Electronic governance as transformation technology of public management

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Abstract

Summary of World experience on realization and implementation of electronic government is presented. We defined the main principles of the transformation of public administration. Approach to the development of mechanisms for improving the efficiency of public management in the process of implementation of the electronic governance is considered.

Keywords

Information society, Electronic Government, Electronic Governance, Transformation, Public Management

I. INTRODUCTION

Structure of the government can be examined as a developed information system, as main principals and process of public management are based on reception, processing, analysis and information dissemination. At present, we can note that, without use of information-communication technologies (ICT), activity of the government in information society will not meet requirements and principals presented by the society. Introduction of ICT in government organizations, in such manner, is an answer to requirements presented for operating effectiveness of governance and is connected to concept of new public management. Electronic government (e-government) – is a term, which became popular during the last 20 years of the last century and is associated with hopes for modernization of interaction character of the government and society. E-government – represents new opportunities for public management created via application of ICT during the operation of government authorities for the benefit of juridical and physical individuals, as well as for their own needs [1, 2, 12, 19].

E-government constitutes use of ICT for transformation of government, in order to make it more available for citizens, more effective and transparent. In accordance with this definition, it doesn't mean that transformation is characterized only with increase of number of computers; it will also transform interrelation between government officials and citizens of the country.

Electronic governance (e-governance) is a dynamic process, based on ICT, allowing improvement of interaction of citizens, business-sectors and government institutions on local, regional and global levels, herewith improving the effectiveness of government decision-making and rendering valid government services [4, 5, 7].

In this paper has been given briefly world experience for realization and implementation of electronic government. The scientific literature in this field has been analyzed and main issues of transformation of public administration have been defined. Main principles of increasing the effectiveness of e-government have been offered.

II. WORLD EXPERIENCE FOR REALIZATION AND IMPLEMENTATION OF ELECTRONIC GOVERNMENT

There are many definitions for "electronic government" term, each of which accents attention on certain functions [1, 7, 9, 12, 19]. Analyzing this definition, we can note that, "electronic government" – means new opportunities for public administration, application of ICT, innovations in activity of government authorities for improvement of interrelation with business-sector, non-governmental organizations and citizens of the country. In other words, the main goal of e-government is – to make public administration systems such, that in majority, they would consider interests of citizens and organizations, and would give them the opportunity to participate in government activities, as well as improve the interaction between them.

Analyzing the scientific literature in this field, we can conclude that "electronic government" consists of give main modules [2, 10, 12, 14]: G2G (government to government), G2B (government to business), G2C (government to citizens), G2N (government to non-government organizations) and G2K (government to knowledge). Among these components, we can distinguish two modules: G2N and G2K, which are very important for completeness of interrelations in social life. Main goal of G2N processes – is to forge interactions of the government with citizens during decision-making, a G2K – is interaction of government and scientific sector, which is directed to solving problems of application of innovative technologies and creation of new mechanisms of public administration by development and use of knowledge in the society.

Let's define the functions of "electronic government" as mechanism of public administration in different aspects: information technologies in public administration; organization of public administration based on electronic means of processing, transfer and dissemination of information, rendering of services by government authorities, provision of citizens with information about activities of government authorities; automated government services, use of innovative technologies by public administration authorities, use of ICT in the Internet network as an instrument, allowing to achieve a more effective administration [1, 2, 8, 10, 19].

"Electronic government" realizes issues, such as provision of a more complete access to information through Internet, participation of each citizen of the country in the life of government, increasing the transparence and abolishment of corruption, reducing of time and material expenses etc.

On the other hand, the fields of appearance of "electronic government" are not limited by developed countries. Today, frequently, the leading experience of Internet use in public administration belongs to developing countries of the world.

If the government will broaden the number of computers and web-sites, it doesn't mean that e-governance has been realized. It will just allow to partially automate the administrative activities. Realization of e-governance is a process of transformation of the government, and it demands planning, making of operative decision, simplification of monitoring process of the system etc. It is clear, that, application of modern technologies, automation of complicated procedures can not increase the effectiveness of public administration by themselves. Considering government experience, usually during the process of implementation of e-government, three stages are selected: public, participation, online-transactions [1-3, 12, 14-18]:

– public: use of ICT for broadening the access to static information of government authorities;

– participation: enlargement of citizen participation in public administration;

– Online-transactions: rendering of government services in online-mode.

Particularly, international organizations such as UN, ITU, OECD, World Bank, CID etc play a major role in research of e-government. Also, researches of companies such as Gartner, Microsoft, CISCO, HP etc in the field of implementation of electronic government is a good sign, as given organizations and companies possess a sufficient material base for conduction of qualitative and important scientific-practical researches. In its turn, it allows to attract significant financial resources to the field of research of electronic government. It also must be noted that, given organizations and consulting companies are interested in

certain coverage of electronic government problem by social-political goals.

