# THE CONTEMPORARY CONCEPT OF E-GOVERNMENT AND THE CASE OF TURKEY: POSSIBLE CHALLENGES AND THE E-TRANSFORMATION TURKEY PROJECT

Aytaç Gökmen\*, A. Buğra Hamşıoğlu\*\*

#### **ABSTRACT**

Globalization is the process of transforming regional or local developments and phenomena into global realities. Globalization is also a process that unifies the world into a single society which is a combination of economical, social, political and technological influences. The most substantial actor in this process is the Internet and its contributions to data and knowledge procurement among the states, legal and natural persons. Moreover, Turkey is one of the leading nations in the world to encourage the use of Internet and e-government implementations to integrate Turkey with rest of the world and render premium services to her citizens and other related entities. The e-government which is also known as e-gov, online government or digital government, is a concept to utilize the Internet technology as a means to exchange information, provide services and transactions with citizens, business and other branches of government. Some e-government implementations both in practice and forthcoming in Turkey are e-Government Gateway, Public Sector Network, Information Disaster Recover System and Justice Net. It is aimed to constitute and develop knowledge society; to facilitate access to knowledge, decrease time consumption, provide better access to public services and enhance efficiency, ensure transparency and accountability, lower the costs and save sources in Turkey by e- government regulations. The aim of this study is to reveal the developments and realities of e-government in Turkey with respect to the E-Transformation Turkey Project theoretically depending on comprehensive and credible, international and national publications.

**Keywords:** E-Government, ICT, Implementation, Information, E-Transformation, Turkey

\* Çankaya University, Ankara, Turkey, E-mail: agokmen@cankaya.edu.tr

<sup>\*\*</sup> Kırıkkale University, Kırıkkale, Turkey, E-mail: ahbugra@yahoo.com

# THE CONTEMPORARY CONCEPT OF E-GOVERNMENT AND THE CASE OF TURKEY: POSSIBLE CHALLENGES AND THE E-TRANSFORMATION TURKEY PROJECT

#### INTRODUCTION

The transition to a knowledge society unavoidably requires the transformation of government institutions and state administrations and considering the requirements of globalization and the age of information. There has been an immense increase in the number of people and agencies that possess access to the Internet and benefit from it to meet their necessities. Structures which are over centralized and dependent on ordinary bureaucratic principles have proved to be unable to respond the necessary promptness of numerous changes that take place around them. With regards to the ever deepening concept of globalization, national governments of our time are compelled to react to the latest knowledge technology tendencies in order to secure or retain the essential level of international, interstate, state – business and state – citizen cooperation (Irknin, 2007).

The rise of new information and communication technologies (ICTs) has not only altered the way of business conducted radically. Since the 1990s public sector agencies all over the globe have been benefiting from the Internet technology and other ICT innovations to render services, engage citizens and improve efficiency which is a set of practices called electronic government, digital government, and mobile government or with the renowned name the e-government (Trimi et al., 2008; Bolgherini, 2007).

The e-government could be described as the continuous innovation in the delivery of services, citizen and legal entities participation and governance through the transformation of external and international relationships by the use of information technology, especially the Internet. This definition reflects the property of inter related dimensions of change which are service delivery, security, transparency and trust. All of these properties are related, directly or indirectly, to the widening comprehensiveness and rapidly increasing importance of a digital infrastructure age rested on information and communication technologies (Roy, 2006; Tolbert et al., 2008).

With regards to e-government applications, service quality and information security have the priority in online service rendering. Actually, rendering services online became a milestone of governments at the beginning of 1990s, the ordinary government and private transaction and works transformed into online forms to save time, effort and financial resources, as well as ensuring efficiency and flexibility. Initially, the endeavor

to utilize online channels to render information and services was regarded as small amount of savings. However, in the later periods the systems constituted, proved to prevent massive production costs and ensure savings (Roy, 2006; Dovifat et al., 2007). This paper aims to reveal and explain the importance of e-government concept, its implementations and the significance of the subject in Turkey.

# THE CONCEPT AND ASSESSMENT OF E-GOVERNMENT

E-Government is one of the phenomenons in the debate on modernizing public administration. Contemporary information and communication technologies, particularly Internet and web technologies are regarded as improving the access, transparency, efficiency and quality of public administration. ICT help open the way to a new and better government by restructuring the current government and ensuring innovations to flourish. This new and better type of government tends to be more responsive to the necessities of citizens and enterprises; more transparent, democratic, accessible and more efficient. However, despite the advantages it bears, the e-government projects and implementations could fail to achieve a certain level of success due to various reasons such as lack of leadership, financial and human resources, senior management support and inefficient planning (Bekkers & Honmurg, 2007; Calista & Melitski, 2007).

