E-GOVERNMENT APLLICATIONSA AND METHODOLOGIES: TURKEY ON THE E-GOVERNMENT WAY

Duygu Apak

duyguapak@yahoo.co.uk

STPS - WP - 0507

ABSTRACT

The recent changes in the technology, especially the use of Internet and the World Wide Web resulted in a new way of doing business for the governments. Governments worldwide face with the challenge of transformation and the need to reinvent government systems, which are based to deliver more efficient and cost effective services for the citizens. The developments and the studies in Information and Communication Technologies (ICT) resulted in E-Government projects and applications. This paper tries to analyze E-Government projects by analyzing their methodologies and strategies; and it is mainly based on the underlying key points in success stories. Also within this paper the reader will get information on E-Government projects in Turkey, successes and failures, IT vision of the administrations and the future plans.

Keywords: E-Government, Information and Communication Technologies (ICT), E-Government Projects

INTRODUCTION

Over the past decades information technology has slowly but consistently permeated government organizations and institutions in all levels. This is mainly the result of converting information from analog to digital forms. The digital revolution has allowed government organizations and agencies to more efficiently and effectively analyze, store and retrieve information. This process is also affected by changes in telecommunications technology and the convergence of computer and communication technologies. The recent manifestation for technological change is the advent of the Internet or world wide web. (Bretschneider; Information Technology, E-Government and Institutional Change; Public Administration Review; 2003)

Governments worldwide are faced with the challenge of transformation and the need to reinvent government systems. The aim for this type of transformation is to deliver more efficient and cost effective services, and to gain information and knowledge through information and communication technologies. The developments in Information and Communication technologies catalyzed and led to E-Government. E-government uses the Internet to deliver services, collect data and enhance democratic processes in government activities. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

WHAT IS E-GOVERNMENT

E-Government is one of the most interesting concepts introduced in the field of public administration in the late 1990s. The idea of e-government is also followed by private sector adoption of so-called e-commerce and e-business.

What is E-Government is the main question that we need to answer. There are many different definitions and theories explaining the W-Government idea. In the paper of Zhiyuan Fang, E-Government in Digital Era: Concept Practice and Development, E-Government is defined as a way for governments to use the most innovative information and communication technologies, particularly web based Internet applications, to provide citizens and businesses with more convenient

access to government information and services, to improve the quality of services and to provide greater opportunities to participate in democratic institutions and processes. The governments in the 21st century aim to provide higher qualified and cost effective services, and better relationships between citizens and government.

Basically E-Government can be explained as the government activities, obligations and duties to its citizens and citizen's duties and services to the governments over electronic communications and operations. E-government is narrowly defined as the production and delivery of government services through IT applications. The basic components of the government are the its citizens and organizations. And in E-Government the basic components are e-citizens, e-companies and e-organizations. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

In Fang's paper e-government studies are mainly divided into eight different types, or models; Government-to Citizen (G2C), Citizen-to-Government (C2G), Government-to-Business (G2B), Business-to-Government (B2G), Government-to-Government (G2G), Government-to-Nonprofit (G2N), Nonprofit-to-Government (N2G), Government-to-Employee (G2E). In the following paragraphs these models will be mentioned in general. Mainly the waves of e-government are rising through public organizations and public administration across the world. More and more governments are using information and communication technology especially Internet or web based network, to provide the above eight type of services between government agencies, citizens, businesses, employees, and other nongovernmental agencies.

Moreover the narrowest definition of e-government may show e-government as the government activities over electronic communications, whereas a broader definition by Gartner (2000) explains e-government as being the continuous optimization of services delivery, constituency participation and governance by transforming internal and external relationships through technology, the Internet and the new media.

According to these definitions the functions of e-government is outlined by Theresa A.Pardo as:

Citizen access to government information: Providing access to government information is the most common digital government initiative.

Facilitating general compliance: E-government can also mean providing electronic access to services that facilitate compliance with a set of rules or regulations.

Citizen access to personal benefits: Electronic benefits transfer and online application for public assistance and worker's compensation are examples of services that provide the citizen with electronic access to personal benefits.

Procurement including bidding, purchasing, and payment: Procurement applications allow government agencies to reap the benefits being realized in the private sector through electronic commerce applications. Electronic vendor cataloging, bid submissions and tabulations, electronic purchasing, and payment are government-to-government and government-to-business transactions that serve both the needs of government agencies as well as their private trading partners.

Government-to-Government information and service integration: Integrating service delivery programs across government agencies and between levels of government requires electronic information sharing and integration.

Citizen participation: Online democracy includes access to elected officials, discussion forums, "town meetings", voter registration and ultimately online voting.

Moon (2002) largely defines e-government having four different aspects. 1. The establishment of a secure government intranet and central database for more efficient and cooperative interaction among governmental agencies, 2. Web-based service delivery, 3. The application of e-commerce for more efficient government transaction activities, 4. Digital democracy for more transparent accountability of government. According to Moon various technologies have been applied to support these unique characteristics, including electronic data interchange, interactive voice response, voice mail and e-mail.

DIFFERENCES BETWEEN TRADITIONAL AND E-GOVERNMENT PROCESSES

Governments around the world are implementing a variety of E-Government initiatives to improve the efficiency and effectiveness of internal operations, communication with the public and engagement in transactional processes with individual and organizational constituents. In contrast to traditional government processes, e-government is notably characterized by the extensive use of communication technology, the impersonal nature of the online environment, the ease by which information can be collected, processed and used by multiple parties, the implicit uncertainty of using an open technological infrastructure and transactions and the newness of the communication medium. The citizens will interact with a government web site. Personal information can easily be collected, manipulated and used by multiple parties of the government. The spatial and temporal separation between the citizens and the government increases with e-government applications. The e-government projects and the adoption of the citizens to the new structure is a difficult process. The declining citizen control and the increasing uncertainty imposes a barrier to e-government adoption.

