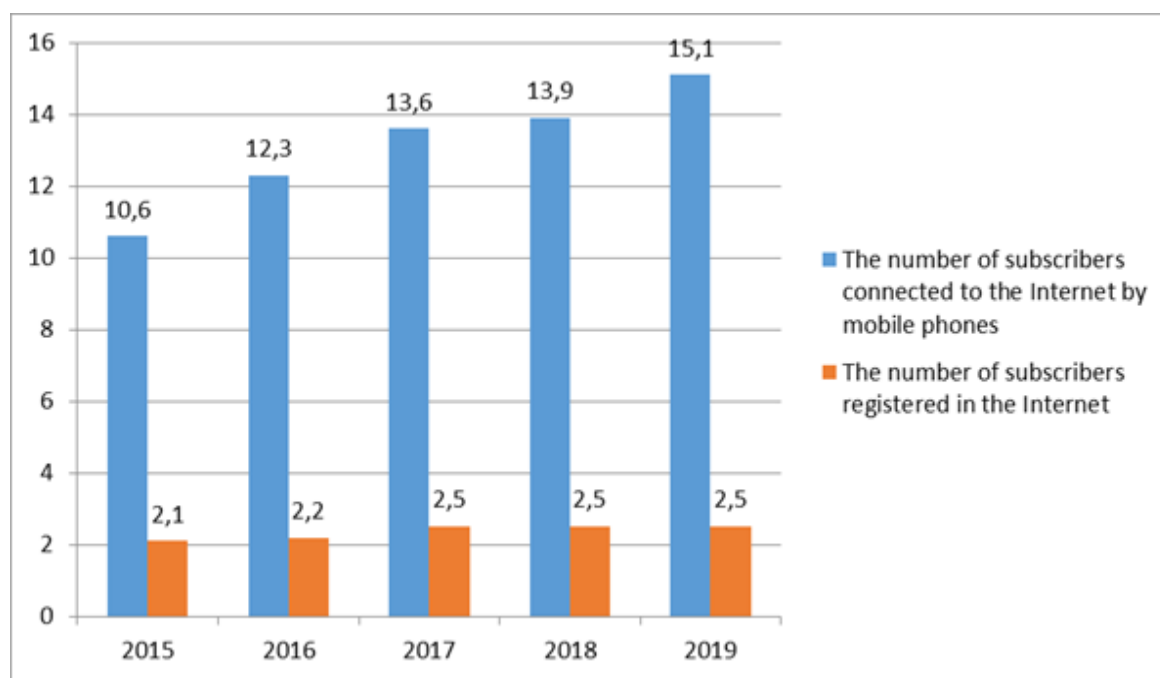


Figure 1. Subscribers with access to the Internet, August 2019 million people
Note: Compiled on the website database <https://kursiv.kz> [3]

As it can be seen from Figure 1, there are 2.5 million users of fixed Internet in in Kazakhstan by the end of August 2019; their number has remained unchanged over the past 3 years. There are 14 fixed Internet subscribers per 100 people.

The number of mobile users with Internet access amounted to 15.1 million - an increase of 8.5% compared to the same period last year (13.9 million). There are 82 mobile users with access to the Internet per 100 people.

According to the Table 1, Kazakhstan currently ranks the 64th place in terms of fixed Internet connection (38.3 Mb/s). St. Vincent and the Grenadines occupy the line above (38.6 Mb/s), and

Kosovo occupies the line below (36.7 Mb/s).

The leaders of Internet speed connection are Singapore (193.9 Mb/s), Hong Kong (161.2 Mb/s) and South Korea (160 Mb/s). The top five also included Romania (131.2 Mb/s) and Taiwan (129.4 Mb/s) [3].

Table 1

Rating of countries and regions by speed connection of fixed Internet (August 2019)

Countries	Place	Download Speed (Mb/s)
Singapore	1	193,9
Hong Kong (CAP)	2	161,2
South Korea	3	160,0
Romania	4	131,2
Taiwan	5	129,4
Monaco	6	124,4
USA	7	120,0
Hungary	8	119,6
Switzerland	9	119,3
Sweden	10	117,3
Kazakhstan	64	38,3
Note - compiled on the website database https://kursiv.kz [3]		

According to the data given in Table 1, it can be seen that in terms of download speed (Mb/s) Kazakhstan takes the 64th place in the ranking of countries in terms of fixed Internet speed connection, this suggests that social protection of the population in digital format still cannot be sufficiently provided in our country. This is precisely the disadvantage of solving the problem of social protection without digitalization and informatization of the economy, because the main advantage of this approach towards the work with population is promptness and rational use of available time and money in order to minimize transaction costs. The experience of the European countries and the USA, whose social organizations have long been united into a single body (Customer Relationship Management, CRM) using Internet technologies, can serve as a good basis for those countries that are only approaching the stage of social protection in a digital format.