E-government has become a comprehensive term that is to utilize the internet for delivering government information and services to citizens. The Organization for Economic Cooperation and Development (OECD) defined it as the use of information and communication technologies, especially the Internet, as a tool to accomplish a better government. In the globe, almost all contemporary governments and municipal administrations design and implement government policies. Similarly, countries whether developing or developed, experience e-government practices with various stages (Yang & Rho, 2007; Torres et al., 2006; Bolgherini, 2007).

E-government is an evolving practice and there are various definitions as mentioned before. Another definition of e-government is to use Webbased applications and other information technologies by the government in compliance with process to implement these technologies to; improve the access to and delivery of government data and information, as well as services to the public, other agencies and government entities, lead to developments in government operations which might involve effectiveness, efficiency, service quality or transformation (Yang & Rho, 2007; Irknin, 2007; Bolgherini, 2007).

The United Nations has adopted a more citizen centered approach that defines the e-government as an internet driven activity that develops citizen access to government information, services and expertise to assure citizen participation in, and the government satisfaction with the government process. Yet, another definition for the e-government could be the strategic use of information technology, particularly the Internet dependent technologies, to achieve greater government efficiency, better service quality and more democratic participation (Yang & Rho, 2007; Tolbert et al., 2008).

In e-government, the emphasis is mostly on designing and implementing front office electronic communicational means which enable agencies to interact electronically and online with citizens and enterprises. In e-government implantations it is important to design the practices in compliance with all levels of the organization in order to galvanize coordination in entire agencies. Also, the system should not only interact with current citizens and enterprises but also design to deliver services to potential clients as well. Therefore, the e-government is a wide concept that takes advantage of the modern ICT, particularly the Internet and web technology to support and reorganize the current and/or future relations with the internal and external stakeholders. Within this context, the pertaining targets include to enhance the access to government services, facilitate the quality of service delivery, foster efficiency, and develop public and political accountability as well as increase the political particularization and preventing corruption (Bekkers & Homburg, 2007; Sinngh & Belwal, 2007; Tolbert et al., 2008).

The e-government present specific opportunities such as developing transactional services help the civil servants to be more efficient, support effective policy outcomes and reform the corporate services and infrastructure that the government uses behind the stage. The new technologies accommodate citizens and enterprises with free access to information, facilitate to exchange information and provide a flexible structure. E-government presents the benefits of the knowledge society. Egovernment delivers citizens prompt opportunities, facilitates the transparency and accountability of governments, social inclusion and empowerment of citizens to monitor government implementations closely (Torres et al., 2006; Bolgherini, 2007; Bekkers & Homburg, 2007). Egovernment functions might also be categorized as information functions which provide access to government information through web portals, involving online publishing and broadcasting, transactional functions that enable citizens to interact with government organizations by means of world wide web such as online procurement and payments, operational functions that refer to internal government operations which is based on internal

efficiency and effectiveness of operations regarding to various government applications (Trimi & Sheng, 2008).

Moreover, there are two technological challenges which could be enumerated to the widespread adoption and implementation e-government services. First on is on provider's side technological infrastructure is supposed to be built to enhance the e-government transformation. Second one is on the end of the user's side which is the uneven access to e-government services resulting from the digital divide among demographically, economically and socially different populations. If these difficulties are tackled the e-government could improve the delivery of government information and services that citizens can access to certain government information and service on online basis Internet technology leads to cost effective implementations, e-government is akin to prevent transaction failure and corruption and increases efficiency and effectiveness (Roy, 2006).

With the backing of e-government, e-citizen and e-business implementations it is aimed to establish a reliable intergovernmental network and a centralized, detailed database which delivers services to citizens and enterprises designed for their necessities by means of electronic network and optimal compliance with the administration under new conditions. With the effective implementation of online services, the information economy works as a result of continuous interactive functioning of electronic portals. This effective online services leads to the adoption of reliable, accountable and efficient electronic system, enhance the trust of citizens to state, reduce corruption and increase state revenues. In order to accomplish such an egovernment system, the authorities should have the political will, the community should have a certain level of internationalization, new administrative structures should be formulated feasibly for the establishment of information technology and capable official personnel must be trained to run the system. On the other hand, one should bear in mind that creating and implementing new system like e-governance requires considering complex social, administrative and legal difficulties that could emerge in the process of adopting new electronically constituted models, social traditions bureaucracy and so on; because e-government is to design and serve for today and build for tomorrow (Irkin, 2007; Sinnigh & Belwal, 2007; Torres et al., 2006; Rocheleau, 2007).