E-GOVERNMENT TYPES AND CHARACTERISTICS

In this part these eight models of e-government applications will be explained in general. The first type Government-to-Citizen (G2C) provides the momentum to put public services online, in particular through the electronic service delivery for offering information and communications. In Citizen-to-Government (C2G) again the applications will provide the momentum to put public services online but this time through electronic service delivery for exchange of information and communication. The Government-to-Business (G2B) model drives e-transaction initiatives such as e-procurement and the development of electronic marketplace for government purchases, and carry put government procurement for exchange of information and commodities. The fourth type called Business-to-Government (B2G) is basically the same as the above model, again the e-transaction activities are developed in electronic marketplace but for this time the sale of goods and services of the businesses are observed. The Government-to-Employee (G2E) model embarks on initiatives that will facilitate the management of civil service and internal

communication with governmental employees in order to make e-career applications. The sixth model called as Government-to-Government (G2G) provides the cooperation and communication of government departments online. There will be a mega database of government, which has a high impact on efficiency. In Government-to-Nonprofit (G2N) model governments provide information and communication to nonprofit organizations, political parties and social organizations. And in Nonprofit-to-Government (N2G) model again the exchange of information and communication between the government and nonprofit organizations, political parties and social organizations can be observed. The table below shows these eight types and characteristics more clearly. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

TABLE 1: CHARACTERISTICS OF TYPES OF E-GOVERNMENT

Items	Information	Communication Online	Transaction
G2C and C2G	Information requests of a firm or the citizen regarding taxes, business licenses, registers, laws, political programs, administrative responsibilities, etc.	Information requests and discussion regarding administrative processes and products; communication with politicians, authorities	Online delivery of service and posting of results; electronic voting, providing solution online, and participation online, etc.
G2B and B2G	Information requests of a firm or the citizen regarding taxes, business licenses, registers, laws, business programs, business policy, administrative responsibilities, etc.	Information requests and discussion regarding administrative processes for business and products; communication with politicians, authorities, etc.	Online delivery of service and posting of results; electronic transactions of accounting, e-auditing, e-procurement, e-shopping, etc.
G2G	Exchange of information among different authorities and different hierarchical levels, regarding administrative acts and laws, policy making, data, projects or programs, background information to	Information is exchanged among different authorities and different hierarchical levels; discussion fora; communication in negotiation and decision making; inter-action regarding administrative acts and	Interorganisational work-flow and exchange of data, exchanging policy and solution online, information and knowledge management, etc.

	decisions, etc.	laws, projects or programs, etc.	
N2G and G2N	Exchange of information regarding administrative acts, administrative policy, data, registers, laws, political programs, background information to decisions etc.	Information is exchanged among different organizations and agencies; discussion fora; communication in negotiation and decision making; interaction regarding administrative acts	Intraorganisational work-flow, and exchange of policy and solution, data, information and knowledge management, etc.
G2E	Exchange of information regarding works and performance, personnel policy, data, and notice for career management and development of government employees, etc.	Information is exchanged among different department or persons; discussion for a; communication in negotiation and decision making; interaction regarding works and performance, etc.	Interpersonal workflow, and exchange of personnel policy and solution, data, information and knowledge management, participation online, etc.

(Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

E-GOVERNMENT AND E-COMMERCE

In e-commerce it is allowed for businesses to transact with each other more effective (B2B), and also it brings customers closer to businesses (B2C). In e-government applications the interactions between government and citizens, government and business enterprises, and interagency relationships will be more effective, friendly, convenient, transparent and inexpensive.

From technological point of view e-government and e-commerce all represent the introduction of technological innovations. As I have mentioned above e-government includes transactions between government, business, employee, and different units of government. In other sense it can be believed that e-business and e-commerce are subsets of e-government. On the basis of above sentences the benefits of e-government will continue to depend on the realization of technical advances in e-business, not only by selling and buying but also services for customers and collaborating with business partners and conducting electronic

transactions within an organization entity. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

E-GOVERNMENT AND E-GOVERNANCE

Here I believe it is also essential to mention the idea of e-governance. Actually e-governance is beyond the scope of e-government. As mentioned above e-government is defined as the delivery of government services and information to the public using electronic means, on the other hand e-governance allows the citizen direct participation of constituents in political activities, it also includes e-democracy, e-voting, and participating political activity online. Since they have different definitions and include different relationships, these two concepts are also highly related to each other. The technologies used can serve a variety of different ends, such as better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information or more efficient government management. The transparency in government applications will increase, greater convenience may result and there will be higher revenues for the governments and reduction in costs. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

WHY E-GOVERNMENT?

According to Fang(2002) In 21st century globalization is results in a new world, which has less economic barriers between the countries and higher rate of information and communication technologies. Technology the main and most critical issue in today's economy. Our country is also trying to cover the technological differences with the other countries. The developments and the progresses that are taking place in our country is basically aims to improve the performance and productivity in the trade of information, service and goods between the government, the citizens and the private sector institutions.

Mainly with the e-government applications a more transparent, fast and effective government, the participation of any citizen in the administration, developing and easier way of life and better processes for the people, a more effective and

profitable time management, less cost and more profit, the increase of pleasure, better life quality, individual participation in the administration, decreasing the human error factor in the processes, development in the relationship between the government and the individuals…etc. is aimed.

DEVELOPMENT OF E-GOVERNMENT

The e-government revolution offers the potential to reshape the public sector and remake the relationship between citizens and government. In the UN/ASPA global survey made in the year 2000, five categories of measuring a global survey, five categories of measuring a country's e-government progress have been identified. According to this survey a country's e-government progress should be identified as follows:

Emerging Web Presence: A country may have a single or a few official national government web sites that offer static information to the user and serve as public affair tools.

Enhanced Web Presence: The number of government webpages increases as information becomes more dynamic with users having more options for accessing information.

Interactive Web Presence: A more formal exchange between user and a government service provider takes place, i.e. forms can be downloaded, applications submitted online.

Transactional Web Presence: Users easily access services prioritized by their needs: conduct formal transactions online, like paying taxes, registration fees.

Fully Integrated Web Presence: The complete integration of all online government services through a one-stop-shop portal.

(Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

THE NECESSARY ISSUES IN AN E-GOVERNMENT PROJECT

The main element, the basic issue that is necessary for an e-government project is the information security. The information that is flowing in the process is critical and any loss in it cannot be accepted. So the information security can be believed as the issue that have the highest priority in such a progress. A clear and common application in information security on e-government applications is the electronic and digital signature.

The electronic signature can be said as one of the most important components of the e-government formation. Mainly it is used for electronic procurement operations, documentation, approval mechanisms etc. The security, privacy and integrity of the messages can be obtained in such an infrastructure.

It cannot be claimed that there is another issue that is more important than the security in e-government applications. The security policies and methodologies are the basic issues. A successful security policy should protect the secrecy of the information flow, all of the processes have to keep in secret and not to leak out. Also the users of the system should only give the information that is necessary to use the system and no other detailed private information should be demanded by the system. And at last the successful policy should be aware of the attacks that the system may face and it should take precautions for such attacks before they take place.

The security policies and precautions directly affect the cost of the system. So a better way is to analyze each and every step and transaction in the e-government project and take the precautions amongst them. I mean for less important transactions maybe lower level of security is enough so by this way it may be possible to reduce the amount of costs.