Today, the leading countries have reoriented their public services to a qualitatively new level of informatization. At the same time, public access to corporate resources is possible. Meanwhile, inter-institutional interaction was built in such a way that user without additional identification measures could switch from the site of one corporation to the site of another. Such cooperation is credited with effective operation and interaction of state databases among themselves.

The introduction of information technology in the activities of state organizations in Kazakhstan has been ongoing for a long time. A number of programs on information cooperation and exchange in the field of social protection have been developed and implemented:

1. The electronic recruiter or e-recruiter (here in after referred to as ER) was introduced on January 1, 2018. The electronic recruiter is a single ecosystem for job search combining all private and state employment agencies. The electronic recruiter contains the widest database of CVs and vacancies in Kazakhstan, automatically selects suitable vacancies for applicants and sends them notifications. The goal of the project is to increase employment and reduce unemployment through the introduction of digital employment tools;

2. A pilot project «electronic labor contracts» has been launched on July 2018. The

introduction of electronic labor contracts ensures the transparency of labor relations between the employee and the employer, increases the efficiency of monitoring the observance of labor rights, eliminates the risk of falsification of documents and will speed up employment, as well as abandon paper employment record books and the provision of paper documents when concluding labor contracts, which will subsequently allow proactive retirement payment;

3. Development and implementation of social and labor systems (2018-2021) will lead to the creation of favorable socio-economic conditions for rural areas to fulfill their production and other national functions, increase employment, the level and quality of life of the rural population, and exclusion of corruption in provision of public services, as well as bringing the rural areas closer to city living standards, expanding and using the capabilities of existing components of information systems of the state bodies through integration consisting of the task of providing comfortable and efficient access interface to data of the state information systems;

4. The information system «Situation center of the social and labor sphere» is a software package that displays real-time information on indicators of the social and labor sphere, including deviations from the implementation of the plan for the current year, thereby allowing quick response to emerging problems (2019);

5. «E-halyq» scaling system allows identifying families in difficult situations and providing an integrated approach of proactive measures of social assistance. Today, this system is the basis for submission of applications for targeted social assistance in a new format (from April 1, 2019);

6. Monitoring of created jobs. On the basis of «Labor Market» automated information system (hereinafter - AIS), a tool has been created for monitoring the created jobs in the framework of the implementation of the state programs. Local executive bodies will enter full information on projects implemented as part of the state programs in their region, indicating the number of created (temporary and permanent) jobs and professions. Based on these data, employment centers will be able to find and send suitable personnel to these regions (2019);

7. Digital social card. Social card is a project launched jointly with «Kazpost» JSC and Aktobe Akimat, aimed at increasing transparency, convenience and effectiveness of social benefits. The goal is to optimize the provision of social services to the population, improve information services for citizens and organizations, through the formation of single information and analytical space (started on July 1, 2019);

8. The portal of social services as a section on the portal of «electronic government». The portal will provide an opportunity for people with special needs to order rehabilitation tools and services directly from suppliers, similar to an online store. One of the goals of introducing the portal is to exclude the public procurement process when providing technical means of rehabilitation, so that the service recipient can choose the product according to individual needs (stage 1 - July 2019, stage 2 - August 2019, stage 3 –2020) [4].

Employees of the Center for the Development of Human Resources (hereinafter - the CDOHR) have developed the information system «Situation center for the social and labor sphere», which will allow monitoring and analyzing the main indicators of the social and labor sphere of Kazakhstan.

This information system will simplify access to all necessary data for specialists of the Ministry of Labor and Social Protection of the Republic of Kazakhstan (hereinafter the MLSP) and representatives of regional government agencies responsible for certain indicators.

By the end of the year, the situation center will have processed in real time data from all the main information systems of the MLSP in 6 key areas: social security and social insurance, disability and social services, social assistance, labor bloc, employment and migration. Large indicators, such as the number of retired or disabled people will be updated daily, others - every 15 minutes.

This system collects, analyzes and updates all the data available in information systems, on

the basis of which reports and indicators are generated, both by region and by country as a whole. The situation center allows seeing the number of people who have been given social support measures, to find out the number of unemployed and employed. In addition to simple receiving information to be reported, the situation center also enables the MLSP employees to identify problems in the regions online.

By the end of the year, the specialists of the MLSP will use the situation center of the social and labor sphere in order to report on necessary changes and additional indicators that require integration into the information system. In the future, access to the system is planned to be opened to local executive bodies represented by akim and deputy akim of the regions [5].

The distribution of digital services in the field of social protection depends on the age of the people, level of education, income, place of residence and other factors.