The establishment of national e-government systems entails the transformation of entire government system. This new system requires to be more responsive, the introduction of high technologies, the creation of specialized administrative structures, reorganization of state's interests in favor of the necessities of citizens, alternation of social, economical and mental environment and to bear more responsibility. The e-government has

evolved so fast that after the year of 2005 more than that, 175 of 200 United Nations countries adopted e-government applications. More than, 30 percent of these states supply continuous, constantly updated information services that include the downloading and printing of official documents for personal use and official transactions. Nonetheless, for the sake of appropriate implementation, the information offered must be objective, updated, and accurate, provide answers to frequently asked questions and provide equal access to each citizen. The services that are offered by means of egovernment implementations are: Publishing information on laws, filing official documents, government benefits, jobs, licensing, postal service, passport application, question on social security, immigration, notices, consumer claims, state administration, business education, science, medicine transactions, workplaces and opportunities, electronic request on documents, laws, decrees, statistical information etc, paying various sorts of bills, fines, taxes and fees, registration mechanisms, filling and disseminating various forms of official documents identified by e-signature and paying, public procurement, public employment, traffic fine appeals, traffic fine payment, identity card/domicile register, lost objects, reporting a fault, voter registration, demanding legal permits, tele-assistance, homecare, nursery services, parking, venues for meetings, congresses, markets, pharmacies, catalogue of libraries, sports facilities, public entertainment and movie theatres (Irkin, 2007; Torres et al, 2006).

As a new global information structure, the e-government applications both reduce the increasing costs of bureaucracy and public management and enhance the quality of public services to meet the necessities of citizens and enterprises (Bolgherini, 2007). This transformation mode arranges the relationship among citizens, enterprises and governments in a positive manner while generating a more citizen-centric and responsive government type, thereby improving citizen trust in government (Coursley & Norris, 2008).

#### **ADVANTAGES OF E-GOVERNMENT PRACTICES**

E-government which is to deliver the government information and services online by way of the Internet presents many advantages to citizens. E-government brings many enhanced types of public services involving online transactions, disseminates information about the operation of the government and improves communication between citizens and government. The advantages of e-government could be mentioned as; it improves the efficiency of public service, enhance managerial capacities and communication with citizens; delivers updated public information online 24 hours a day, thereby enhances public trust towards the state; serves as a

tool to positively influence and lead citizens; facilitates to save time, effort and financial resources; enables the state structure to be more flexible and responsive to immediate demands, thus prevents delays; enables to design safe structures to conduct and preserve information, especially the Internet and web technologies improve the access to strategic public information, transparency, efficiency and quality of public administration; enables citizens to monitor government implementations; prevents transaction failure, corruption and increases efficiency and effectiveness; provides easy access to laws, decrees, statistical information, filing and disseminating various forms of official documents and reporting public complaints, perils and crimes (Tolbert & Mossberger, 2006; Reddick, 2007; Robbins et al., 2008; Irkin, 2007; Torres et al., 2006; Trimi & Sheng, 2008; Bekkers & Homburg, 2007).

Advantages of e-government are dependent on the possible benefits it supplies, such as economic competitiveness, citizen satisfaction, and quality of service, cost effectiveness, transparency, effectiveness and efficiency. Effective e-government applications enable to accomplish organizational missions and goals as well as increases managerial effectiveness and citizen satisfaction. E-government aims to make all necessary services equally available and secure safety, privacy, and usability, content, services and citizen participation. Moreover, e-government applications help the state become more generative by enabling public employees to be mission-critical oriented and improve client satisfaction. E-government might help lower expenses by reducing paperwork, staffing, printing, mailing, document storage, phone calls and thereby enhancing the efficiency usually brings about economic savings. Furthermore, the gains secured by e-government implementations and reducing costs in turn results in realizing a more viable economic development, increasing income per capita and tax collection (Yang & Rho, 2007; Torres et al., 2006; Bekkers & Homburg, 2007; Trimi & Sheng, 2008).

#### **HINDRANCES TO E-GOVERNMENT**

As one can comprehend, building and conducting e-government services entail a high level of technical and technological know-how, competencies, structures and tools, as well as necessitate cross-national and far reaching visions in order to be accurately implemented. These prominent technology based properties, instead of helping to create better management applications, sometimes might lead to a series of misunderstandings and errors. Therefore, the e-government diffusion and practices may result differently in a wide paradigm, such as policy implementation failures, disparity, financial shortcomings, inadequate exploitation of facilities, being

deprived of necessary leadership, know-how and technical capabilities and so on (Bolgherini, 2007; Yang & Rho, 2007).

