E-Government in the Western European Countries, Asia and in the USA

Oksana A. Mukhoryanova¹, Irina V. Novikova¹, Slavko B. Rudich¹ and Elena V. Bogushevich^{2*}

¹North Caucasian Federal University, Institute of Economics and Management, Stavropol, Russian Federation; belchenko@inbox.ru, iren-n@rambler.ru, slavko82@yandex.ru ²North Caucasian Federal University, Institute of Information Technologies and Telecommunications, Stavropol, Russian Federation; elena.bogushevich@gmail.com

Abstract

Background/Objectives: The study's purpose was generalization of best practices of E-government adoption in the different countries of the world for future use of best practice in the Russian context. **Methods/Statistical Analysis**: The basic work methods include sociologic research methods, in particular, the content analysis. **Findings**: In the world there was a large-scale experience of E-government formation. In this case, the distribution of countries that carry such experience around the world is unevenly, since most of them are located in Europe, some - in North America and units in the Asian Region. For Russia, not the whole experience can be valuable because levels of development, socio-economic and political situation considerably differs. The research makes it possible to make a conclusion that in Russia it is necessary to use foreign experience of those countries which began the way to E-government in conditions similar to the current Russian. The universal principle, which is followed by many countries and should be followed by the Russian Federation, is the - compliance of supply of electronic government services to demand of citizens and businesses. **Application/Improvements:** The main area of application of research results is development and implementation of E-government in state management around the world, including Russia.

Keywords: E-Government, E-Government Models, Foreign Experience in E-Government Formation

1. Introduction

"E-government" is a foreign experience that in the Russian Federation called "electronic government". Often raise the problem of the use of equivocal language where "E-government" is identical – "e-governance" that in its turn translated as "electronic control". This concept arose in the Occident towards the end of the last decade of the 20th century and meant universal application of high technologies: computer and information technologies in regulatory body action for improvement and openness of their work. At the same time the considered concept led to creation of the innovative State – service oriented that means the State become organization-rendering services to citizens and society. So, the strategies and implementation programs of the "E-government" concept are created: "Indonesia National-Strategy", "e-Europe", "e-Austria" and the similar in other countries.

There are four main models of the electronic government, which are presented in Figure 1.

Each of these models have the own characteristics which had influenced and continue to exert an impact on the formed experience of Russia. The following belongs to these characteristics:

1.1 The Anglo-American Model

- Service-oriented State.
- Revision of State administration functions and an exception unnecessary from them.

^{*}Author for correspondence



Figure 1. Models of electronic government.

- Services in the majority are paid by means of the Internet.
- Expansion of publication opportunities of statistical data in the network.
- Publication efficiency of administrative decisions.
- Integration of government institutions by means of telecommunications.
- Operational satisfaction of public wants.

1.2 The Asian Model

- Development of society information system.
- Job cuts of officials with replacement by information systems.
- Scientific development in the field of ICT use.
- Electronic commerce.
- Placing of terminal servers nets in public places.
- Synchronization of service provision portals with mobile devices.

1.3 The Continental Model

- Investment in human potential.
- State and civil partnership.
- Aspiration of public administration to efficiency.
- Electronic competitions and grants.
- Intercommunications of citizens (business) and the State by means of high technologies.
- Openness of data about activity of establishments.

2. Materials and Methods

The continental model combine with experience of such countries as Great Britain, Germany, France, Sweden, Finland, Denmark, Portugal, Spain, Estonia and many other countries – active agents of innovations. In general, all these countries are integrated under the auspices of the European Union which administrative institutions take under patronage the same sort institutions in each country. In these countries, the law has hard power; this law strictly regulates the relations in IT field, data flows proceeding across all Europe.

Management in these States, apart from level, from national authorities until pan-European establishments is characterized by the high level of technological innovations application to provide to Europe comfortable use of Internet opportunities in satisfaction of information wants. Citizens receive all interesting information online and can participate in management and exercise the civil rights, for example, to participate in elections, referendums and polls in the Internet, to pay mulcts and taxes in real time mode.

The European Union in formation of electronic government gives preference to the directions on social equality establishment and unity of people and nations living in Europe. The gap between number of the retirement age citizens who are not using the computer equipment, and the active age citizens who are innovations guide becomes an important problem.

So in 2000 the Electronic Europe program containing bases on introduction of the electronic government is created. It does not exclude possibility of introduction of national systems. Such systems are already realized in some European countries.

The important step of France on transition to the electronic government principles in the 1980th years was installation of Minitel terminals for reporting of data and electronic services with use of remote access.