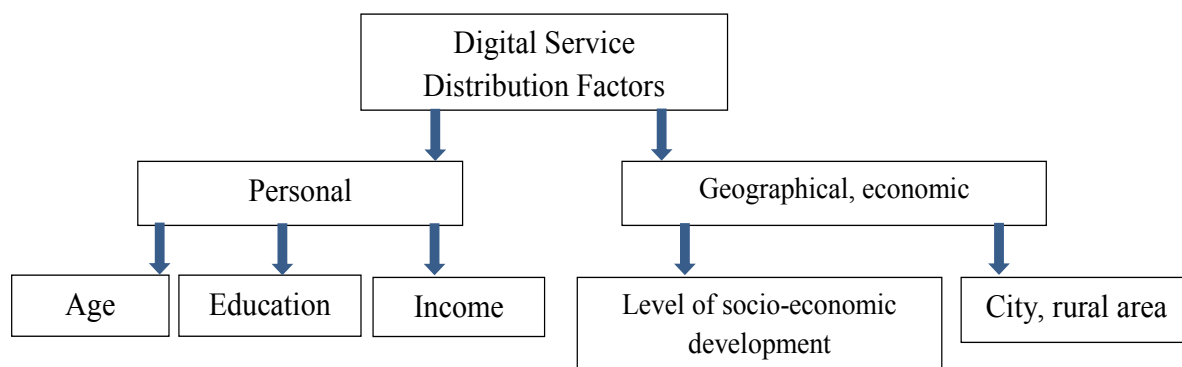


Figure 2 - Factors affecting the distribution of digital services

Note: Compiled by the authors of the article during the study.

The main factors at the government level that slow down the development of the system of social protection in digital format are:

- insufficient activity of state bodies and organizations in resolving issues of informatization;
- deficit of government investments;
- low level of available computer equipment, lack of modern software;
- insufficient reliability of the communication channel;
- need to purchase additional software (backup system, analytical subsystem);
- lack of specialists working with modern software.

The main direction of solving the problem should be an increase of the level of technical security of social institutions and an increase of the level of computer literacy of the population.

The use of digital technologies in the process of interaction between government bodies and the population is determined by the level of Internet literacy, i.e. the ability of customers to use certain methods when working in Internet services and the provision of guarantees for complete protection of data from fraud by the state.

The creation of unified information systems, applications for facilitated access to social services and, in general, digitalization of the social system seems impossible without proper material support and personnel.

The introduction of information and communication tools (hereinafter - ICT) in the activities of social protection services also implies the need to include innovative methods and new academic disciplines in the process of education and training future social work specialists. All of the above-mentioned give the opportunity to argue that the automation of the work of institutions and services of social protection must be carried out in several stages: improving automation programs for social services, implementing a project on the Internet for the direct participation of citizens, ensuring information security by introducing e-signatures.

As a result, there is decrease in the amount of work associated with filling out, processing and storing information on paper, in addition, the speed and the transaction costs increase. Thus, experts say that transaction costs are reduced by the time spent by citizens waiting in a queue. Electronic circulation reduces not only time, but also the cost of moving large amounts of paper-based media.

The formation of the information environment as “a combination of information resources and systems, telecommunication systems and networks, operating on the basis of interconnected principles, ensuring optimal information interaction of the subjects, as well as the most complete satisfaction of their needs” is also taking place. The purpose of informatization is to establish fundamentally new and previously inaccessible opportunities for multilateral relationships based on modern ICT, based on a geographically distributed database. In addition, informatization helps to increase the effectiveness and efficiency of quality management of social protection.

The main obstacles to the development of information technologies in the field of social services are insufficient funding, a low level of protection against hacking and fraud as well as a lack of qualified IT specialists in the public sector. The transition to new information technologies is impossible without elaboration and approval of national programs on IT development and their use in government and administrative bodies.

Summing up the results of this work, one can conclude that the digitalization of the social protection system in Kazakhstan is in full swing. A number of programs of digitalization of social protection in the country have been adopted where some of them operate successfully and others operate in pilot mode. An important task at this stage is expansion of the material and technical base, training of specialists for creation and development of an information and communication structure in all spheres of life, in particular, the social system, informatization of all processes of its activities. The main goal of informatization of social protection is to ensure the improvement of the quality and standard of living of the population through the wide use of information resources and technologies.