Basically there are three types of security precautions in an e-government project. The first one is the physical security, I mean to protect the place, where the data is saved, physically. Database servers, other hardware components, power sources etc. should not fail to work physically. The second one is the network security. By network security the entrance that is not permissed or that is not wanted have to be prevented. The entrance and exit from the system by each and every user should be kept in records and controlled. More than that the data security is also important. The

data should be kept in safe while it is saved in the database and in processes of the transmission. With the Internet and Intranet technologies data is open to the usage of many people. So in such a case it is costly and hard to protect it, and at this point the importance of security appears. But on the other hand with the help of 21st century technologies it is not impossible to build up such a security system and policy. (Warkentin, Gefen, Pavlou and Rose; Encouraging Citizen Adoption of E-Government by Trust; Electronic Markets; 2002)

The foreseen technologies and methodologies of this century can be used in almost all e-government applications. So the infrastructures of the applications and the resulting products and services should also be controlled and managed legally. The laws, rules and regulations also need to be reanalyzed and replanned. The legal changes and needs I mean the legal arrangements should be observed and defined.

THE COMMUNICATION INFRASTRUCTURE

In the e-government projects not only the effective and productive usage of the software and the hardware but also the production and the share of the information is also important and necessary factors. The institutional Internets, which we call as Intranet, is the main step in e-government formation. The institutions that have completed their own information production and share will prefer to use government portals. Inside these wide government portals there are also institutional smaller portals and portlets, which will show us the classical hierarchy of the government. Aiming these portals and structures becoming more widespread among the citizens the governments try to speed up and accelerate communication speed and hey also try to offer cheaper way for such information flow. Otherwise noone would prefer to use such a system.

THE PRIOR STEPS FOR E-GOVERNMENT PROJECTS

As I have mentioned before the legal and technological infrastructures are essential for successful e-government projects.

More than these the human factor is necessary fur successful results. The importance of education appears at this point. With the help of educational and

informational programs the adaptation of the society to the new structure and process would be easier and faster.

The e-government projects are high-costly projects. So financial sources should be used productively and efficiently. The investment rates would be high and they should be planned and organized carefully. Besides the classical budget works the new system needs new budget calculations. E-government investments interests different units of the governmental bodies, not only the IT departments.

The word "service" may be thought as one of the key words of the e-government projects. Since these projects are based on better, faster and cheaper services for the citizens then the shape the structure of the services should be defined carefully. The users need to receive better and high-qualified services from the government. The technologies should be chosen carefully for more efficient results. The service mechanism needs to develop new principles for the system mechanisms to work together in harmony. The principles to reach, save and share the information is determined by service mechanism.

Moreover as I have mentioned in the previous pages many times the security and the secrecy of the information flow is a must in e-government projects. The information flow would be high and it should be kept in safe both by the users and the government. The secrecy principles have to be applied definitely. In the studies and reports of Turkish Informatics Association the way to the success for E-Government applications are mentioned in detail.

SUCCESSFUL E-GOVERNMENT IMPLEMENTATIONS

Fang (2002) also mentioned the basic characteristics of successful e-government applications throughout the world. The countries that are successfully implementing e-government projects have the basic characteristics that will be mentioned below:

1. Comprehensive: To the greatest extend possible, citizens should be able to do everything that have to do or want to do with their government through one e-government portal.

2. Integrated: All e-government applications should be integrated each other, so citizens can avoid the need to provide the same data over and over and governments can save time and money by not needing to re-enter data.

3. Ubiquitous: Access to a jurisdiction's e-government portal and its connected sites and applications should be available to users/citizens from any Internet capable connection, Internet appliances.

4. Transparent/Easy to Use: E-Government sites should be designed and operated so that the most novice of computer users can readily find the information they need, provide the information requested by the government agencies with which they are dealing, and otherwise perform all e-government applications.

5. Accessible: The design and operation of e-government systems should, from the ground up, take into account the special needs of the disabled, and make it possible for them to use these systems as easily as the non-disabled.

6. Secure: E-government systems need to protect the confidentiality of data provided by citizens, the records created and stored by government, and the content and existence of citizen-government transactions performed over the Internet.

7. Private: Data about citizen-government transactions, and the content of those transactions, needs to be fiercely protected by the government.

8. Re-engineered: It is not enough to replicate electronically the administrative processes and procedures currently in place. It is necessary to thoroughly re-evaluate the overall mission of the jurisdiction and then design a digital structure that creates a government-citizen interface that simplifies and streamlines each transaction individually and the entire process of government administration generally.

9. Interoperable: An excellent e-government site is one that provides appropriate and up-to-date links to other e-government sites, at its own and other levels in the government hierarchy. All e-government sites need to work together seamlessly.

10. Be Developed to E-governance Systems: Developed from e-government, E-governance systems can just as easily implement democratic process, e-making of or policy, building up e-community. E-government serves not only as a means of administration, but also as a primary tool of collective and democratic decision-making, and participation for society. (Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

THE IMPORTANCE OF TRUST IN E-GOVERNMENT APPLICATIONS

Actually trust is one of the main defining aspects of e-government applications. In Warkentin, Gefen, Pavlou and Rose; 2002; Electronic Markets the importance of trust in E-Government Applications is mentioned in detail. "Trust reduces the social complexity that is the result of people being independent agents whose behavior cannot always be controlled or anticipated and thus reduces the risk and uncertainty involved in interacting with them. Trust is crucial in economic transactions because it reduces the risk of falling victim to opportunistic behavior. Zucker (1986) suggests that there are three types of trust for e-government economic environment. These are institution-based trust, characteristic-based trust and process-based trust. Institutional-based trust deals with third party guarantors that provide certification about the trustworthiness, and expected behavior of a person like doctor licenses. Characteristic-based trust deals with social similarity in issues like gender, nationality etc. They are quite rational assessments because they mean that all the parties have the same expectation as to what constitutes acceptable social behavior. Process-based trust is based on prior experience. Governments can create trust this way by convincing their citizens that the same control mechanisms, which make the government handling its business trustworthy, also may be applied online business types." (Warkentin, Gefen, Pavlou and Rose; Encouraging Citizen Adoption of E-Government by Trust; Electronic Markets; 2002)

"Trust is also a product of psychological dispositions that are beyond the short-term control of any government. These dispositions deal with a life-long socialized tendency to believe in social entities and to believe that better results will occur and take place if one trusts to others." (Warkentin, Gefen, Pavlou and Rose; Encouraging Citizen Adoption of E-Government by Trust; Electronic Markets; 2002)

When making an online transaction process, consumers are rightfully alarmed about different types of risks. Citizens may be afraid of suffering a loss in pursuit of the desired outcome. In e-government applications there is economic risk, risk of exposure of personal information, and risk of imperfect monitoring. (Warkentin, Gefen, Pavlou and Rose; Encouraging Citizen Adoption of E-Government by Trust; Electronic Markets; 2002)

