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## **REALITIES AND PERSPECTIVES OF DEVELOPMENT OF E-GOVERNMENT IN THE KAZAKHSTAN**

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### **—Abstract—**

In this paper we consider the history, realities and prospects of development of e-government in Kazakhstan. Philosophy of e-government and e-democracy in Kazakhstan is to provide extensive information about current state (updates) processes in the country, in the implementation of government services on-line, as well as to empower citizens to participate in state governance (or public administration).

Processes of formation and development of e-democracy, in particular e-government are going all over the world, including Kazakhstan. This is due to the current trends of development of post-industrial society based on information and communication technologies. This paper discusses the existing theories of the information society, defines the difference between the concepts of e-government and e-democracy, as well as the realities and prospects of development of e-government in Kazakhstan.

**Key Words:** e-government, e-governance, e-participation Index, e - government Readiness Index, Web Measure Index, Telecommunication Infrastructure Index, Human Capital Index, e-democracy.

**JEL Classification:** O38 - Government Policy

## 1. INTRODUCTION

### 1.1. Information theory of democracy

Before considering peculiarities of the development of e-democracy and e-government in Kazakhstan let us focus on the theory of information democracy in general. The leading concepts of social development in the 21st century include the theory of post-industrial society D. Bell, the theory of informational capitalism by M. Castells, Samuel Huntington's transitology theory, which analyzes the key trends of the modern world as globalization, computerization and democratization as the main factors of modern development (Obryvkova, 2006). In this case, e-democracy in the modern world, acts as a form of online interaction of population and power in the political process.

Information theory of democracy is an interdisciplinary scientific field that studies information and communication technologies' (ICT) potentials to improve the social, economic and other forms of interaction, aiming at understanding place of democracy in the information society.

The information society is a society of a new type, emerging as a result of the global scientific and social revolution generated by the explosive development and convergence of information and communication technologies. It is a society in which the main resource of economic and social power is increasingly becoming the information that is associated with the development of high-tech industry.

Thus, the information society is a society of the new economy, where the bulk of production is created through the creation and sale of high-end technologies, information products as the result of intellectual creativity of the people. In the information society, the condition of each individual's well-being are the skills of handling various types of information, computerization, professional knowledge gained through unhindered access to information and the ability to work with it. Also it should be noted that the information society is a society of the globalization era in which the exchange of information has no time, no space, no political boundaries, which contributes to the harmonization of certain knowledge

and skills for information that the interpenetration of cultures and the formation of philosophy of cosmopolitanism. Thus, the development of information theory of democracy is impossible without recognition of the critical role of information in social development. Researcher McLuhan believed (Obryvkova, 2006) that the most important factor in the historical process is the change of information technology and one of the first to suggest that the type of society is determined by the dominant type of communication in it, and human perception by the speed of information transfer.

J. Nesbit even in 1982 identified (Obryvkova N., 2006) the following social and political changes accompanying the transition of the industrial society to the information one:

- 1) The transition from a centralized to a decentralized management;
- 2) The transition from institutionalized help to self-help;
- 3) The transition of representative democracy to participative (democratic participation) one;
- 4) The transition from a bureaucratic hierarchy to work networks;
- 5) The transition from the dichotomy of "either-or" to the diversity of choice.

Researcher M. Castells notes (Obryvkova, 2006) decreasing belief to the political system, absorption of the media by state bureaucracy and inefficiency of the law, based on the principles of liberal democracy. Ways of going out of the crisis Castells sees in: 1) the creation of local government through decentralization, 2) the use of electronic communications and the shift from a hierarchical to a network management system with the establishment of horizontal communication of citizens with government and management.

Establishment of horizontal communication of citizens with authorities and management is highly relevant to the current stage of development of e-government in Kazakhstan. The philosophy of creating e-government and e-democracy in Kazakhstan is to provide extensive information about ongoing processes of government in the country, in the implementation of government services on-line, as well as to empower citizens to participate in government.