In 1998, it was claimed that high technologies would strengthen communications between citizens (business, public organizations) and the State; this thesis became the main accent of the PAGSI program. By turn of the 21-century all-public institutions of France received e-mail addresses, public officials were directed on training computing program and working with the Internet resources. The 2000th years in France were marked by creation of regulatory and legal informatization basis in power structures. The Law Concerning Electronic Digital Signatures was issued at the beginning of 2000. In the middle of 2005, there was a law on access to administrative records. At the end of 2005, for the purpose of regulatory and legal framework content for management informatization by 2008, the Electronic Interaction of Public Services Consumers and Administrative Authorities Act are issued. Ministry of Budget, Public Accounts and Civil Administration of France is an individual responsible for electronic government introduction and its development.

The "Use of Government Information and Telecommunication Technologies" program became base for State control reforming. French ADELE Programme is autonomous strategic action and activities plan. The plan purpose is rendering electronic services online 7 days in a week, 24 hours per day. In 2005, the break in regulation of electronic government in France is made. The government of France issued the decree describing all aspects of government bodies' activity in electronic form – from e-document flow before interaction with citizens and business.

Today the Legifrance system became a big achievement of France. Here citizens, business, public organizations can exercise the rights in electronic government: Receive lot of necessary services, contact with certain government institution, receive information on its activity and many other things. France achieves as the result improvement of rendering services to citizens and business, instead of empty achievement of electronic government.

Now the French can receive in electronic form more than 85% of documentation, forms and blanks. The French citizens and the companies fill in more than 10 million tax declarations Online. Government Services Portal has more than 15 years history, it is popular among 53 million users, at the general population about 66.5 million people. Since 2010 the service –databank (the passport, other documents) is introduced, called "electronic safe", demand for this service increases annually on 1 million people. Generally, the total effect from introduction of electronic government in France in money terms makes tens of billions of euros^{1,2}.

The Netherlands in many electronic government ratings takes the first-lines not the first year. The program of electronic government in this country was published 21 years ago, ever since this program actively develops. The main objectives of the electronic government in the Netherlands are identical with tasks, which many countries set, so these are universal tasks. However, the Netherlands managed to solve them more effectively, than some other countries.

In this country, interests of government institutions, public organizations, citizens, business and science direct to the same course, the course of cooperation. The researches in the field of electronic government well know the Netherlands national E-citizen Charter³ as the document qualifying society expectations from electronic government. This document includes 10 sections, each of them describe citizens' rights on particular service, at the same time the government obligates to execute this service. The following belongs to these sections:

- Right of communication way definition. The citizen can independently choose the channel for contacts with the State. The popular channel at this moment is the Internet.
- Openness of government. Data concerning the performance of State functions are open for each citizen, and government action is transparent.
- Knowing of the rights and duties. Each citizen has to be informed about services that he can receive from the State, and conditions of their granting.
- Information of interest. Each citizen has the right in full and in a timely manner to receive information. This information has to be guaranteed open and be in electronic form. If citizens have a demand for information, so the government should justify this demand by offering the information.
- Services convenience in electronic form. The civil right to declare the data just once in electronic system of rendering services for further work with this system.
- Transparency of rendering service at all stages. The citizen can monitor the rendering service procedure, thus the citizen can also look to government control activity by the Internet.
- System safety of electronic government. It is understood the right to receive only high-quality services, and also to provide information and data to government on a confidential basis;
- Response of the government to offers and criticism. Citizens can make proposals and ideas which purpose is management improvement; also, it can be complaints and constructive criticism. The relevance of this situation is proved by the citizen's position, as services and information customer at government institutions.

- Analytics and reporting. The citizen entitled to analyze and check the results government institutions action. For this purpose, the government creates various forms of feedback.
- Participation in decision-making and influence on governance process from citizens.

The citizen Charter provides society with influence opportunities on the power and participations in management processes. In return, the society, in particular citizens are obliged to be respectful to the law and to show immersiveness in political processes.

Today in the Netherlands each level of power is in the Wide-Area Network. Overheid.ni is a place of concentration of the greatest volume of public information and services, thus "One-stop" service is realized. Each citizen can participate in common goal - public administration in order to personalize the service "My Government" representing profile with personal data, information on contacts the authorities and e-mail. At the same time, online declarations, partly taxes payment over the Internet, notice of the government about change of residence place are available to each citizen. For the citizen enshrined ID called "Citizen Service Number", for business structures - "Business Service Number", to check identity of which there are special platforms - "DigiD" and "eRecognition". In 2014, the budget of the Netherlands laid down 110 million Euro for information technology^{3,4}.

The last decade of the 20th century in Finland was marked by scientific researches and developments in the field of information and telecommunication technologies. Mobile technologies have served as a stimulus to emergence of E-government. The company Nokia, which has become transnational, made from Finland, the country of mobile technologies.

As well as Russia, Finland has developed a strategy of information-oriented society, designed to expand the field of innovative technologies application. The most innovative became the tax system and health care system, which performance has risen. You can select the filling in of tax declarations among the procedures that significantly simplified and accelerate.