Actually successful implementation of e-government application in all its forms is an important issue in this century. For national and local governments to cut costs, improve services, and become more responsive to their citizenry, it is imperative that they establish trust in the online services they provide or will be providing. The role of culture, risk and control is fundamental in adoption process. With e-commerce applications technology adoption is an essential issue. Government officials and the private companies that assist them must be aware of the role of proposed variables and their expected results. Governments can take many actions that can facilitate the success of e-government implementations. Institutional guarantees, improving its social characteristics, and making the public knowledge about the government and its applications may be some examples to solve the problem. It can be claimed that the adoption of e-government process is a critical component in the creation of efficient and responsive new public management. With widespread adoption of electronic interactions through national and local government agencies, the process of reengineering can create a different and new type of government, which provides much more value to its citizens. This will result in a more customer-focused government that will transmit the world as well. (Warkentin, Gefen, Pavlou and Rose; Encouraging Citizen Adoption of E-Government by Trust; Electronic Markets; 2002)

A SUMMARY OF E-GOVERNMENT INITIATIVES WORLDWIDE

For e-governments worldwide, the digital revolution offers unprecedented opportunities for improving virtually all forms of public revolution offers unprecedented opportunities for improving virtually all forms of public service delivery. From Europe to South Asia to South America to Africa, countries are taking a more innovative approach to doing business with their citizens. The use of internet to deliver government information and services has become a growth industry all over the world.

The e-government projects in the world start with the applications in the local administrations. The belief that is especially shown in the western culture that "the declared information is true" made it easier for the transition into the e-government applications.

When we look at the e-government organizations within the world we observe that they have mainly started with social security management, citizenship rights, e-trade and e-commerce issues, making tax collection easier, serving municipality services. In United States the e-government organization is defined under 4 titles: from government to government (G2G), form government to business (G2B), from government to employee (G2E), and from government to citizen (G2C). All of the organizations in the process do also play role in the international e-trade and e-business solutions.

Mostly Singapore is mentioned on the world when we talk about e-government studies and projects. Also serious projects and studies are observed in United States, Australia, United Kingdom, Ireland and Japan. The e-Europe project aims to set up a more dynamic and competitive market. A high amount of investment is made on the Internet infrastructure for cheaper, faster and safer Internet that will also encourage the citizens to use it more frequently for daily business.

When we look at the e-government projects through the world they are especially based on developing the local administrations and their businesses. Especially they are centered with institutional communication, legal arrangements, property rights etc. For such titles the role of the civil society institutions cannot be denied. The role and assistance of CSIs is very high in these countries.

In United States the e-government applications are mainly seen in the development of state portals. In different states different solutions and services are given to the citizens on these portals. These are especially personalized so that a citizen can solve his/her different problems from one gateway. These are not only basic public transactions but also more serious and important transactions like the population operations, trade or world wide economical transactions can be done on these portals. Also the on-line education as I have mentioned in the previous pages

has become even more important today, and by using Internet a higher level of educated people is aimed.

In United Kingdom and in Canada e-government studies started in the mid of 1990s. these countries gave shape to their studies according to the governmental bodies and the civil society institutions that will take place in the action. The effects of the changes, and the expectations of these institutions made it easier to develop a structure. The prior services in the e-government process, the role of the civil society institutions, the role of the private sector and the citizens, the security policies, and the rights and the liberty of the ones that will prefer to stay outside the e-government organization are some main titles for these countries.

In United Kingdom the "UK Government Gateway" project has started with the cooperation of the government and Microsoft. Its basic portal is working and it supplies the connection to almost 1000 government sites. At the beginning it was mainly based on giving information but today a large number of transactions can be done online.

In Spain the Ministry of Finance developed a portal on taxation with the help of IBM. Giving information on taxation for the citizens and the companies and their tax declaration can be done with the help of this portal structure. As I have said before many countries like Spain, Sweden, Italy, Finland, Belgium, Portugal etc. are trying to solve their taxation problem, the declaration and control of the taxation online with e-government projects.

In Singapore the national IT plan has started in 1981. The government information infrastructure resulted in today's e-citizen gateway. E-Citizen gateway started in 1997 as a pilot project and today more than 250 services can be given to the customers from this gateway. When you enter to the site as citizen A, your previous operations are reminded to you. The site is divided into small structures that are called towns; like educational town, health town, work town, travel town etc. The educational activities of the citizens, the school and scholarship applications, examination processes, dormitory registrations etc. may be done from this portlet. Or when you try to rent or purchase a house, telephone or when you try to change your address info you can use another portlet. Also a citizen may be in need of taking an

appointment form a doctor or hospital, or he/she would like to get some results of a test, or even he/she would like to get some information on health and try to read some magazines and books then the health portlet makes it possible. Even you can search for jobs, or try to change your current job, or you would be retired and you would like to get information about your social security premiums and compensations then you will use work portlet. As I have said at the beginning of this chapter Singapore and the studies on e-government applications in Singapore are believed to be the highest qualified and best planned studies.

To sum up a general view about the e-government projects and implementations can be analyzed through the table below.

TABLE 2: E-GOVERNMENT INITIATIVES WORLDWIDE

Country	E-Government Initiatives
AUSTRALIA	Specific commitments were made to: - deliver all appropriate Commonwealth services electronically on the Internet complementing; - establish a Government Information Center through the Office for Government Online as a main point of access to information about government services; - establish electronic payment as the normal means for Commonwealth payments; and - establish a government-wide intranet for secure online communication.
AUSTRIA	Government acts and understands itself as a partner of private industry especially in the transition process from the post-industrial service society to the information society: Information Retrieval Systems; EDI; Interactive Online Systems
CANADA	*E-Government* is effected through the following principles: - Responding to public demand for better and more accessible Government; - Clarifying roles and responsibilities including (i) areas of involvement; (ii) areas of disengagement; (iii) areas of devolution; - Achieving affordable government; - Ensuing that resources are devoted to highest priority
CHINA	The Government Online Project covers five aspects of contents: -The first is to make known government functions online, which is to post to the Internet the functions, duties,

	organizational structure, administrative procedures and rules and regulations of governments and their departments. -Second, government documents, archives and databases posted online. -Third, daily activities of government departments released online, which is regarded as a channel of openness of administrative affairs. -The fourth is online administration, with an electronic center of files and documents to improve administration efficiency. -Online trading is the last to be posted online.
DENMARK	E-Government is based on the following principles: - Information Society for All; - Realization of the Global Research Village; - Realization of Broadband Internet for Research Institutions; - Use of Online Publications; - IT Usage in Municipalities - IT Usage in Danish Companies; - Electronic Filing; - The Portable Revolution; - IT Usage in Education; - Electronic Supported Administration & Legal Roles - IT and the Disabled- Plan of Action
FINLAND	- E-Government deploys the following: - Sharing of Data between National Base Registers; - Messaging e-mail; - EDI for some applications; - E-commerce; - Telework; Smart Card Use, Kiosks and Internet Use; - One-Stop Service; - Communication and Documentation become increasingly electronic;
FRANCE	-IT has lost its "special narrow status" in preference to being perceived as one of the necessary tools for modernizing or improving government administration
HONG KONG	The Government published the "2001 Digital 21 Strategy" signifying its firm commitment to lead by example in the adoption of e-business, both in conducting internal business operations and in delivering public services to the businesses and the community on an "anywhere anytime" basis.
JAPAN	The Millennium Project "Electronic Government" includes: - Online administrative procedures - Basic system such as electronic authentication - Network base - Technological base - Electronic public procurement - Security measures
NEW ZEALAND	Intends to be among the governments which actively manage e-technology to make life better for its people. Overall that requires government to do two things:

	- create the environment where others - the private sector, communities and individuals – can make the most of e-technology; - capitalize on e-technology to improve the way government serves New Zealanders.
SINGAPORE	The "Singapore ONE" Initiative is one of the first implementations of multimedia broadband networks and applications in the world. The program is a national initiative that delivers a new level of interactive, multimedia applications and services to homes, businesses and schools throughout Singapore.
UNITED KINGDOM	There are four guiding principles underlying the Government's strategy as set out in *E-government, a strategic framework for public services in the information age, April 200*0: - building services around citizens choices; - making government and its services more accessible; - ensuring that new technology does not create a digital divide between those with ready access to electronic media and those without; and - using information more effectively.
UNITED STATES	E-Government is based on 7 principles comprising the following: - Easy access; - Re-engineered Systems; - Automated Systems; - One-Stop Service; - Service by Customer, not Provider; - Privacy protected and embraced; - Access to the physically challenged

(Fang; E-Government in Digital Era: Concept, Practice, and Development; International Journal of the Computer, The Internet and Management; 2002)

E-EUROPE AND E-EUROPE+

The E-Europe enterprise has accepted by the European Commission in December 1999. It is mainly based on Internet and the new economy trends. Cheaper and faster Internet, higher level of investment into the human resources and to encourage the usage of Internet were the main issues. And in June 2001 e-Europe+ was accepted. It is based on the aim to constitute an information society in Europe. The candidates of EU will renew and modernize their economies based on the new technological and informational trends, and by this way they will improve their economies and they will be more competitive in the global market. The higher level of Internet usage will speed up the e-trade and this will result in higher level of

competition. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

The E-Europe+ studies mainly aim to end with faster Internet communications in the Europe, higher level of usage of Internet in educational area so that higher level of educated people. Also with faster communication it will be easier to work at home, mobile-office period starts and people will work more efficiently. The high-tech products will help these changes, such as computers, mobile telephones, agendas and faxes etc. will communicate with each other and with only one product you can do anything anywhere. And the ease of trade on the Internet results in sellers and buyers to compare the prices and the features of the products. Personal information such as identity, health, income, taxes etc. information would become easier to share. So that you will not wait for long hours to gain a service in a public institution. In any place on the world the citizens' personal information can be reached and better solutions can be given. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

E-GOVERNMENT AND E-TURKEY

Today in our country we mainly observe e-government projects based on giving information to the citizens. They are mainly some simple processes. The web sites of many government institutions do present static information to the citizens and they do not give institutional information to the users. It can be claimed that an informational-based system is observed in our country.

For example the Ministry of Finance in our country the MOTOP project the vehicle taxation and the taxpayers are connected to each other and their control has become easier. Also the VEDOP project resulted in easier control of the taxpayers in our country. The Ministry of Internal Affairs finished the first phase of the MERNIS project and started its second phase. By this way the ministry gave identity numbers for the citizens online. Now it aims to develop an identity share system with the other organizational bodies in the government. The projects and studies of e-government has accelerated in our country at the end of 20th century and at the beginning of 21st century. Higher amounts of investment is made on that and the IT departments of the governmental organizations has become more powerful.

As mentioned before the role of education and training is important in the age of technology. In our country there are almost 40 universities that have Computer Engineering departments. Less than ¼ of them has the same quality of education in the developed foreign countries. The reason that they do not have high-qualified education is the insufficiency of instructors and academicians. Many of the graduates work in different sectors and in different titles after graduation. Unfortunately it is impossible to cover the necessity of computer engineers with these graduates. From the other departments of the universities the students interested in the computer sciences and information technologies try to take the necessary trainings and educations from private courses and seminars. They also take elective courses in the university. With the suggestion of the Council of Higher Education of the Republic of Turkey all of the universities in Turkey opened Informatics Institutes or Departments within the university aiming to give lectures, courses and training to the students that are interested in Information Technologies and Computer Sciences but do not study in these departments.

Another educational progress is giving trainings and courses to the professional employees. In the previous years a large number of personnel both from the public and from the private sector did not have any idea about computer sciences, Informational Technologies and they did not prefer to use new technologies, new systems and programs in their business. However if they use such programs and systems their jobs would be easier to cover and they would do more efficient and productive work in less time period. With such trainings and courses that are given by professionals, the employees would not stay behind the new technologies and they would use these technologies efficiently. Such trainings may be on site training or it may also be given on-line. The on-line technology supported educations and trainings have gained further importance within the previous years. With on-line education it would be cheaper to give education to a larger number of people. Also since this type of education is independent from the physical centers of education then it would be easier for more people to attend these courses and trainings without a loss in manpower. On the other hand this on-line education is related to the Internet infrastructure. It needs faster and cheaper Internet communication, higher image and voice quality and higher bandwidth. The on-line education may be used to protect and save the institutional identity, to make the

educations and activities that are based on total quality management becoming more widespread, to give a more effective and efficient orientation program for the new employees, to supply faster and better personal development. The on-line education methodologies have been using frequently and efficiently in many countries. They are mainly based on to arrange courses and educational programs that aim to increase the capabilities and abilities of the employees, to give consultancy services for the employees to solve their problems and develop better planning, and to give consultancy services for the employees to share the information efficiently with the others.

In our country there are many problems that the IT personnel working in the government or in governmental institutions faces with. They face with different procedures with the other employees (non-IT employees). The IT personnel need to have better educated for their business. Higher-qualified people are needed for these positions. But the IT personnel that are employed in these positions do usually earn less money than the other personnel working in other departments. So this makes it difficult to employ and hire higher-qualified personnel in IT departments. These higher-qualified personnel demand to earn higher amounts and they desire better working conditions. Also most of the IT personnel working for the government in Turkey would prefer to move to other positions in a short time period, so in our country it is hard to keep the IT personnel in their departments for a long time period. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

THE ADAPTATION TO NEW TECHNOLOGIES IN TURKEY

As mentioned in previous pages the Internet and the Information Technologies do shape and manage the new economy and new world dynamics in the 21st century. The number of Internet users has been increasing day by day. Turkey has also accelerated the usage of Internet and the new technologies. The E-government applications in our country have not completed and have not applied completely, but a clear improvement may be observed. Today's technologies have many different alternatives for the architectural, security needs of e-government applications.

