

**S.M. Srapilov^{1*}, G.A. Alibayeva¹,
A.M. Bisztyga², Zh.D. Tarap¹, A.G. Duysenkul¹**

¹D.A. Kunaev Eurasian law Academy, Kazakhstan, Almaty

²University of Silesia, Poland, Katowice

*e-mail: sultan0818@mail.ru

ON THE TRANSFORMATION OF SOME FUNCTIONS OF THE STATE IN THE INFORMATION SOCIETY

This article analyzes the modernization of individual functions of the state in the context of digitalization. Based on the analysis of ongoing and planned changes in the public administration system, based on the introduction of modern information technologies, the author concludes that the functions themselves are being improved and transformed. In addition, the author comes to the conclusion that the effectiveness of public administration in modern society is already directly dependent on the use of the latest technologies and procedures. In addition, the state should strive to adapt these procedures and technologies in order to achieve its goals, thereby improving itself.

The article analyzes the legislation on digitalization and the changes that were made to it in connection with the updates of public administration processes. The main directions in which digitalization processes are actively implemented, as well as those directions in which this process is to be implemented, are considered.

The author conducts a comparative analysis of domestic practice with the practice and legislation of a number of foreign countries. The article focuses on the problems that can be solved by the digitalization process, as well as those issues that do not allow the state to implement Informatization more widely.

Key words: public administration, state functions, information society, legal relations, legal consciousness.

**С.М. Срапилов^{1*}, Г.А. Алибаева¹,
А.М. Бисцига², Ж.Д. Тарап¹, А.Г. Дуйсенкул¹**

¹Д.А. Қонаев атындағы Еуразиялық заң академиясы, Қазақстан, Алматы қ.

²Силезия университеті, Польша, Катовице қ.

*e-mail: sultan0818@mail.ru

Ақпараттық қоғам жағдайында мемлекеттің кейбір функцияларын трансформациялау туралы мәселеге

Аталған мақала цифрландыру жағдайында мемлекеттің жекелеген қызметтерін өзгертуді талдауға арналған. Өтіп жатқан және жоспарланған мемлекеттік басқару жүйесін өзгертуді талдау барысында авторлар сол функциялардың өзін жетілдіру мен трансформациялау туралы қазіргі ақпараттық технологияларды енгізуге негізделген қорытынды жасайды. Сонымен қатар авторлар қазіргі қоғамда мемлекетті басқарудың тиімділігі жаңа технологиялар мен процедураларды пайдалануға тікелей байланысты деген тұжырымға келеді. Мемлекет өзін-өзі жетілдіре отырып бұл процедуралар мен технологияларды өз қызметіне жету мақсатына бейімдеуге ұмтылуы тиіс.

Мақалада мемлекеттік басқару үдерісін жаңғыртуға байланысты енгізілген цифрландыру туралы заңнамаға талдау жасалады. Цифрландыру үдерісі белсенді енгізіліп жатқан, сондай-ақ аталған үдерісті іске асыруға дайын тұрған бағыттар да жан-жақты қарастырылған. Авторлар отандық тәжірибелерге және бірнеше шет елдік заңнамалар мен тәжірибелерге салыстырмалы талдаулар жүргізген.

Цифрландыру үдерісі шешетін мәселелер мен ақпараттандыруға кеңінен енгізуге болмайтын мәселелерге де баса көңіл аударылғаны байқалады.

Түйін сөздер: мемлекеттік басқару, мемлекеттің функциялары, ақпараттық қоғам, құқықтық қатынас, құқықтық сана.