Safe identification on the Internet has created in order to secure the service delivery process. Mobile identification wanted for procedures of electronic banking using mobile devices is implemented. To date, over 80% of Finnish Internet users receive services in real time. In this way, for example, queues in banks greatly relieve. If the government is able to attract people of retirement age to use the services in electronic form, then the load on the government institutions activity will reduce and their productivity will increase. In addition, using of mobile phone will allow senior citizens to use the services of everyday life (order delivery of products at home, call the expert of human service), as well as to communicate with the doctor by mobile device and transmit information about their health status.

Ministry of Transport and Communications of Finland in 2011 takes an important step in legally significant document turnover: Electronic invoices were issued to completely different companies' customers, for this purpose, legislative amendments were made. In addition to the above, the Finns confirming its reputation as "nature and environment defenders" made interesting calculations showing that the rejection of paper bills at least one service provider to the population, which is more than 150 thousand pages every month, helps to reduce atmospheric dioxides pollution almost 60 tons annually. Carbon dioxide emissions are reduced to the level attainable 14 households per year⁵.

Consequently, the Finnish banks strive not only to economic gains from the introduction of billing system but also work for protection of environment. Few of the States and even the most practical nation would appreciate the E-government advantages. At the same time in Finland bills storage portals start working, called "e-bill", secured by banks guarantees and electronic signatures. Registered letter and special code is sent to the subscriber's e-mail address and he enters the code in the space on the banking portal, met with the account.

Finland accurately monitors the errors in work, determines incorrect solutions providing services in other areas. The experience of legal system and its result is analyzed.

Interoperability Concept (ENI) was introduced by Spanish legislation in 2010⁶. It contains the recommendations and aspects concerning standards of electronic information and services, data and information storage to make the right management decisions and provide quality interdepartmental interactions. The concept purpose is reduction to general standards of technical, organizational and semantic characteristics of government electronic services for E-services provision. Besides, concept provisions should organize the work of the authorities, make it high quality and productive.

The concept is built based on requirements of the European Union, existing standards and technologies of

government authorities functioning and providing services. The interaction between government agencies in Spain is based on a single technology language.

Norway society is towards full capture and introduction of new technologies, in other words - by the way of computerization and digitalization, that is proper for State institutions. Health service, education, social security and service, market relations, banking - all areas associated with electronic "ties". Such system operates simultaneously over 10 million queries and outputs the result as soon standing orders involves.

"DiFi" is the name of Agency for Public Management and eGovernment in Leikanger small Norwegian village. DiFi created in 2008 to combine three structures: Statkonsult, Norway.no, as well as the Norwegian purchasing management in electronic format.

Less than 90% of State and municipal documents can be obtained electronically. It is not just "open documents". This includes all correspondence and data about communications within government agencies, across all divisions. It is necessary three calendar days to receipt the document, its order is carried out on a special portal oep. no. The defining feature of the request for this service is the ability to do it unreasonably without identification. As we know, on the contrary, many countries try to create well-functioning systems of self-identification in the use of government Internet resources.

Citizens can get a wide range of central and local government services. Every taxpayer has a personal ID. If you have any technical problems with the service order, special support center experts in DiFi help all addressed with resolution of problems. At this center, as per normal, only 12 experts lend support, but when system overloads their number increase up to 40 people. DiFi budget amounts to 40 million Euros, or 300 million Crowns in native currency, and for government with population of 5 million people, with communication and willingness to information and technological innovations, is successful and sufficient investment in computerization and E-government.

The Norwegian company EVRY is the stop-rank company in Northern Europe in terms of information technologies, its annual cash cycle is \$12 billion Crowns and thousands of employees. Like Finland, Norway very successful seeks to electronic billing. EVRY is also engaged in E-government and does it very successfully on the principle of "One-stop" in foreign practice better known as "one-stop-shop" that contains all public services. EVRY can be regarded as a monopoly in its field, as the other billing services market represented by small companies, unable to compete with it.

Norway is a country with a very wise and useful legal system for E-government and citizens. Any information received or transmitted before witness, any form of writing a letter, SMS-message - this is the official documentation, which can be a subject of lawsuit. In addition, in this regard, officials have no legal right to refuse in information output, as false informing is statutory.

Sweden started to prepare for E-government in 1995. Then local authorities received subsidies to develop the Internet across the country, to carry out the connection with WAN network everywhere. Since 2000, idea to increase the power openness, to involve citizens in the governance process becomes a popular, information society arises⁷.

Rendering of public services around-the-clock has been made possible through the program of public administration, published in 2003, "24/7 Agency» began to work". In 2009, Sweden recognized the need in special structure of management innovations - E-government Delegations, which has the task by 2014 to coordinate all projects in the field of management electronification. The principal directions of the Delegation are:

- Electronic identification service of citizens.
- E-government portal on the Internet.
- Improving of electronization regulatory basis and legislation.
- Use of a transparent and open source software.
- Security of Internet transactions.
- Convenient services for citizens and businesses in electronic form.