The government institutions in Turkey have developed and took important steps in e-government projects. Most of them have developed their own interior structures for their processes and made it possible to solve their internal problems

easily. Also most of them give some services by the Internet to the citizens. But most of these services are static services and do not based on dynamic structures as I have mentioned before. The major point for successful e-government projects is the interaction and data transfer between different government bodies but it is not possible in Turkey now. On the other hand I don't want to think pessimistic, because the steps that we took up to now do show us that we are on the right way to end in success.

Our country do follow and observe the latest technologies but we are not the country that produce the technology, we are the one that use the technology. We are dependent on the foreign developed countries for the new trends, new software and hardware technologies. Actually we have the sufficient potential of the manpower for software development and application development. If we try to keep the educated graduates in our country then I believe that it would be faster and easier for us to take further steps. On the other hand the network, hardware and software infrastructures that the government bodies have are insufficient. The differences and variations between different government institutions do also slow down the progress. There is lack of standardization within the government and its bodies. Also unlike the developed countries we do not have the sufficient Internet infrastructure. In our country the Internet speed is not fast, it is not cheap for everyone to use it, and it is not widespread, not in any place in our country the citizens can easily have the access to use the Internet and its technologies. The security and secrecy problem has not been solved in our country. And legal problems still exist on the usage of Internet. Unfortunately basis of many problems that we face in our country is the lack of education. The number of educated people is low, it is almost impossible to give higher education and training for everyone in our country. Especially in the eastern part the citizens do not even know reading and writing, so in such a condition how can we give them basic computer and technology usage training. The e-government projects and this huge progress will end with a large volume and huge capacity of data. This data need to be gathered in one central database and all of the essential conditions like security, secrecy, network conditions etc. need to be prepared for this. The technological infrastructure that is needed for this process has to be prepared and constituted. Otherwise it is impossible to end in success. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

THE INFRASTRUCTURE OF TURKEY

Standardization and its importance appears when we face with the problem of developing the infrastructure. Standards do keep up with both the technological and human changes. The problems that we may face in the applications may be solved easily with better and strict standards. In e-government applications the software standards and their applications is important. In our country the main problem is on translating the international standards into Turkish. Turkey is not represented and presented actively in International Standard Organizations. In our country also there is no data standards so that different organizations cannot communicate with each other. We do not use system and application development standards and this makes it difficult for us to do the necessary application developments. Since there is lack of standardization in our country then we face serious problems when we try to apply them to different bodies. The sole power of government cannot be used efficiently and it does not give the last decision on its bodies so that different bodies do prefer different solutions.

The establishment of IT needs in the organizations, the prior needs and projects, software quality and management plans and standards, project plans and project managements, the preparation of contracts, system analysis, models and methodologies, test models, user interfaces etc. are some other problems that the organizations face with while developing e-government projects. Users do not usually enter into this picture and do not assist into the projects directly and they do leave to make the choices to the IT personnel. On the other hand the IT personnel face with some problems and they do not determine and designate the needs of the e-government projects efficiently. Analyzing the needs and the expected results of the projects at the beginning is an important and it may be considered as the most critical issue in IT projects. If this analysis is not done correctly then at the end the projects will extend or even they may fail. The project plans and the usage of methodologies and standards is important for the success of a project. But unfortunately in our country we observe lack of such usage in projects.

In governmental purchases and procurements we observe the "Public Procurement Law" and the factor of "Public Procurement Authority" in our country. Within the tendering procedures the list of specifications, tendering documents etc.

are prepared by the procurement and IT departments for IT purchases. For 90% of the time the employees working for this issue do get assistance from the Internet, for 80% of the time they do get assistance from the private companies and for only 35% of the time they use the International standards. Since this business is on the shoulders of a group of people for each organization we cannot think and observe that these individuals do always have the same level of knowledge and expertise on the issues. Only in a few projects the experts and advisors help the IT departments and in most of them the advisors and the IT people do disagree on the issues. Most of the time the projects delay and in some of them they fail. A better and higher qualified project plans should be made and they should not be load onto the shoulders of a group of people, and it should not be human-dependent. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

THE IT VISION AND THE ADMINISTRATION IN TURKEY

According to the researches made by the SIS and Informatics Association of Turkey in the year 2000 the directors of the organizations are aware of the IT ad the new technologies. They believe that these new technologies give acceleration to their way of doing business. Most of the administration authorities (55%) would desire to take trainings and courses on new technologies and on IT. But they face with the problem of time management and they say that they would only take such trainings and courses if they have enough time for them. However the budget levels for education and trainings are low in the organizations. When there is need of saving first of all the education budget is the item that will diminish. Also there is lack of analysis for the return on the IT investments. 81% of the administrators admitted that they do not make such an analysis. Some of the administrators claimed that IT investments are believed as services so that there is no need to make an analysis on its returns. In the previous chapters I have mentioned the importance of education especially in the government organizations for the personnel. But such as system is available only in a small percentage of the institutions.

To sum up the administrators and the managers do not use the advantages of computer support in decision-making processes. They do not use computer technologies to reach data. The administration is not based on computer and educational support. This results in a large number of errors and problems in to make

faster and efficient choices. (Türkiye Bilişim Derneği; e-Devlet Yolunda Türkiye; TBD-KamuBib Yayınları; 2002)

THE ROLE OF CIVIL SOCIETY ORGANIZATIONS IN E-GOVERNMENT APPLICATIONS

Turkey has first met with computers in 1968. After that time many things have changed and developed in our country. The developments and changes in network, software, hardware and communication technologies changed the line of business and the way we do our business. Also since 1995 the Internet has entered into our lives. The people have got closer to each other, it became easier to reach and gather information and the world economy has become more global. The technologies and trends in the computer sciences and in the Information Technologies have been changing fast and our country also needs to face with these changes. Turkey has to keep up with this dynamism so that it has to renew its laws, procedures, bodies, regulations, technological infrastructure, culture etc. There has to be an important change in our way of doing business. The legal, institutional and political processes in our country have to be reanalyzed and reformed. The public authorities have to be more transparent and trustful for the citizens. The technological benefits and uses need to be used more efficiently for to reach a new body and successful e-government projects. The information, service and property trade and relations between the government and its citizens would be faster and efficient. And at the end the citizens would be pleased on these services and the government would win the confidence of its citizens.