## **1.2. Concepts of e- Government and e-Democracy**

In order to consider the realities and prospects of development of e-government and e-democracy in Kazakhstan, in our opinion, it is necessary to define clear-cut

definitions of e-democracy and e-government and the fundamental difference between them.

E-Government is a way to provide information and assistance already a formed set of public services to citizens, businesses, other branches of the government and public officials, in which the personal interaction between the state and the applicant is minimized and mostly used information technology. This is an interactive form of communication between the authorities and the people in order to improve the delivery of public services. Thus, e-Government is based on advanced information and communications technology; it is increasingly accepted feature of the information society, where traditional government functions are offset and fading. In general, the “e-government” (or digital government) is defined as “employment in the World Wide Web to provide government information and services to citizens” (UN, 2006).

Often, the concept “e-democracy” is identified with the concept of “e-government”, but they are fundamentally different by nature. In contrast to the e-Government, which is created “from above” for a more effective functioning of the state apparatus, e-democracy is focused on quality improvement of citizens' participation in political life, that is, to the initiative “from below” in government. Thus, the important is to understand the differences between the concepts of e-government and e-governance. If the e-government has traditionally been understood as an activity of government, then e-governance is an extension of the scope of government by involving citizens in the process of governance. In this sense, the electronic control is an integral part of the concept of e-democracy.

The most reliable tool for the global ranking of countries in the development of e-government is recognized e-Government Readiness Index, which reflects the characteristics of access to e-government, mainly the technological infrastructure of the country and the educational level of citizens. According to this e-government readiness index is made up of three initial indexes - Web Measure Index, Telecommunication Infrastructure Index, and Human Capital Index.

The next important indicator is e-Participation Index, which evaluates how useful are online services and how often they are provided to the citizens. Its components are: e-information of citizens by the government from its Web site on programs, budgets, laws and all that is of key importance to society, e-consultation, and the visitors of the government web site can choose topic of public policy for the online discussion; e-decision making with the participation of the citizens of the

country, while the government provides feedback on solutions to specific problems (UN, 2012).

## **2. The development of e-government in Kazakhstan**

### **2.1. The realities of e-government in Kazakhstan**

Kazakhstan is a young country that is going through a forced economic, social and political modernization in all areas of society, including the establishment of information and communication technologies, and effective e-government. A long-term policy of modernization in Kazakhstan is shown in the long-term strategy for the development of Kazakhstan till 2030 and 2050, the state program "Information Kazakhstan - 2020" and in the program of the Government of the Republic of Kazakhstan on development of information and communication technologies for 2010 - 2014, which outlines the key task of the state to go to the level of a highly developed, post-industrial society. Here an important role plays the development of e-government, e-participation and e-democracy in general.

According to the rating of the United Nations global readiness for e-government in accordance with the E-Government Readiness Index in 2012, Kazakhstan is on 38th position (UN, 2012). Whereas in 2010, Kazakhstan was in 46th place, while still ahead of other countries like Russia, Ukraine and Belarus.

In the classification in e-participation index of citizens in e-government projects, which determines the ability of citizens to appeal to the Government of Kazakhstan in 2012, took the 2nd place along with Singapore. For comparison, Kazakhstan in 2010 for the development of "e-government" took 46th place, in 2008 - 81<sup>st</sup> place, and in 2012 - 38th place, which indicates the intensity, the forced development of e-government policy in Kazakhstan.

For the first time the idea of creation of the electronic government in Kazakhstan has been announced in the annual Message of the President of Republic Kazakhstan on March, 19th, 2004. According to which the portal of the electronic government [www.egov.kz](http://www.egov.kz) has been developed by the national operator in sphere of information technology of Republic Kazakhstan JSC "National Information Technologies" (JSC NIT). JSC "National Information Technologies" (NIT) was developed by the e-government portal [www.egov.kz](http://www.egov.kz). In the period with 2007 on 2009 JSC "NIT" developed the infrastructure of e-government, established its basic components: a web portal and e-government gateway, payment gateway e-government, electronic interdepartmental workflow, public key infrastructure, the

uniform transport environment of state bodies, national registers of identification numbers, implemented electronic government services.