In Sweden, there was a first international experience of electronic tax returns and online identification of citizens. Despite government portal öppnadata.se, implying disclosure of information does not work very effectively. IT market is actively formed in the country, thanks to the government's decision to develop all portals of administrative assignments with use of open source software, which greatly expanded the scope of technical solutions.

The Swiss, through the portal 1177.se, can search for information of interest in the field of health. In the capital, the State implemented the project "SMS - lifesaver". For example, project participants can provide all possible assistance for those who has a heart attack. This service finds the participants who are closely to need helper, and sends location data⁸.

In 2008, the project of citizens and managers contact through information and communication technologies is realized. For example, a set of services, such as:

- The Dialogue- allows citizens to make their point to official.
- Mobile survey portal to public opinion poll.
- Budget stimulant allows citizens to participate in the budget process, to set forward their proposals even with media support. Citizens offered about 100 ideas concerning one aspect of the budgeting; it led to the publication of 20 new projects.

In June 2012, "Government Services Center" began to work, which has identical to similar structure the problems to provide quality and timely services. By 2015, the operational efficiency is increased by 33% in this mode; it was possible to facilitate the work of 25% State employees.

In general, the Swedish government shows an example of formation the supply of quality public services and thus triggers an economic growth through the expansion of new markets and innovative development using business ideas.

Estonia has passed three stages of reform in E-government formation:

- Traditional bureaucracy combined with Internet technologies. It means multiple contacts of citizens with government agencies, and the public officials have internal communication through the Internet.
- "One-stop-shop" services rendering through the multifunctional centers. Citizen applies for a service once, the further procedure of rendering service and contacts between governments institutions are care of authorities.
- Joint E-government. Citizen received the service through the special portal on the Internet.

E-government experts recognize the Estonian experience as one of the best world's practice⁹, in this country there are more than one hundred different electronic services, registries and database are integrated into integral system. E-banking services are involved 98% of the potential capacity. For 10 years, the citizens can participate in public polls regardless of their location.

In this country immediate filling in of taxes declaration, payment of parking space by cell phone, even registration of Start-up Company over the Internet became customary. Parents of students need not to go to school to explore their child's progress and class schedule; all data on process of education are available in electronic form. Estonia is an example for many countries with developing information-oriented society. Integrated E-government promotes business development and economic growth.

Since 2000, the Estonian government stops using paper records at Cabinet Conference, it used only electronic forms of documents on the Internet. Signs of the Estonian E-government include the following:

- All development projects should be implemented.
- In electronic services, e-Governance Academy in Estonia is competent with narrow focus experts.
- There are projects that make it possible to carry out the transactions with profit taking.
- Mobile payments.

Data safety stored on Common E-government Services Portal, guaranteed by the principle that the citizens can monitor the statistics of personal data views. If public servants illegally view your personal data, you can prefer a corresponding complaint. There are different forms of punishment: Fines, disranking to lower position, and even the institution of criminal proceedings.

Instead of passport, the Estonians received personal identifier - an electronic ID-card. The card is protected by two protection stages and SMS verification. Personal ID replaces the set of identity and personal documents; the owner is free to travel within the European space. ID-card replaces digital signature and it is an electronic means of participation in elections.

Since 1997, Cybernetica Company has developed Estonian E-government. Distribution system for unhampered cooperation of government agencies is projected. X-Road model manages the requests from different information spaces, transforming and adapting the data during their exchange in a common format¹⁰. All government agencies can use information contained even in Soviet databases.

Of course, the positive experience of the State is also connected with a small population - about 1.3 million people residing inside the territory of 45000 sq km. Therefore, the overall budget of developed systems amount from 50 to 60 million Euros, compared with the inventions budgets of other States it is very little. It is

Table 1.

Europe

important to note that the company engaged in the creation of E-government has only 100 employees.

Although today Estonia has not occupy the first line of the E-government rankings, but its achievements are among the most significant. It is planned to transfer the electronic government in the "cloud storage" that will protect it from loss of storage mediums.

Germany is one of the leaders in E-government among European countries. It started an electronization journey in 1998. At the time, it has become an urgent need to increase computer competence and providing secure access on the Internet. Gerhard Schroder German ex-chancellor in 2000 announced¹¹ about the directions in formation of E-government:

- Computer literacy should take on at school.
- Libraries should provide access on the Internet.
- Digital commerce and the introduction of digital signatures for secure transactions on the Internet.

Strategy "Bund Online 2005" assumes the modernization of government agencies action and conversion the services in electronic form to the beginning of 2006. The objectives of strategy have been achieved and by the deadline, 440 government services have already become in electronic form. German E-government involves:

- Provision of quality public services to the extent required.
- Online cooperation between the State and business.
- Introduction of electronic identification.

The municipal authority is also an active participant in innovation. Its main objectives are receiving onlinerequests from citizens, registration of citizens, informing of citizens in electronic form, and the supply of government control.