Unlike other technological innovations e-government is subject to various potential obstacles, especially the management abilities affect egovernment practices. Strategic management, staffing, decision making, performance management, leadership and resources have an important place in e-government implementations. Most of the time, failures stem from the lack of government funding accounts, security considerations, technology infrastructure, web expertise, senior management capacity and etc. Intergovernmental or interdepartmental relations are essential to develop efficient e-government, since many public operations and systems require the coordination and collaboration for sharing information among citizens, enterprises and government agencies. Furthermore, there could be other inequalities such as being deprived of benefiting from information and communication technologies, unequal access to Internet as well as education, income and gender differences. Yet, another considerable problem is online security and privacy. Without confidence in digital transaction, citizens and enterprises would be reluctant to use e-government. Some other obstacles and disadvantages might be as listed; the absence of necessary procedures, interoperability and technical standards, incapability of defining working routines and developing new ICT-based products governments being short of basic incentives and institutional structures to accomplish the full potential of electronic service delivery, updated technology, web expertise, privacy issues, lack of support from officials, staff resistance and public resistance and lack of necessary training of users as well as fraud and computer hacking (Bolgherini, 2007; Yang & Rho, 2007; Bekkers & Homburg, 2007; Trimi & Sheng, 2008; Robbins et al., 2008).

Beginning from 21<sup>st</sup> century, many technical reports revealed that most of the applications resulted in failure and the rate of failure amounted to 80 percent in most of the cases. About 2/3 of e-government applications fail entirely or partially, including related expenses. The most dramatic results are observed in developing countries with more that 80 percent. The rate of failure is slightly low in Western countries with a percentage of about 75. These failures result from inefficient government applications, inadequate public structures as well as private sector and ICT technologies based initiatives (Bolgherini, 2007).

# E-GOVERNMENT, THE CASE OF TURKEY AND E-TRANSFORMATION TURKEY PROJECT

One of the comprehensive steps taken by the government in Turkey is the "E-transformation Turkey project". The project was designed to be a

substantial step in Turkey's transformation into an information community. Even though the project is a very assertive one, it is also subject to much concern and criticism, especially when considering the high failure rates of these types of initiatives throughout the world. The basic concerns confronted are the delay and slow applications broadly, insufficient human resource planning, inadequate open source software and lack of cooperation among the related parties including the government, private sector, public agencies and NGOs (Alican, 2007).

The e-Transformation Turkey Project targets to instigate the evolution and coordination of information society activities within the framework of egovernment concept, with a coordination unit constituted just for this goal. Responsible agency for this unique project is designated as the State Planning Organization (SPO) that is affiliated to prime ministry. SPO is the responsible agency for countrywide economic and social development programs, distribution of funds to public investment projects and conveying advisory reports to the government. With regards to this, the goals of the e-Transformation Turkey Project are<sup>1</sup>:

- Policies, laws and regulations relative to ICTs is going to be revised and altered if necessary, with regards to the EU Acquis; eEurope+ Initiative, initiated for the candidate countries, will be adopted by Turkey,
- Processes facilitating the participation of citizens to decision making process in the public domain along with the e-Government Gateway project via utilizing ICTs will be developed,
- Transparency and accountability of public administration will be improved,
- By way of increasing the usage of ICTs, good governance targets would be accomplished in government agencies and services,
- Spreading the utilization of ICTs, Internet, digital network and web portals,
- Coordination, monitor, assessment and consolidation of public IT projects in order to prevent duplication and overlap of investments,
- Related parties (citizens, companies, societal organizations, other government institutions and civil servants) will be promoted to adopt the above mentioned conditions.

Applications targeting the foundation of interoperable and secure online information systems have the priority in the e-Transformation Turkey

<sup>&</sup>lt;sup>1</sup> OECD Report for e-Transformation Turkey Project (www.bilgitoplumu.gov.tr); The eEurope+ Progress Report, January 2004; The eEurope+ Interim Report, June 2003.

Project. Yet, another priority of the project is to restructure the public management, increase efficiency in public services and governance and promote citizen and institution oriented services as well as to harmonize the implementations with the EU process. The project also aims the cover the entire society, maximize national benefits and increase value added. This project will moreover enable to enlighten Turkey's transformation from labor intensive society to information society and convert the traditional production - consumption economy to knowledge economy. When the basic subjects summarize, the topics are<sup>2</sup>:

- Enacting legislation with respect to regulatory and legal framework,
- Establishing the technical structure and information society,
- Optimizing education and human resources planning to acquire necessary human capital,
- E-Government for introducing digital services to citizens and institutions without bureaucratic hindrances,
- Determining standards for integrated and interoperable services,
- Redesigning the healthcare system,
- Improving e-commerce for the enhancement of e-business environment.