In researches of UN (Benchmarking E-government: A Global Perspective), conception of "development index" of an e-government (e-Government Index) was applied and a certain value of that index for 169 countries of UN was introduced [3]. In accordance with the results of the year of 2008, e-Government Readiness Index for 192 countries of UN was determined [18].

III. TRANSFORMATION OF PUBLIC ADMINISTRATION

Based on international experience, we can note that, e-government requires transformation of order of interrelations of government and society [2, 8, 12, 13, 17, 19]. Transformation process requires a consequent strategy, starting from monitoring of current condition of the country and the ability of its citizens to use new technologies. In order to improve the transformation process, government must developed a model of interrelations with main persons of interest and consider opinions of the country citizens.

Based on international experience, we can note that, as there is no unique general strategy on implementation of e-governance, we can emphasize following foundation issues of transformation process:

– Legalization of application of ICT in the activity of government authorities and interrelations of government authorities with business and citizens must be the main constituent of the e-government;

– Creation of new processes and new interrelations between controlled and controlling ones is required for successful implementation of e-government. For this reason, if correctly planned, real revolutionary changes can be introduced in the process of public management itself;

– During the process of passage to e-governance, there must be employees on all levels of government system that comprehend the importance of the new technology, understand the goals of government policy and are determined to actively conduct the innovation in general;

– During the process of passage to e-governance, developing countries must thoroughly select projects in order to optimize their expenses of time and resources. Projects must be characterized by the increased the level of government participation in processes of public administration. For this reason, it is necessary to define standards and target directions;

– government authorities must test a new order of interrelations among government institutions, as well as within the framework of partnership with private sector

and non-governmental organizations for provision of quality and accessibility of the e-governance;

– considering the fact that concept of the e-governance is oriented to the interests of citizens, it represents an initiative directed at improving the life of citizens. For this reason, efforts to stimulate citizen participation in government actions form a very important task.

It is important to note that, during the process of transformation of public administration, following can be emphasized among difficult tasks:

Problems related to Internet network access. For example, if developed countries generally have an unlimited Internet access, developing countries use Internet mainly at work or at Internet-clubs. On the other hand, generally developing countries do not have the financial resources to be invested in implementation of e-government. The problem is, planning of expenses, ICT related expenses or expenses spent on internet-infrastructure of government authorities for effective achievement of practical results are used purposelessly.

Problems of connection of interrelation of government authorities with the society consist of conformability of systems, acceptance of unique standards, possibility of exchange of information, unified search in government information resources etc. E-governance must be integrated into the process of reformation of public administration and activities on development of information society as a mechanism.

Problems related to access of citizens to government information and government services through Internet and use of possibilities of Internet in an incomplete volume. For elimination of this problem, it is necessary to stimulate the citizens of the country, for example, to reduce the Internet access fees and application of new technologies for improvement of possibility of access the government information resources.

IV. MECHANISM OF INCREASING THE EFFECTIVENESS OF E-GOVERNANCE

The recent years have been the period of active transformation of public administration systems. A complex of programs related to administrative reform directed to increase of effectiveness of public administration has been conducted in the majority of developed countries and many developing countries. The main goal of implemented administrative reforms – is to increase the effectiveness of e-governance by providing a passage from public administration to public management. Effective public management is based on use of electronic technologies. Development of information and ICT has had a serious impact on processes of public administration. Tendency of public administration system's transformation in practically all countries continues to be connected with larger scale of ICT application and is based on formation of e-governance term.

Issues of transformation and reformation of public administration are based on concept of new public management on a significant level [6-8, 10, 12, 19]. Based on international experience and study of literature in this field, it is clear, that effective government must be in accordance with requirements of information society and be based on provision of equality of possibilities among all citizens. We must note, that concept of new public management exists and is described in different countries under different titles and concepts [1, 2, 5, 10, 12].

Currently, principals of new public management are based on concept of good governance and include key characteristics [1, 9, 12, 16, 18, 19]. New approach to public administration is expressed in the process of transformation of e-government to e-governance. In other words, if we compare these two concepts, terms of clarity, transparence of information and provision of online services relate to first concept and the second concept includes terms such as participation and partnership. From this point of view, public administration must consider activity of government structures, as well as mechanisms of e-governance. One of the important and difficult tasks during the process of implementation of e-governance is evaluation of effectiveness of public administration mechanisms, as well as impact of these processes on society, economy and life of citizens. It must be noted that, in certain conditions it is possible to achieve approximate for such evaluation. Study of the research results in this field, monitoring and analysis of evaluation of effectiveness of implementation of new technologies in public administration demonstrate absence of a single approach in given issue.