Germany operates several services:

- "De-mail" general public e-mail.
- "Electronic Identitycard" prototype of traditional passport.
- "Public Service Number" contact information with power 115.

Portal bund.de is a major online governmental resource; here there is an open access to all government agencies and services. Since 2013, the country has a law

State	Index indicator	
	(from 0 to 1 ea.)	
1	2	
France	0,8938	
Netherlands	0,8897	
Finland	0,8644	
Spain	0,8410	
Norway	0,8357	
Sweden	0,8225	
Estonia	0,8180	
Denmark	0,8162	
Austria	0,7912	
Germany	0,7864	
Ireland	0,7810	
Italy	0,7593	
Luxembourg	0,7591	
Belgium	0,7420	
Russia	0,7296	
Lithuania	0,7271	
Switzerland	0,7267	
Latvia	0,7178	
Portugal	0,6900	

Ranking of E-government development in

"E-government – Gesetz" in support of electronic control. It greatly simplifies the communication of citizens and authorities, as well as interdepartmental interaction. Today, however, Germany has not yet come to an exclusive interaction via the Internet, E-government still continues to evolve. As in Russia, there is an access to the service electronically has not yet become the rule.

In the ranking conducted since 2003¹² and annually renovated by the United Nations Organizations – "UN E-government Survey", the main indicator is "The E-government Development Index". These ratings by 2015 in European section are shown in Table 1.

The data presented in Table 1 shows that E-government in Europe develops irregularly towards the economic level of States development. Unexpected leaders in this ranking from year to year are the Netherlands, Finland, Norway, Spain and Estonia. These countries cannot be considered the most active economically. Whereby, it is possible to say that neither the expenditure level on information technologies, nor the spatial quantity and population size are not the determining success factors of innovations. Analysis has shown only initiative countries, not pursuing the primary economic electronization and informatization benefits, can achieve the considerable progress.

So, Continental model countries form different ways of E-government, the general features of which are:

- Long history of the information society and e-government development. The most countries have realized the need for change management technologies towards the end of XX century.
- High level of legal culture. Identical within the meaning and direction programs and policies in different countries include measures that apply only to their circumstances.
- Coverage of all areas of life by electronic and mobile services. Created unique service products that simplify daily contacts not only the citizens with the authorities, but also citizens with society. There are services common to all countries-filling in of tax returns, pay of taxes and fines.
- Promotion to the development of national information technologies market by the State. Governments actively support innovative business ideas and implements variety technological products.
- Online identification of citizens and protection of personal data. European countries support the initiative to create electronic identifiers - ID for citizens providing the replacement of many personal documents and protection of personal information.

3. Results and Discussion

E-government in the Asian model is based on the Asian type of corporate culture, the multi-level system of governance control and hierarchy. The brightest model representative is South Korea the leader in the ranking of the United Nations¹², not only among Asian countries, but also among all countries of the world. It takes the first line of rating with The E-government Development Index - 0.9462. The Koreans vector directed toward the electronization of education and culture. E-democracy in the case of South Korea is a support for each citizen, the development of which has led people to understanding their own capabilities, significancy and ability to real impact on the course of life, not only in society but also at all State. The government, for its part, has adopted long-term results prediction policies from practical implementation of information technology and telecommunications. Integrated Information Space in Korea creates support for the government and, in practice, implements the principles of democracy, where the people play the role of a single carrier and a source of power.

In the 80s 20th century, Korea has established 5 national databases in the areas of State government, finance, scientific research and education, National security, Civil defense. It was the most inconspicuous stage in the creation of E-government. Whereat, at the end of the 90s the country came to the need to reform the cumbersome and volume management apparatus. Then more than 16 thousand officials were laid off. Simultaneously the new information technologies began to adopt. Therefore, by the end of 20th century, Korea issued Plan Information Act. Seven control systems are created in social security, mail, cargo, protection of intellectual creation and meteorology rights. Website of government is launched; the activity of tax and customs authorities took the electronic form, State Procurement System "Narajangteo", an electronic system of issuing passports are created. Thus, Korea's public institutions were able to function more harmoniously and efficiently.

At the beginning of the first decade of the 21st century, the infrastructure of future E-government is formed. The stages of E-government construction are presented in Figure 2. 30 projects was implemented at the initial stage of E-government development, it arouses foreign colleagues' interest. Export of electronic products significantly increases the incomings of Korea. Moreover, the UN rating result, which was mentioned above, raised the demand for E-government development services in two times. KICA is Korean exporter of electronic information services with use of digital signatures. From such exports, Korea plans to receive 3.2 billion dollars in investment.

A good example of successful innovation in management can be considered "U-cities" or "smart cities". So the whole life of the modern South Korean city surrounded of computational processes. Electronic and mobile equipment just adapts to the person lifestyle. There is no need to worry about routine business in city life. Mobile phone or smartphone allows you to order the necessary services from the State, to calculate the route and movement time,



Figure 2. The main stages of E-government establishment in South Korea.

get medical advice without leaving home. In addition, this is not all the advantages of "smart cities".