С.М. Срапилов^{1*}, Г.А. Алибаева,¹
А.М. Бисцига², Ж.Д. Тарап¹, А.Г. Дуйсенкул¹

¹Евразийская юридическая академия имени Д.А. Кунаева, Казахстан, г. Алматы

²Силезский Университет, Польша, г. Катовице

*e-mail: sultan0818@mail.ru

К вопросу о трансформации некоторых функций государства в условиях информационного общества

Представленная статья посвящена анализу модернизации отдельных функций государства в условиях цифровизации. На основе анализа происходящих и планируемых изменений в системе государственного управления, основанных на внедрении современных информационных технологий, автором делается вывод о совершенствовании и трансформации самих функций. Кроме того, автор приходит к выводу о том, что эффективность государственного управления в современном обществе уже напрямую зависит от использования новейших технологий и процедур. Помимо этого, государство должно стремиться адаптировать эти процедуры и технологии в целях достижения своих функций, тем самым совершенствуя себя.

В статье проводится анализ законодательства о цифровизации и тех изменений, которые были внесены в него в связи с обновлениями процессов государственного управления. Рассмотрены основные направления, в которых активно внедряются процессы цифровизации, а также те направления, в которых этот процесс предстоит.

Авторы провели сравнительный анализ отечественной практики с практикой и законодательством ряда зарубежных стран. Делается акцент на тех проблемах, которые позволяют решить процесс цифровизации, а также на тех вопросах, которые не позволяют государству более широко внедрять информатизацию.

Ключевые слова: государственное управление, функции государства, информационное общество, правовое отношение, правосознание.

Introduction

The development and use of information technology that led to the formation of the information society, and eventually to the fourth industrial revolution, is becoming an integral part of the state.

Modern scholars emphasize that public administration is undergoing significant changes, mainly related to the use of information technology (Talapina 2015: 5). E. V. Talapina emphasizes that “development requires the use of such technologies and procedures that contribute to making informed political, economic and social decision-making and achieving outcomes. Modern information technologies are a kind of key to using the potential of public administration in the interests of sustainable socio-economic development of our country and prevention of crisis situations” (Talapina 2015).

The introduction of information technologies and programs into the public administration system began literally in the late 80-ies of the last century, and during this time the world has moved so far that “in modern conditions, the state can be considered as a developed information system, since the entire process of public administration is based on the collection, analysis, processing, storage and dissemination of information” [2]. The state has become a real subject of information and legal relations, and in some cases, it is the state that initiates the expansion

of information exchange, the formation of information systems at local, regional and other scales, dictate the direction of development of information technology and other aspects of the information society. It is the involvement of the state in information flows that today determines the effectiveness of state regulation, awareness and effectiveness of the government’s steps.

The introduction of information technologies in the system of state regulation and management has led to major changes in the interaction of States with other parties, namely, created the conditions for a dialogue platform between the state and public institutions; provided feedback opportunities between public servants and citizens, the conditions for transparency of the state apparatus; simplified administrative procedures; reduced the state apparatus; availability of public services. Over time, the state transforms its functions, adapting them to modern requirements, which are constantly increasing. This, in turn, gives “a leap in the development of information technologies at the present stage entails a rethinking of the role and significance of the state” (Ignatova 2006).

Main part

The possibility of Internet technologies during the quarantine period in connection with CO-

VID-19, which covered the entire planet, was invaluable and literally saving. Remote employment has literally become a lifesaver for many companies (maintaining the ability to function, fulfill obligations, and survive), for people (maintaining wages and solvency), and for the state (continuing to perform certain functions, services, and so on).

Many researchers have no doubt that the experience gained during the quarantine process will significantly change the internal attitude and approach of society to communication opportunities. Expansion and deeper implementation of information and digital processes is inevitable. We have come close to the so-called “Internet economy”, the foundations of which were laid at the end of the twentieth century and the urgent need for which arose now.

If today every third person works remotely by “remote” and usually only in foreign companies, this figure may be reached in Kazakhstan. Since the time of work in quarantine opened and showed these opportunities. Accordingly, domestic business, education and management will not be able to use these methods for further functioning to one degree or another.

The use of software products in the public administration system of Kazakhstan in the pre-quarantine period has already been set to a certain level.

The transformation of public administration under the influence of electronic technologies in Kazakhstan has taken the path of creating e-government, which is currently moving to a digital format. Its implementation has led to major changes in various areas of public administration and thus has seriously affected the modernization of public administration functions themselves.