Criteria of such evaluation depend on interested people on a significant level, for example, government officials, citizens as service users, mass media etc. Furthermore, criteria and methods of evaluation differ for different levels of public administration.

One of main goals of introduction of new technologies and mechanisms in public administration are as following: increase of effectiveness of governance, introduction of systems of electronic document flow, economy of time, simplification of general system monitoring process, transparence and simplicity, increase of responsibility of employees.

For example, application of innovative technologies also allows to easily monitor the stage of bureaucratic procedure the certain document is on, which simplifies the general monitoring of effectiveness of the system and increases individual responsibility of each employee for the field of work entrusted to him, considering improvement of quality

of decisions made and increasing the confidence of citizens in the government.

During the process of introduction of e-governance, following requirements must be met: availability of a policy plan of each organization affiliated with the government; implementation of management of given process, conduction of regular or periodic monitoring; simultaneous development of fundamental and specific (subject to activity of subjects) indicator systems of an e-government.

Following are equally important tasks: making decisions in network environment, study of public opinion, conduction of referendums and elections, development of technologies, as well as creation of site center of each organization affiliated with e-governance. Considering creation of such site center on a supercomputer basis in accordance with requirements of safety policy among them, development of interrelations may also be one of the important functions.

During the process of development of online-contacts among citizens and government authorities, based on content-analysis of log-files collected on servers, as well as data on electronic mails, qualified decision-making is performed by subjects of e-government. In its turn, it allows to develop mechanisms of effective public administration.

In e-governance environment, use of opportunities created by audio-informative technologies (military, police, medical aid, verbal directions, people with physical limitations, elderly etc), as well as wide application of GIS-technologies in activities and public administration, electronic cards and performance of visualization based on them in accordance with different indicators, reflect the importance of such decision-making.

One of the important tasks is formation of infrastructure of public internet-centers and points in populated areas, in order to provide the citizens with an access to authorities of an e-government in the country. Simultaneously, e-governance is obliged is perform stable activities, be reliable and possess a safety immunity, i.e. information, energetic and other securities of an e-government, as well as full readiness for an information war must be provided.

Formation of information culture in public administration is one of the important tasks during the process of creation of e-governance. Formation of information culture in information society is directly connected with the stability of economical, social-political and social-cultural conditions. Consideration of factors affecting the formation of information culture (social-cultural, social-political), study of international practice in this field, analysis of Eastern and Western values are significant. Importance of study of cultures of different nations can be considered as a new approach to formation of culture in the process of creation of an e-government. Process of formation of cultures in administration of an e-government is based on changes in ideological paradigms of administration and simplification of cultural norms for government officials. As a result, it will allow a stable development of the society generally due to achievement of effectiveness in administration.

Development and sufficient popularization of social networks among users facilitates their use in different fields [11]. From this point of view, application of social networks as one of the mechanism for increasing the effectiveness of public administration is one of the current actual issues. Application of social networks in processes of creation of information society, as well transformation and development of mechanism of public administration, allow the developing of effective solution methods.

Upon implementation of electronic technologies in public relations, it is necessary to focus on achievement of assigned targets, but simultaneously, the targets and their achievement stages must have an indicative expression, allowing the monitoring of the process of realization of projects of electronic government. It is impossible to evaluate the effectiveness of implementation of electronic technologies using a few indicators. It is necessary to use several indicators for a complete evaluation which presents the current condition of effectiveness evaluation. For example, following, regularly monitored package titled government services is used in EU countries in accordance with an indicator titled "e-services package": classification is carried out for citizens, for businesses, for government officials, for another governments etc. Thus, in order to evaluate the effectiveness of introduction of electronic technologies in public administration, following is important at the development stage: determination of indicators for tracking of implementation results; determination of information sources for performance of monitoring of implementation results; selection of information gathering and measuring methods; determination of frequency and schedule of information gathering; determination of processing and analysis technologies for received information.

V. CONCLUSION

The research of e-governance briefly presented above, demonstrates that ICT and particularly internet-technologies are increasingly shifting into the multidimensional citizen society sector, requiring new forms of researches, administration and education. Besides, provision of alternatives to e-governance is an expensive, (it does not provide the expected savings in expenses) and was not fully accepted by citizens and generally did not improve the inclusions, innovations or participation of citizens in key decision-making.

Based on world experience, we can affirm that many developing countries do not possess the infrastructure for provision of e-government services on their entire territory.

Such countries must include the development of ICT-infrastructure in the e-government development strategy, developing new approaches to solution of the access problem.

Analyzing the current condition of the e-government in the world, it can be noted that, the growing gap between countries more developed in the informational field and the developing countries, is still an actual problem. At present, it is impossible to affirm that realization and implementation of advantages of ICT will permit to reduce the gap between countries of different levels of development.

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