"Smart schools and universities" were first implemented in the Korean Sejong. Entrance to the educational institution is registered through the identification cards of pupils and students. Parents receive daily SMS-notification about visiting of their child school or university; they can monitor progress over the Internet. Electronic boards, translating new information and knowledge automatically translated into special electronic books of each student. Schedule is shown on the electronic displays at the institution. Planning sessions and publication of relevant materials are accessible to teachers Online. The system "E-school" minimizes gaps in traditional organization of educational process and simplifies the life of students, their parents and teachers.

Mobile application services in E-government is actively developing in the country, for the government the head motive for such direction is the increase of smartphone users number towards computer users. In 2014, the mobile Internet has exceeded the volume of stationary use¹³. Korean authorities seek to offer the citizens what is in their demand. Now 330 services provided through SMS and MMS Services. Increasingly, the concept «electronic» of the government are beginning to replace the concept of "mobile".

In addition, electronic document management system is 100% developed in the country. Total savings have amounted more than 16 billion dollars¹⁴. For 12 years, about 1.7 billion dollars spent on a system of "cloud storage". For example, Table 2 shows the costs of some countries on E-government as of 2014.

Table 2 shows that the South Korea able to execute a great work at lowers expenses.

Singapore is one of the leader countries in electronization not only in Asia but also around the world. Singapore

Table 2.	The budget for E-government
implemer	tation

Country	Budget (billion	Dollars per man	The start of realization
	dollars)		
Russia	0,18	1,2	2002
Estonia	1,5	1153,8	1997
South Korea	1,6	35,6	2003
Singapore	15	3125	1998
United States	36,65	118,6	1992

holds 3 UN rating line on the E-government Development Index, which is 0.9067.

This is a unique State, which has become the path of electronization and informatization more than 30 years ago. The last two decades of the 20th century computing was actively involved in the country. From 2000 until 2006 the transfer preparations of State services into electronic form was made. The direct exploitation of electronic service was conducted from 2006 until 2010 under iGov2010. More than 50 systems began to work for government agencies, more than 1.5 thousand. Online -services for citizens and businesses. The results of the program have led to the fact that 9 out of 10 people appreciated its practical results¹⁵. The mobile government "mGov" operates; it has 300 mobile applications and services.

Today, the Singapore government services are available in real time in the "Singapore ONE". Singapore, like other successful countries brings together all E-government systems in a single portal of services - egov. gov.sg. Singapore citizens have the right to start personal details (username, password) to log in this integrated site, to bind to their Smartphone. This feature allows you to keep track of their pension contributions by using mobile phone. In 2010, the access to government portals opened to holders of work visas.

Singapore authorities believe that the successful improvement of government in electronic form involves in centralized control. Here is the State Technology Center, responsible for computerization. Moreover, all the technology projects in the country are based on partnership between government and business.

We can say that the priority areas of information in the framework of E-government in Asian model are education, culture and health care. The various forms of electronic communications work out. Under a substitution of information technology, the civil service is reduced. States promote the development of E-commerce. A very important feature that distinguishes Asian model from others is the integration of all created services and systems with mobile phones by way of special applications.

The Anglo-American model includes two prominent representatives - the US and the UK. These countries are included in 20 leaders of the UN rating on E-government Development Index.

The United States has the highest E-government Development Index - 0.8748, it holds the 7th line in the rankings. In the US, the concept of "E-government" significantly differs from that concept in other countries and means the interaction of American citizens with nongovernmental organizations: Civil society organizations, business, regional and municipal authorities^{15,16}.

The reforming of public administration in the United States based on the reengineering of government business processes. For this purpose, initially from 1995 to 2002, documentation package is adopted in the field of information system development, including the Law "On E-government". In 2003, the US issued The National Strategy to Secure Cyberspace, has become an unprecedented step of the time in the field of computerization.

Hindrance to the United States E-government has been a repetition of functions and their large number, duplicating of work of various departments and management services. Among 30 branches of business processes and functions, 20 services and departments were carried out all of them. Because of these blunders, the citizens had to produce a large volume of operations, to collect a lot of documents and filling in of many various forms.

In the United States, the transition to a "State service" is expressed in the form of transition from monologue of power to dialogue between power and citizens. "Service State" makes the main thrust on an excellent service; E-government is providing services to citizens and accounts to them.

"E-government" in the United States aimed at the effective operation of the federal authorities with management simplification; remove duplication of functions, the introduction of information services, openness of information and providing services to citizens, businesses, and civil servants. Reforming of political machinery in America and getting rid of inefficient authorities to reduce the excess useless spending and to facilitate contact between society and the authorities are considered as strategically important¹⁷. In E-government part, the United States focuses on the following areas:

- Electronic commerce, competitive tendering for public procurement needs.
- Openness of government information for citizens.
- The use of "smart" electronic cards for citizens and the federal government.
- Obtaining all information of interest, solving different tasks through portals on the Internet.
- Online taxes payment.
- Computerization in health service.
- Transparency of statistics of public institutions action.