For E-Europe and E-Government progress the role of Civil Society Institutions is high. The number of CSI's on the theme of IT is increasing. Not only the voluntary organizations, but also the university organizations and the private sector support is useful for the changes and the developments that we face in our country. These organizations mainly aim:

- To transform our society into an information based IT society

- To make the IT culture become widespread in the society, and to increase the usage of computer

- To constitute the necessary infrastructure for the free flow and share of the information

- To increase the usage of Internet

- To analyze the problems and to give solutions for these problems

- To help the individuals to reach the information easily for better, faster, efficient and correct solutions

- For technological development they try to increase the rate of investment in technology for its usage through the country

- To cooperate with the other organizations for IT purposes

- To create solutions for the problems that the IT departments in the public sector face with

- To inform the citizens and the public about the IT market

- To help in the constitution of an Internet law, regulations and procedures and to make it in relation with the international laws and regulations.

- To arrange educational programs and trainings on the Information Technologies.

E-GOVERNMENT PROJECTS IN TURKEY

In this section I would like to mention some successful e-government projects form Turkey.

Ministry of International Affairs

A very well known success story is the MERNIS, population and citizenship services. In this service there is a huge database foe all the citizens in the country and all the individuals are given one specific identity numbers and kept in the database according to these numbers. This project is very helpful for the taxation office for the control of the individuals, and also for the security and police services the control of the criminals and the comparison of the incidents become easier, faster

and more efficient. Also for military services the control of the deserters becomes easier, the guys reaching the age for their military services will be kept in one database and the control of them becomes more efficient. From the point of view of health services each individual in the country will have one specific health folder in the database and it can be reachable from all other institutions, so that in case of emergency according to the identity number the information about the health problems of a given individual can be gained from everywhere. Also from this database all the statistical information about the educational background of the people can be gained and the future plans and policies about the educational developments can be more helpful and efficient. More than that in case of judiciary systems and in laws the identity establishment will be faster and the judgment process will be shorter. But as we can all see that many of these aims and projects cannot be put into practice, because the e-government projects cannot be built only in one institution. For better and high-efficient services all the public and private institutions need to work in the same direction and has to be controlled from a specific central management point. They need to be in contact and in connection all the time and the flow of information within them have to be developed perfectly.

www.nvi.gov.tr

Ministry of Finance

Also in this part I would like to mention some other projects in general, and also I will mention the aims and plans about these projects. In the ministry of finance about the finance and accounting application a web based automation project has developed and by this service the governmental and public accountings are kept daily and in a more safe way.

www.muhasebat.gov.tr

Istanbul Water and Sewerage System

Another project comes from Istanbul water and sewerage system. For better and high-qualified customer services, online payments and control of the bills by the individuals they built a web-based system. With e-membership forms citizens can make their payments, complaints, solution developments online. They can also get

online information about their receipts and they can get information about the institution's other services.

www.iski.gov.tr

The Association of Natural Disaster and Insurance

In the project developed by the Association of Natural Disaster and Insurance, online information services and insurance services were built. Also the private insurance companies can keep and offer their policies online, so that a bridge between the public sector and private sector is built.

www.dask.gov.tr

The Customs Undersecretary in Turkey

The Customs Undersecretary in Turkey built an e-customs service aiming to pass through all customs services online. Today many customs services are done with this site. A more efficient and faster analysis about the imports, exports, transits and smuggling problems can be done. Also they improved the project further and developed a customs datawarehouse, which is the first public datawarehouse project in Turkey.

www.gumruk.gov.tr

Ankara Electricity, Gas, Bus and Railway System

Another project comes from Ankara EGO. This institution serves for bus, gas, electricity and railway systems in Ankara. They started to use a new system for more efficient, helpful and modern services for the individuals in the city.

www.ego.gov.tr

Ministry of National Education

Ministry gives online services to the central educational units and to the provinces. Also for the students, teachers, administrators and parents the ministry plans to develop online educational services.

www.meb.gov.tr

Ministry of Health

There exist a pilot project about the information exchange between the village clinic and hospitals based on a telematic network system.

www.saglik.gov.tr

Ministry of Justice

Cross examination results on the judicial dossier of the citizens can be made by the Statistical Departments and by the Ministry of Justice.

www.adalet.gov.tr

Central Bank of The Republic of Turkey

There exists an electronic data transmission service for the banking sector to get detailed analysis on the rates of exchange, electronic fund transfer, periodic reports and bulletins.

www.tcmb.gov.tr

General Directorate of Rural Services

General Directorate of Rural Services has Rural and Agricultural Database and Detailed Soil Database for Turkey, so that it can serve for internet and intranet users for detailed analysis.

www.khgm.gov.tr

Capital Markets Board of Turkey

The members of stock exchange can gather orders online. Also the market information arising from the changes in the stock exchange are kept in a database and detailed analysis on this database can be made by the specialists.

www.spk.gov.tr

Association of the Social Insurance

The payment cross examinations for the retired personnel can be made online.

www.ssk.gov.tr

General Directorate of Revenues

The directorate serves both in English and in Turkish in its web site. In this site the institution serves for the vehicles registered in 17 taxation departments. Identity information about the vehicles, taxation amounts for the motorized vehicles, debt information about the traffic penalties etc. can be gained from this site. More than that the identity number information about the taxation of the individuals can be taken from this site.

www.gelirler.gov.tr

State Supply Office

Electronic Sales Project has opened on Internet, sales procedures can be done by online catalogs. In this electronic sales site a continuous and effective advertisement of the office can be made and adjucations and yearly provision plans are announced.

www.dmo.gov.tr

CONCLUSION

At the age of technology it is not logical to stay away from the new technologies and new dynamics. No one and no country can compete in the global market without accepting and using the new trends. The effects that influence the way and quality of living resulted in compulsory changes. The communities that do not protect and care their own benefits and interests will disappear in the cycle. So in the age of technology, information and communication our country should use the computer sciences and information technologies efficiently and we should gain the highest amount of profit and benefit from these technologies.

Also it should not be forgotten that yet there is not a silver bullet to derive the changes in the way the services are delivered. Many different technologies are being combined. For e-government success some prototypes and strategies should not be forgotten. (Hoenig; Beyond E-Government; Business Source Premier; 2001)

Understanding and learning. Computer systems are comprehending more of what humans do and say on their own. Technologies range from natural language processing that allows understanding of human speech and writing, to automated learning that allows smarter systems.

Smart searching and solving. Building on search engines a new wave of context, decision and service engines will take what a human is looking for, help in a decision, or assist in solving a problem.

Next generation data and knowledge management. Data mining, business intelligence and knowledge management tools make larger volumes of data available for new search and problem solving engines in a way that helps reduce overload. More and more information is produced, stored and distributed.