Referring to the classics of the Kazakh theory of the state: academician M.T. Baymakhanov proposed his modern concept of the state function. Under the function of the state, he understands “expressing its essence and social purpose, the main directions of its activities in the relevant spheres of public life, characterized by the desire to ensure their development in the interests of the state, society and its members” (Baimakhanov 2005). Hromanik in turn, under the functions of the state imply: “the main, most important areas of the state’s activity, in which its social purpose is manifested. The main activities of the legislative, Executive and judicial authorities in a state governed by the rule of law have a common nature. Their primary goal is to ensure the harmonious functioning of society” (Khropanyuk 2008). They and many other researchers emphasize the social purpose of the state function, from which they distinguish economic, social, ideological, pro-

tective, ensuring and protecting the rights and freedoms of citizens, and environmental internal functions.

It should be noted that all these areas of state activity are fully covered by the processes of Informatization, and now digitalization.

Economic issues are most widely covered by Informatization processes. In a short period of time, a huge leap was made in this area. Creating a database of business entities and entrepreneurs, Informatization of services for them, creating platforms for dialogue with government agencies, online registration and notification of a number of procedures, online reports and control, electronic exchange, a full package of online banking and payment services, and much more created conditions for the development of all sectors of the economy and business in Kazakhstan at the latest level. One of the steps to create conditions for the transition to the information society was the state program “Information Kazakhstan-2020”, approved in 2013, which emphasizes that “As a Foundation for the digital transformation of the country’s economy, this program contributed to the development of the following factors: the transition to the information society, improving public administration, creating institutions of “open and mobile government”, increasing the availability of information infrastructure not only for corporate structures, but also for citizens of the country” (<https://tengrinews.kz>).

Basically, the essence of these changes is to provide fresh, reliable, objective and timely information to all business entities. On this basis, in the country, as well as in almost all countries of the world, was formed and is actively developing new economic sector – the sector of information and communication technologies, which is determined by the Law of Kazakhstan “On Informatization” as “the branch of Economics related to the design, production and sale of software, hardware, consumer electronics and its components, as well as providing information and communication services” (<https://online.zakon.kz>). At the same time, experts emphasize that the share of the IT economy continues to grow.

The foundations of Informatization and then digitalization of the economy were laid by the state programs “Information Kazakhstan” in 2013 and “Digital Kazakhstan” in 2017, which outlined the main development priorities and outlined ways to achieve the goals in all areas of the economy and certain social spheres using the technology of Informatization and digitalization. The digital Economy is an economy that is based on the use of digital computer technologies, it shows much higher indi-

cators than other classical economies, mainly due to the fact that the cost of maintaining staff is seriously reduced and sometimes eliminated, production costs are reduced, labor productivity is increased, due to mobility. In other words, according to D. Kalybekova, “the digital economy is more efficient than the traditional one in terms of labor productivity and possible costs per unit of production” (Kalybekova 2018: 154).

At the same time, it was the process of Informatization, and then digitalization, that showed the mixing of the state’s function, namely, economic and social functions.

1. Basically, we are talking about the formation of knowledge-intensive industries and the development of human capital through the educational process. All these areas are considered in close relationship and without separation from each other. This interdependence has become an axiom of the formation of a strong economy and is constantly emphasized in all business appeals. The interest of business in a strong economy is indisputable, which pushes it to invest in the development of education, especially science, as is done in all economically strong countries of the world. While In Kazakhstan, investment in these areas is still insignificant (for the first five months of this year, investment in education amounted to only 51.6 billion tenge, down by 6.9% compared to the same period a year earlier, according to the report finprom.kz in the corresponding period, the Sector experienced a negative trend for the second year in a row: in January-may 2018, investments in education amounted to 55.5 billion tenge, a decrease of 21.9% over the year (<https://strategy2050.kz/ru/news/investitsii-v-obrazovanie-snizilis-na-8-issledovanie/>). Thus, “over the past 10 years, over \$220 billion of foreign direct investment has been attracted to the economy of Kazakhstan, which makes this country one of the regional leaders in terms of attractiveness for investment. ... Over the past 10 years, over \$220 billion of foreign direct investment has been attracted to the economy of Kazakhstan, which makes this country one of the regional leaders in terms of attractiveness for investment” (Ivanov 2020). While long-term business investment in science and education has become a global trend and a guarantee of competitiveness. In industrially developed countries, the share of personnel training, production organization, and new knowledge embodied in technologies and equipment accounts for 80 to 95% of GDP growth.