Possibility to pay for public services via the Internet appeared in Kazakhstan in 2010. There are about 675 public services in Kazakhstan. Out of these it was possible to implement 20 services in 2007, in 2010 — 59 services, in 2011 — 74, and in 2012 already 84 services obtained through the Internet. Thus, today 11.4% of Kazakhstan's public services are provided through the Internet. For comparison, in Estonia - the leader of post-Soviet countries, this indicator makes more than 70 %. The information system «Electronic state purchases» was created. Since January 1, 2010 there was 100% transition of state purchase by method of price offers in electronic format. In the 2009-2010 the implementation of projects "E-licensing" for businesses, "E-notary", "Electronic akimat" started. According to the latest data on the portal [www.egov.kz](http://www.egov.kz) in the frames "E-government" project more than 236 state electronic services are provided. In 2012, the website [www.egov.kz](http://www.egov.kz) integrated databases of the REGISTRY OFFICE, Ministry of Health and the Ministry of Internal Affairs. Currently on this portal 84 public services, 21 types of government payments, 16 state duties, 4 types of tax payments and the payment of the full range of penalties for violation of traffic rules are offered.

Thus, ample opportunities of electronic participation, use of advantages of electronic payment of the state taxes and tax collections, various duties and penalties, fee, and also giving of statements of various socially significant and allowing documents are given to citizens of Kazakhstan. In many respects it improves a transparency of the state allowing system and serves reduction of bureaucracy and corruption in Kazakhstan. The total expenses provided in the republican budget on realization of the Program on development of information and communication technologies in Republic Kazakhstan on 2010 - 2014 which was approved by Government RK on September, 29th, 2010 makes. ( State proram "Information Kazakhstan - 2020", 2012)

- 1) 2010 – 17 billion 495 000 tenge or 119 million 815 000 US dollars;
- 2) 2011 - 23 billion 269 000 tenge or 154 million 984 000 US dollars;
- 3) 2012 - 20 billion 893000 tenge or 139 million 280 000 US dollars;
- 4) 2013 - 5 billion 182000 tenge or 34 million 545 000 US dollars;
- 5) 2014 – 4 млрд. 491000 tenge or 29 million 944 480 US dollars.

In total by the end of 2014 for implementation of ICT programs to be spent from the state budget about 480 million U.S. dollars.

In most countries, such as Canada, Korea, Malaysia, Singapore, the United States has developed and implemented the strategy of development of the information society as a whole and the individual fields. In the former Soviet Union there is long-term strategic program of national information policy of the Russian Federation and Belarus. The main strategic document for the development of the information society and e-government in Kazakhstan is a state program "Information Kazakhstan – 2020" and the Program for the development of information and communication technologies in the Republic of Kazakhstan for 2010-2014.

The purpose of the state program "Information Kazakhstan - 2020" is the creation of conditions for the transition to the information society. In this program, the following objectives are set: ensuring the effectiveness of the public administration, ensuring the availability of information and communication infrastructure for the population of Kazakhstan, creation of an information environment for socio-economic and cultural development of society, development of Kazakhstan's information space.

Implementation period of this program: Stage 1 - 2013 - 2017, stage 2 - 2018-2020. Target indicators of the program are the following: the task that Kazakhstan in Doing Business rating should be in the list of top 35 countries in the world, according to an index of "electronic government" (as described in the UN) in 2020, Kazakhstan has to be among the first 25 countries, while Kazakhstan is on the 38<sup>th</sup> place now; the availability of information and communication infrastructure in the households of the Republic of Kazakhstan -100%; the number of Internet users in 2020 should be 75%; air digital TV and radio coverage of the population of Kazakhstan - 95%; and the share of the information and communication technologies sector in Kazakhstan's GDP should reach 4% (State program "Information Kazakhstan - 2020", 2012).