The United States created a responsible function at the Presidential Administration level - the E-government Office, hosted by the Federal CIO. This is an internal division of Office of Management and Budget.

The Board of IT-directors of all federal departments (CIO) makes the United States E-government Management. That particular Board develops and implements policies and programs of informatization and electronization in the United States. Another important aspect is the regulatory framework flexibility relating to the Public Service, in order to attract highly qualified professionals from information technology business environment in governance at different times. Also, State employees receive training in private business structures in the field of information technology to build partnerships in the implementation of E-government projects and search for the best innovation practices in management.

The explosive interest in electronic document flow in the US is experienced after terrorist attacks 11 September of 2001, when the valuable archives documents were lost. After a few hours in the Library of Congress, it began to create large-scale collection of Internet documents forms. Since then, the United States decided to keep certain types of documents in electronic form.

The unification and standardization of political developments and modes of providing different information gave an opportunity to create following services:

- FRPI federal structure of public keys.
- ACES authorization system.
- FedForms system of federal forms.
- FedBizOpps federal system of government procurement.

• GILS - document search system for all databases of public institutions.

Today, the United States does more than 4 mln transactions in the Internet over \$16 billion dollars. The budget of E-government in the United States on 1 citizen was almost 119 dollars and it's the highest indicator all over the world. The total budget of the United States E-government is a little less than 37 billion dollars.

In just one year at the end of the 20 century in the UK, the number of Internet users has increased 13%. The UK went its E-government development way. "E - envoy" has been appointed the responsible person, the messenger responsible for the implementation of E-government. The messenger is subordinate to the Prime Minister of Great Britain; its purpose is to destroy the barriers between government institutions and to associate their activities. In addition, the Government initially set up e-mails for members of parliament and ordered to give answers to letters from citizens. Next was a system that online allows you to become acquainted with Parliament decision accepted on the eve on the Internet. At the same time, there was the need to create a common website portal for access to government agencies, as well as for communication between citizen and official who make a decision on the issue of the citizen¹⁷.

The UK has chosen fundamentally different strategic direction in the area of governance, different from the traditional management model. In this case, as principles of E-government suggested, the State's interests are subordinated to the interests of civil society. The society has experience of direct contacts with the State - from the collection of documents in different instances to huge queues at public institutions. It follows from the new system should to be more comfortable and eliminating bureaucracy. In the UK at the beginning, the optimization of E-government management has the political impetus, but later motivation vector rushed in the direction of economic benefits.

In this country, 80% of the population uses the Internet. Therefore, the State could not take advantage of this factor, and created a new system, so the citizens can take advantage of its services over the Internet, the emergence of which could radically change the concept of governance. That phase when the government agencies published information about their activities, described on the Internet their bureaucratic mechanisms, was absolutely uninterested in the UK. It was important take into account that in the UK there are about 20 federal departments and agencies of regional management level more than 300 institutions of municipal governance.

During the development of the electronic services portal, the Britain is guided by the principle that is the basis of all current innovations and novelties. The developers have suggested that it is necessary to change the concept essence and pass on to the government that operated not on the Internet, but from it. The resources contained in the network began to gather together. At the end of 2012 in the UK Common Government Portal Gov.uk started to work. It synchronized previously created "DirectGov" - the portal for the public and "BusinessLink" - a portal for businesses. A common portal allows you to perform regular and recurring transactions online, for example, to pay taxes, to fill in the declarations, to carry out operations with the passport and driving license.

Healthcare portal – "HNSChoices" individually operates. Healthcare services include online appointment with the doctor, the issuance of medical prescriptions and much more. Remote accounting service brought under the control citizens with chronic diseases, the service essence is monitoring the patient condition by means of special mobile and online surveys that help us quickly establish the need of consultation with a specialist.

During 2014 more than thousand mirrored State sites eliminated, in this case the number of such sites is about four thousand. The need to increase the demand for new portal forced to apply drastic measures: The changes were made in the legal system supposed tax benefits to citizens and businesses using the service of electronic payments. Citizens get a discount of 10 pounds, a business - 150 pounds. Thus, "the E-government" has interpreted into electronic form 75% of the UK public services, increased quality of these services¹⁸.

Annual operating budget expenditures on innovation are more than 15 billion euros; it is about 5% of all State expenditures. Microsoft Corp. has 20% of software market for public use under new management. In 2014, software for electronic government took 2.5 billion pounds¹⁹.

The E-government Anglo-American model is based on the service for citizens, getting rid of structures and functions redundance in public administration and information technology in the service of society. In addition, informatization management in these countries has significantly reduced the time of official publication of the decisions and laws taken by the authorities. E-commerce is supported and encouraged.