The task of investing in these social spheres is being updated, as the process of economic development for years to come largely depends on it. In this

regard, the President of the Republic of Kazakhstan K. Tokayev at the 32nd plenary session of the Council of foreign investors drew attention to “the special importance of the role of human capital, and especially education. He noted that investments in human capital contribute to the economic development of the country and the growth of the welfare of society as a whole” (<https://24.kz/ru/news/economy/item/327748-v-rk-investitsii-v-obrazovanie-prodolzhayut-snizhatsya>).

World practice shows that the introduction of new technologies has become a key factor in market competition, the main means of increasing production efficiency and improving the quality of goods and services. The use of high-tech industries is becoming one of the key indicators of the country’s economic development, as “high-tech industries and high technologies play a vanguard role in the development of the social sphere and economy. They materialize the main part of the results of R & d, they determine the demand for scientific achievements and create the basis for the supply of new information technologies, the results of developments in the field of electronics and automation of production processes, biotechnology and new materials for almost all sectors of the economy. The size of the knowledge-intensive sector and the scale of use of high-tech economy characterize the scientific, technical and economic potential of the country” (<https://cyberleninka.ru/article/n/naukoemkie-otrasli-i-vysokie-tehnologii-opredelenie-pokazatelitehnicheskaya-politika-udelnyy-ves-v-strukture-ekonomiki-rossii>). These industries currently include microelectronics, computer engineering, robotics, nuclear and aerospace production, microbiological industry, computer science industry, etc. In the developed countries of the West, these industries account for up to 40% of the total gross output of the manufacturing industry.

All these data show a serious lag of Kazakhstan in the rating of economic development.

Another example of merging state functions is the “green economy”, which is considered as a paradigm of sustainable development.

In essence, a green economy is an economy aimed at preserving the well – being of society, through the efficient and economical consumption of natural resources that are currently subject to depletion (minerals – oil, gas) and the rational use of inexhaustible resources. Once again, we return to the fact that the basis is the use of clean or “green” technologies, the so-called knowledge-intensive, high technologies. And now we see an intertwining of functions, to achieve which the state must con-

nect the necessary tools and methods of management and regulation.

If investment investments in the sphere of science and education in Kazakhstan are quite low, the sphere of the environmental industry is more in demand. International organizations and numerous international financial institutions that are interested in developing renewable energy, clean technologies and infrastructure are involved in this direction. On the portal of the Ministry of ecology, Geology and natural resources “Green economy” constantly updated registers of producers of green technologies and lists of objects using green technologies.

In the action plan for the implementation Of the concept for the transition of the Republic of Kazakhstan to a “green economy” for 2013-2020, the Decree of the government of the Republic of Kazakhstan dated July 31, 2013 No. 750 defines large – scale projects in the field of the environment. At the same time, the government recognizes that “the overall institutional environment remains insufficiently favorable for large-scale implementation of green technologies”, which is largely due to the low level of development and implementation of knowledge-intensive green technologies.