Considering the world experience and share ITC sector in the GDP of developed countries in terms of technology, we can underline the countries of South-East Asian countries such as Korea, Malaysia, Taiwan, and Singapore, where the share of the ICT industry to GDP exceeds 10%. India is also one of examples of successful development of export-oriented sector of IT-services and intensive ICT-using.



Also, the share of health care organizations, research and educational institutions are connected to a single electronic network should be 100%, the share of sales to Kazakhstan Internet stores, paid electronically - 440%, and finally the share of public services provided in electronic format - 50%.

In Kazakhstan, the main focus is on one part of the information society - on the formation and development of e-government, which has been successfully implemented, as evidenced by the high international rankings. In general, in the report on global competitiveness of 2012-2013 years by World Economic Forum competitiveness ranking Kazakhstan improved 21 positions to reach 51<sup>st</sup> place. The development of communication networks to provide access to the Internet is a rapidly developing. Internet users make 53.5% of the population.

Considering the current situation with the development of e-government in Kazakhstan should be noted that since 2008, "e-government" Kazakhstan has risen in the ranking of the United Nations by 43 positions. In solving the problems of information and services to citizens and organizations have successfully implemented the basic components, the infrastructure of the "electronic government" and projects such as the issuance of electronic licenses, CPS, e-payment of taxes and penalties, the electronic notary, e-customs, e-government services, Call- center of the "electronic government". In order to improve the efficiency of the Government of the Republic of Kazakhstan implemented projects such as electronic document management, e-procurement, portals, government agencies, the project is being implemented e-health, covering all hospitals and medical management of the entire system of Kazakhstan. Realization of project "e-Finance" and "e-statistics" is being finalized. As part of the development of electronic local government offices the project "Regional Gateway "e-city administration" with the ability to automate 20 public services was implemented.

In the State Program "Information Kazakhstan – 2020" tasks of further development of "electronic government" are clearly shown as an instrument of information of the state where the targets of electronic participation are:

1. The index of "electronic government" (according to UN methods) in 2017 – to be among the first 30, and in 2020 among the first 25 countries;
2. The index of satisfaction with the quality of public services in 2017 should reach 4.5 points out of 5, in 2020 - 4.7;
3. Index of bureaucratization of public services by 2017 – 3, and by 2020 - 1;

4. The proportion of e-government services rendered in relation to the total number of services received in the traditional form in 2017 - 50%, in 2020 - 80%;
5. The share of mobile e-government services in the total amount of e-services in 2017 - at least 36%, in 2020 - 40%;

## **2.2. Perspectives of the development of e-government in Kazakhstan.**

In the future development of e-government in Kazakhstan there are the two major tasks: development of e-democracy through the further development of e-participation and development of human capital index.

One of the indicators of e-democracy is development of transparency and accountability of government to meet the legitimate rights and interests of citizens, business and society in the information. Ways to achieve these goals are to organize and structure the information public bodies. To do this, the following measures should be implemented: the list of public information provided by the Government of the Republic of Kazakhstan and government bodies to citizens and businesses through the portal of “electronic government” will be expanded; the current legislation will be changed in order to achieve timeliness, objectivity, completeness and reliability of electronic information resources; “electronic government” portal will be further developed that will serve as a platform for community dialogue, the discussion of quality of services. It is planned that involvement of citizens, non-governmental and other non-governmental organizations in the process of continuous monitoring of the quality of public provision of public services will increased. The social site on the Internet for public discussion of public bodies and the public social problems will be used; a mechanism for involving citizens in the process of reforming and improving the state will be launched. Websites of government agencies will be standardized and converted to a single platform. Mechanisms of electronic evaluation of the effectiveness of the state bodies, including the governors - the heads of local administrations at all levels and local governments by the citizens are being implemented. Another very important task is the development of Human Capital Index, which includes an increase in the level of computer literacy and vocational training of specialists in the field of ICT. In practice, the implementation of ‘e-government’ faced with the problem of the lack of a critical mass of citizens who are ready to fully use the services of e-GOV. In Kazakhstan, compared with Estonia, has not been given due attention to improving skills to use new and unusual for people systems and increase the level of computer literacy of the

population, especially in the regions. Although citizen awareness, use and participation are still limited, seminars are organized to educate citizens. Citizens can learn via call centers the schedule of the seminar programs available in their neighborhood.