The analysis showed the achievements of State leaders in the United Nations rating in informatization and electronization^{20,21}. All countries in Africa, South-East Asia, South America and Asian post-Soviet countries are the outsiders.

4. Conclusion

Thus, a large-scale experience of E-government formation in the world has formed. In addition to the above, the distribution of countries of that experience all round the world is unevenly, as most of them are located in Europe, some - in North America and units are in Asia. Achievements of these countries are not only the key of high-quality living environment of citizens, they are allowed to save large amounts of State budget funds and own funds of citizens. Public-private partnership propels business structure to the next development level. Each State assures market supply of information technologies, suitable to demand that society imposes. Time of traditional governance in E-Government adepts gradually exhausts itself, leaving all the best and necessary for appropriate functioning of State structures. The aspects of traditional governance, necessary for new management, include: The nature and essence of governance, structure and branches and government levels hierarchy, the power right on the legal regulation of relations in the society, the national defense.

Not the whole experience can be valuable for Russia, because development levels, socio-economic and political situations are much different. If we can talk about the use of foreign experience, it is only the experience of those countries, which began their journey to E-government in conditions similar to the current in Russian. The universal principle that many countries and the Russian Federation have followed, is correspondence of E-government proposal services to demand from citizens and businesses. In addition, Russia has enough private companies in the field of information technology, which in the future may start developing different solutions for E-government, so there is the possibility of public-private partnership developing and adaptation of innovative business ideas in the State practice. Unfortunately, Russia cannot be compared with any of the leading countries in E-government budget and this is a serious obstacle to its innovative development.

5. References

- Balyukov AS. The best worldwide E-government practices. The Essentials of Economics, Management and Law Basics. 2014 Jan. p. 7–8.
- Dyurbek E. Sweden: Digital nation. E-government concepts for Belarus: The best world practices; 2014. Available from: http://e-gov.by/best-practices/shveciya-cifrovaya-naciya
- 3. Sweden: E-government. State Management; 2014. 5/14. Available from: http://www.gosman.ru/electron?news=35268
- 4. German: E-government. State Management; 2014. 2/14. Available from: http://www.gosman.ru/electron?news=34129
- 5. Gutri IS. Internet and contemporary society. Material of 12th Russian National Composite Conference. The Basic Strategies of E-Government Formation; Russia, St. Petersburg. 2009 May. p. 118–20.
- 6. Humanitarian Encyclopedia. Centre of Humanitarian Technologies. Countries rating of E-Government Development Level; 2010. Available from: http://gtmarket. ru/ratings/e-government-survey/info
- 7. Khramtsovskaya AN. Spain: Published technical standards on national interoperability concept. Electronic Office Systems; 2011. Available from:
- http://www.eos.ru/eos_delopr/eos_delopr_intesting/detail. php?ID=83936&SECTIONID=596
- 9. Kristal'nyy BV. E-government. The USA practice. Moscow: Eco-Trend; 2011.
- Kurash AN. From rags to riches: how UK Government became electronic. CNews: State management. 2010 Jul. p. 12–9.
- 11. Mironycheva LP. Estonia E-government. Perm University Herald; 2014. p. 102–9.
- 12. Novikova IV. Problems in innovative development of Russia. Tomsk State University Herald; 2013. p. 130–4.
- Popova AS. About Estonia E-government. E-government concepts for Belarus: The best world practice. Available from: http://e-gov.by/ekspert/alena-popova-ob-elektronnom-pravitelstve-estonii
- 14. Sadovskaya KG. How to do the Government electronic. Portal of Russia Multipurpose Center. Available from: http://mfts.rf/articles/2687/
- 15. Sadovskaya KG. How Singapore managed to create E-government and be IT leader. Portal of Russia Multipurpose Center. Available from: http://mfts.rf/articles/672/
- Stankevich LT. Internet and contemporary society. E-government: Theoretical models and actual practice Material of 12th Russian National Composite Conference; St Petersburg. 2009. p. 128–9.
- Sedinkin MA. Application possibility of International practices of E-government formation in Russia. ASU Herald. Series 1: Areas Studies; 2011. p. 50–63.

- South Korea E-government. State Business. Information Technology; 2014. Available from: http://www.tadviser.ru/ index.php/Stat'ya:Elektronnoe_pravitel'stvo_Korei
- Styrin EM. E-government: Cooperation of public and private sectors. State and Municipal Management Issues; 2010. p. 163–72.
- 20. The Netherlands E-citizen Charter. Europe security and cooperation organization. Available from: http://www.osce. org/ru/secretariat/90192
- 21. UK E-Government. State Management. Available from: http://www.gosman.ru/electron?news=34308
- 22. Amalanathan A, Anounci SM, Vairamuthu S, Vasudevan M. A framework for E-governance system using linked data and belief desire intention agent. Indian Journal of Science and Technology. 2015 Jul; 8(15). p. 1–6.