Packaged expertise and interaction. There are new, efficient ways to engineer human expertise into intelligent online assistants and make their interactions with users nearly human in quality: preference-engineering, advisory services, and sophisticated design and implementation of human-computer interactions.

Secure, modular Web based systems and services. Web security has a long way to go, but everyone is aware of the fact that with more security levels, it will be more possible to provide complete solution-based services by offering the electronic signatures, data integrity and security required.

Collaboration and communication. Collaboration tools and knowledge hubs will allow larger groups of people spread across different locations, levels of government, industries and specialties to work together to solve a problem or to serve someone. It is only a matter of time before someone creates the unique blend that pulls all these evolving tools together in packaged, marketable fashion. (Hoenig; Beyond E-Government; Business Source Premier; 2001)

Throughout this study I have mentioned that the digital guides and new technologies will add new value, new costs, and new types of relationships. There are also intangible benefits of these new technologies and new dynamics. With new information systems and information technologies the way of doing business for people and the economical structure of the world economy has faced with great

changes. And with the latest technologies and new world dynamics in a more competitive market further and more effective solutions and applications enter into our lives. E-government projects are one of the best-known studies with as a result of these new dynamics.

Better and more efficient services will be improved by the government institutions, and citizens use these technologies and services. The productivity of people and information technology increases. Creating these new generation of solution based services will require larger investments. However the nature of these services will also change the nature of the investments. The costs for these systems are high, because it is not only the cost of buying and building up such systems but also it is the cost of keeping them operating effectively. Also as I have mentioned in the previous pages the political and personal barriers will usually appear in e-government projects. They are mainly observed from the public sector adoption to the new dynamics. The existing organizations refuse to these radical changes. They are also afraid of the data security and privacy. The more transparent, integrated, accountable and higher-performed solution types are preferred by the citizens but it is not so easy to develop such solutions and make the public sector accept these changes easily. New boundaries and new barriers are developed in these new systems and e-governance structure is created within these boundaries. On the other hand it should not be forgotten that even these are important changes in way of doing business and in citizens way of living, so things within these dynamics do not change, actually they never change. The core of government's democratic process and organizational structures will not change rapidly. And also its decision making process cannot be easily changes. They are replaced by a layer of solution based services and digital guides, but their original basis do not change.

For e-government success it is important to define the needs and the expected solutions clearly before starting the projects. The expected needs, solutions, and expectations that are made by both the public and private sector and by the citizens should be analyzed. The infrastructure and the capacity of the country should be clearly observed and for more efficient and faster solutions all of the dynamics that enter into these projects directly or indirectly should be taken into consideration. The current level of service given by the public sector has to be well-defined. Since it should be replaced by a new system its offerings have to be correctly and clearly

discussed. The capability of the country have to be taken into consideration. It is impossible for two different countries reaching the success by doing the same way of business. There are different strengths and weaknesses for different countries. And both by building the right alliances and by adopting its components to the new changes the weaknesses of the country may be minimized. The alliances for such a project may be businesses, agencies, non-profit organizations etc. These may offer expertise, infrastructure, technology and information. And also such changes affect the citizens most. The private sector, the public sector changes, higher level of rivalry exists, higher investment levels are observed, and even the definition of success and failure changes. So for different sectors the adoption of the individuals to the new dynamics is an essential issue.

Unfortunately it should be well known that solutions based e-services and digital guides have entered into our lives fast and they are gaining more power as time passes. They also have big impact on government. It is now important that how well the government executives step up to this challenge. It is actually the basis that will shape the new economy. For an increase in the change of success and for a decrease in the reduction for the risk of failure can be ended with better and efficient strategies.

In this study I have also mentioned the e-government studies in our country. In Turkey there is a wide structure for e-government applications and projects in different government institutions and bodies. For such a serious and huge progress and for its continuity a well and strategically planned and institutionally designed strategies have to be used. Its budget will also be much. The Internet bandwidth I mean the technical infrastructure of our country is an important factor for success. Also the legal infrastructure, legal arrangements, regulations, rules have to be standardized and the global standards have to me implemented into our legal bodies. Since the e-government applications will bring us the structure of e-trade and e-business progress the difficulties and the handicaps that anyone and any user can face during these processes have to be predefined and solved. The level of knowledge and skills of the government bodies have to be increased, the importance of education and human resources planning are observed in this process. The EU funded and academic projects are frequently observed in e-government progress. So the universities and technology centers have to be supported. Within each and every

governmental bodies there has to be an isolated group that is responsible from e-government projects. These groups have to analyze similar projects and success stories throughout the world and make efficient plans for the institutions.

To sum up it is claimed that the targeted online government services throughout the world are aimed for better implemented and managed public needs for being effective in facilitating government-to-citizens transactions. (G2C). With e-government the way that the citizens and the public communicate changes and the economies of the countries will be more globalized. Not only the public sector, but also the private sector, citizens and the civil society institutions will be affected by these changes. Actually it cannot be claimed that a country may stay non-reacting near these important and serious strategic changes.

REFERENCES

- Borquard,J.A.; *What's Up With E-Government*; Academic Search Premier, State Legislatures, Vol.29, Issue 3, Mar.2003.

- Bretschneider,S.; *Information Technology, E-Government, and Institutional Change*; Public Administration Review, Vol.63, No.6, November/December 2003.

- Fang,Z.; *E-Government in Digital Era: Concept, Practice and Development*; International Journal of the Computer, The Internet and Management, Vol.10, No.2; 2002, pp.1-22.

- Hoenig, C.; *Beyond E-Government*; Government Executive, Vol.33, Issue.4, November 2001.

- Marche,S., McNiven,J.; *E-Government and E-Governance: The Future Isn't What Is Used To Be*; Canadian Journal of Administrative Sciences, 20(1), pp.74-86.

- Moon, M.J.; *The Evolution of E-government Among Municipalities: Rhetoric or Reality?*; Public Administration Review, Vol.62, No.4, July/August 2002.

- T.C. Başbakanlık; *E-Türkiye Eylem Planı*; Ağustos 2002.

- Türkiye Bilişim Derneği; *e-Devlet Yolunda Türkiye*; TBD-KamuBib Yayınları, ISBN: 975-96888-5-9, 2002.

- Uçkan,Ö.; *E-Devlet E-Demokrasi ve Türkiye*; Literatür Yayıncılık, Dağıtım, Pazarlama, Sanayi ve Ticaret Ltd.Şti.,2003.

- Warkentin,M., Gefen,D., Pavlou,P.A., Rose,G.M.; *Encouraging Citizen Adoption of E-Government by Building Trust*; Electronic Markets, Vol.12(3), 2002, pp.157-162.

- Zucker,L.G; *Production of Trust: Institutional Sources of Economic Structure*; Research in Organizational Behavior, 1986.