### **3. CONCLUSION**

In general, the main positive features of e-government in Kazakhstan for the current period are:

1. Transparency of government procedures, including the legislative and licensing system, such as the discussion of the budget of the general public and the issuance of permits and licenses for public authorities.
2. Antibureaucracy shown in the making of a “single window” system, which excludes the officials in the chain of relationships between consumers of public services, in particular businessmen and licensing system of the state.
3. Anticorruption, a transparency and efficiency of public services, which appears in reducing the licensing functions of the bureaucracy as a corruption of the resource.
- 4 Efficiency and convenience for consumers of public services, which is a requirement of modern information society. The e-government allows the governmental information to be more accessible for establishments of public sector and citizens
5. Increasing e-democracy as increased citizen participation. The use of information and communication services in the form of e-government is a new imperative. For the development of e-democracy, as that is only the beginning of development, it is required that active development of the human capital index and the transparency and accountability of government to meet the legitimate rights and interests of citizens, businesses and society as a whole.

In Kazakhstan, most of public services are provided in one-stop-shops as physical facilities in local vicinities. The infrastructure that enables the operations of these physical one-stop-shops would also make easier to virtualize the related business processes in order to establish virtual one-stop-shop structures.

The common disadvantages of e-government include the high cost of development and implementation of e-government, reducing the confidentiality of personal information of citizens, in which inviolability of private life decreases. In Kazakhstan, at all development of a network of public services, there is an

important lack of absence of a large number of citizens who are ready to fully utilize the services e-GOV, due to the lack of development of skills of using systems new for people and increasing the level of computer literacy, particularly in the regions.

## BIBLIOGRAPHY

Chereshka DS, Smolyan GL (1997) "Network information revolution".

*Information Resources Russia*. No 4. p. 17.

Government Program "Information Kazakhstan - 2020"

[http://online.zakon.kz/Document/?doc\\_id=31238288](http://online.zakon.kz/Document/?doc_id=31238288) [Accessed 7.12.2012]

Government program for the development of information and communication technologies in the Republic of Kazakhstan for 2010-2014

<http://www.e.govce.kz/index.php/ru/zakonodatelstvo/programmnye-dokumenty/12-programma-po-razvitiyu-informatsionnykh-i-kommunikatsionnykh-tek> [Accessed 02.04.2011]

Novosti IT v Kazakhstane (2012) *Elektronnnoe-Pravitelstvo-v-Kazakhstane-realnost?* <http://www.profit.kz/articles/1865> [Accessed 6.02.2013]

Natalya Obryvkova (2006), Avtoreferat dissertatsyi na soiskanie uchenoi stepeni kandidata politicheskikh nauk «E-democracy in the modern post-industrial society»

<http://www.dissercat.com/content/elektronnaya-demokratiya-v-sovremennom-postindustrialnom-obshchestve> [Accessed 8.02.2013]

Theses of the director Department of social and political work Ministry of Culture of the Republic of Kazakhstan Nurgazieva BG on "Electronic Democracy" (Warsaw, 20.05.2011)

<http://www.osce.org/ru/odihr/77868>

United Nations (2012) *E-Government Survey 2012 E-Government for the People*,

[http://www2.unpan.org/egovkb/global\\_reports/12report.htm](http://www2.unpan.org/egovkb/global_reports/12report.htm) [Accessed 02.04.2013]