References

- 1 Колесник А.П. Социальные системы в цифровой экономике // Электронный научно-экономический журнал Стратегии бизнеса – 2018. - №1. (45) – С. 3.
- 2 Конституция Республики Казахстан - 30 августа 1995 года (с изменениями и дополнениями по состоянию на 23 марта 2019 года)
- 3 Деловой портал. Новости экономики, политики, бизнеса и финансов Республики Казахстан. [Электрон. ресурс]. URL: <https://kursiv.kz/news/obschestvo> (дата обращения: 10.10.2019)
- 4 Официальный интернет-ресурс Министерства труда и социальной защиты населения Республики Казахстан. [Электрон. ресурс]. URL: <http://www.enbek.gov.kz/ru/node> (дата обращения: 14.10.2019)
- 5 Официальный сайт центра развития трудовых ресурсов. [Электрон. ресурс]. URL: <https://ias.enbek.kz> (дата обращения: 22.10.2019)

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Экономиканы цифрландыру жағдайында халықты әлеуметтік қорғау

Аңдатпа. Еліміздің негізгі тапсырмаларының бірі әлеуметтік саланың қызметін жетілдіру, яғни әлеуметтік қорғау жүйесін дамыту арқылы халқымыздың әл-ауқатын жақсарту болып табылады. Әлеуметтік сала қызметінің басты міндеті көмекке зәру адамдарды өмірлік игіліктермен қамтамасыз етуге, олар мен қоғам арасындағы әлеуметтік-психологиялық қатынастарды қалыпқа келтіруге бағытталған жүйенің түрлі деңгейлері арасында тұрақты және реттелген байланыстар орнату болып табылады. Әлеуметтік қорғаудың басқармасы және оған тиісті кәсіпорындар, мекемелер мен ұйымдар халықты әлеуметтік қорғаудың біртұтас жүйесін қалыптастырады, ол өз кезегінде жанұяларға, қарияларға, ардагерлерге, мүгедектерге, әскери қызметтен босатылғандарға және олардың отбасы мүшелеріне мемлекеттік қолдауды, әлеуметтік қызмет жүйесін дамытуды, зейнетақымен қамтамасыз етуді және еңбек қатынасындағы мемлекеттік саясатты іске асыруды қамтамасыз етеді. Осы кезеңде мемлекетіміз «цифрлық экономика» деген атауға ие болған жаңа даму стратегиясын енгізу туралы шешім қабылдады. Сондықтан бұл жұмыста әлеуметтік қорғаудың даму деңгейі, сондай-ақ, оны заманауи технологиялардың көмегімен жаңғырту мүмкіндігі қарастырылады.

Түйін сөздер: әлеуметтік қорғау, цифрлық экономика, ақпараттық-коммуникативтік инфрақұрылым, ақпараттандыру.

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Социальная защита населения в условиях цифровизации экономики

Аннотация. Одной из приоритетных задач государства является обеспечение благосостояния граждан путем организации деятельности социальной системы, в частности – развития системы социальной защиты. Основной целью в деятельности организаций социальной работы является установление устойчивых и упорядоченных связей между различными уровнями системы, призванной обеспечить нуждающихся в помощи людей жизненными благами, нормализовать социально-психологические отношения между ними и обществом. Органы управления социальной защиты и подведомственные им предприятия, учреждения, организации образуют единую государственную систему социальной защиты населения, тем самым обеспечивают государственную поддержку семье, пожилым людям, ветеранам и инвалидам, лицам, уволенным с военной службы, и членам их семей, развитие системы социальных служб, реализацию государственной политики в области пенсионного обеспечения и трудовых отношений. На данном этапе страна приняла решение о внедрении новой стратегии развития, получившей название «цифровая экономика». В связи с этим в данной работе рассматриваются уровень развития социальной защиты, а также возможность ее модернизации с помощью современных технологий.

Ключевые слова: социальная защита, цифровая экономика, информационно-коммуникативная инфраструктура, информатизация.

References

- 1 Kolesnik A.P. Social'nye sistemy v cifrovoj ekonomike [Social systems in digital economy], Elektronnyj nauchno-ekonomicheskij zhurnal Strategii biznesa [Electronic Scientific and Economic Journal of Business Strategy] 1 (45), 3 (2018).

- 2 Konstituciya Respubliki Kazahstan [Constitution of the Republic of Kazakhstan] - 30 avgusta 1995 goda (s izmeneniyami i dopolneniyami po sostoyaniyu na 23 marta 2019 goda) [August 30, 1995 (as amended and supplemented as of March 23, 2019)]
- 3 Delovoj portal. Novosti ekonomiki, politiki, biznesa i finansov Respubliki Kazahstan [Business portal. News of the economy, politics, business and finance of the Republic of Kazakhstan] [Electronic resource]. Available at: <https://kursiv.kz/news/obschestvo> (Accessed: 10.10.2019)
- 4 Oficial'nyj internet-resurs Ministerstva truda i social'noj zashchity naseleniya Respubliki Kazahstan [The official Internet resource of the Ministry of Labor and Social Protection of Population of the Republic of Kazakhstan] [Electronic resource]. Available at: <http://www.enbek.gov.kz/ru/node> (Accessed:14.10.2019)
- 5 Oficial'nyj sajt centra razvitiya trudovyh resursov [The official website of the center for the development of labor resources] [Electronic resource]. Available at:<https://iac.enbek.kz> (Accessed:22.10.2019)

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