In turn,” green ecology “ allows you to solve some social problems, namely the creation of additional jobs. In countries that are “creating a green economy”, their policies create new jobs; this potential can be increased by additional investment in green sectors. Policies aimed at small and medium-sized enterprises (SMEs) seem particularly promising, since such enterprises create a significant portion of jobs and provide employment growth in most countries” (www.unep.org/greeneconomy). Experience of such countries as the USA, China, Brazil, etc. Thus, the introduction of the principles of the green economy has led to the creation of additional jobs in the field of gardening, water and fishing, cleaning and processing of household and other garbage, processing of industrial, medical, construction, radioactive and other waste, and much more. It is planned that this will be done in Kazakhstan.

Astana international financial center (AIFC) together with the European Bank for reconstruction and development (EBRD) has developed a concept that defines The main approaches to building a “green” financial system in Kazakhstan. one of the main goals of the AIFC is to develop the capital market in Kazakhstan. By 2050, it is planned to transform the green economy to further increase GDP by 3%, create more than 500 thousand new jobs, create new industries and services, and ensure high standards of quality of life for the population.

At the end of 2018, investments in the green economy of the Republic of Kazakhstan increased 2.5 times over the year and amounted to 80.2 billion tenge. This is a record value for the entire history of investment in this area. Previously, the maximum amount of investment was recorded in 2014 — 78.7 billion tenge. In 2017, the amount of investments invested in environmental protection was equal to 32.5 billion tenge, while the annual growth was only 0.9% (<https://liter.kz/money/economy/4962-investitsii-v-zelenuyu-ekonomiku-kazahstana-sostavili-80-2-mlrd-tenge/>).

All these and many other data show that the functions of the state are closely intertwined and complement each other. And the widespread introduction of automation and digitalization technology has played a huge role in this. Technologies for the availability of information, its systematization and constant updating constantly increase the level of scientific research, the results of which are implemented in all spheres of life of the individual, society and the state.

In this process, a huge role is played by the state, which, on the example of the Republic of Kazakhstan, initiates the introduction of these processes not only in the management system, but also creates conditions for their introduction in the private sector. Public-private partnership is an example of this. The state reserves control and Supervisory functions, and state bodies become subjects of business activity, involving investments in the most complex and costly areas. Accordingly, digitalization introduced into the public administration system creates prerequisites for the integration of public functions and contributes to the achievement of goals, which in turn change based on the conditions of development and life of society. Digitalization is becoming a certain indicator of the state’s development, which also contributes to changes in the public administration system itself.

The main movement is expected in two directions: movement along two development vectors-digitalization of the existing economy, that is, ensuring a pragmatic start consisting of specific projects in the real sector, launching projects on digitalization and technological re-equipment of existing sectors of the economy, state structures, and development of digital infrastructure.

The second direction is the creation of the digital industry of the future-ensuring long-term sustainability, launching the digital transformation of the country by increasing the level of human capital development, building institutions for

innovative development and generally progressive development of the digital ecosystem.

This concept is based on five main directions, namely, digitalization of economic sectors, transformation of traditional sectors of the economy using breakthrough technologies and opportunities that will increase labor productivity and lead to increased capitalization.

The transition to the digital state is a direction of transforming the functions of the state as an infrastructure for providing services to the population and business, anticipating its needs.

Implementation of the digital silk road – that is, the development of high-speed and secure infrastructure for data transmission, storage and processing.

The development of human capital is a direction of transformation that includes the creation of a so – called creative society to ensure the transition to a new reality-the knowledge economy.

The creation of an innovation ecosystem is the creation of conditions for the development of technological entrepreneurship and innovation with stable horizontal links between business, the scientific sphere and the state. The state will act as a catalyst for the ecosystem, able to generate, adapt and implement innovations in production.

The implementation of the program involves attracting funding in the amount of 141 billion tenge from the national budget. It is also expected to attract more than 169 billion tenge from quasi-public sector entities. In the context of the global trend of digitalization of all spheres of life and economy, the key factor of competitiveness is the introduction and widespread use of digital technologies. A lot of work has been done in this direction and in 2020, measures will be taken to increase the coverage of Internet services to 93% of the country's population; bring the level of public services in electronic format to 90%; increase the level of digital literacy of the population to 80%.

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