Moreover, it is argued that, it will not be easy to put the project into practice owing to various reasons. First of all there are plans to enhance computer literacy of the state personnel, private entrepreneurs, teachers, students and other people who could be related with the project (it is substantial to bear in mind that there are 7 computers for 100 people in Turkey). On the other hand almost 10 percent of the population is illiterate. The percentage of the population who does not have education no more than elementary school is about 75 percent. The government spends about 4 percent of the GDP for education and Turkey holds the 94th place in the Human Development Index of the United Nations. Constituting an investment portal for the future of a country is significant, but securing the necessary preconditions for the full implementation of such a project would be a better step to take (Alican, 2007)<sup>3</sup>.

The E-transformation Turkey Project is anticipated to develop the global competitiveness of the state in various fields and harvest the potential benefits of e-transformation project. The project is envisaged to be accomplished with an important influence until the end of 2010 and its expected cost of implementation to Turkey is about 2.9 billion YTL (almost 2 billion USD). Main goals of the E-transformation Turkey Project are

<sup>3</sup> State Planning Organization of Turkey, Information Society Strategy, Action Plan, 2006 – 2010,

www.dpt.gov.tr

<sup>&</sup>lt;sup>2</sup> OECD Report for e-Transformation Turkey Project (www.bilgitoplumu.gov.tr).

reengineering of business processes in the public sector and securing modernization in public administration; effective, fast, easy accessible, efficient service delivery to citizens and businesses by the public sector; transferring the highest level of information society opportunities; reducing the digital divide and enhancing productivity and employment; securing a widespread use of ICTs to generate high values for securing growth and international competitiveness (Alican, 2007)<sup>4</sup>.

The final objective of transformation into an information society is to acquire a bigger share from the world production and enhance the level of welfare by improving competitive power. ICT has a dramatic role in enhancing productivity by delivering new opportunities for producing, processing, storing and sharing information with easy access, in addition to constitution new organizational structures and elaboration of new business structures to access new markets. With regards to macroeconomic estimates, it is envisaged that with the initiation of strategy and constitution of network affect the contribution of ICT to our economy for the forthcoming three decades might reveal itself in an additional 2 percent GDP growth annually, of which 1,4 percent would result from the increase in labor productivity and 0,6 percent through employment rise, thereby increasing the national income. The priority fields and challenges referred in the Information Society Strategy, with the E-transformation Turkey project are: Sustainable growth and increasing competitive power; improving quality of life; eliminating digital divide; developing human resource capabilities and employment; efficient administration of citizen oriented public services; instigating ecommerce; securing standardization and security in Information Society implementations; promoting R&D and innovation; securing communication infrastructure commonly available; taking advantage of integrating potential technologies and improving media channels in the enhancement of Information Society<sup>5</sup>.

The means to apply the e-Transformation Turkey Project is the e-Government Gateway. The e-Government Gateway (www.türkiye.gov.tr) is a portal on which government services are offered electronically to citizens, businesses and other government agencies from a single website and with a simple format. The Gateway enables the related parties to access to information and services from a single point and involves contents targeted at securing easy access to government services. The Portal offers public information and services to citizens and institutions with a simple language,

State Planning Organization of Turkey, Information Society Strategy, Action Plan, 2006-2010, www.dpt.gov.tr

<sup>&</sup>lt;sup>5</sup> State Planning Organization of Turkey, Information Society Strategy, www.dpt.gov.tr

is free from legal, technical and foreign terms, provides updated information, saves time and sources and facilitates to use the public services on the 7/24 basis. The e-Government Gateway constitutes service integration for establishing a point of data exchange among government agencies, designing and provision of common e-government services and ensuring central security mechanism. The e-Government Gateway offers a frame work in which the related parties can have secured access to the information and services necessary. By means of this platform, where ID verification will be ensured via password and signature and the privacy of information will be protected, therefore the citizens and institutions manage to benefit safely form the government services delivered electronically. Moreover, this unique project was designed as a joint platform that is uninterrupted, secure and fast one. The Gateway architecture possesses modern web service and the EU wide government standards and technologies. The e-Government Gateway is a significant initiative which was initiated towards the constitution of a public administration that is citizen centric, transparent and accountable<sup>6</sup>.

The E-transformation Turkey Project was designed to secure the accomplishment of the goals in Turkey by 2010. It is crucial to take the right steps in the right time in order to achieve the goals. The project was initiated in 2006 and the distribution of actions within the time table is dependent on the strategic prioritization principle. The fundamental factors of prioritization of the events are expected benefit from the event and ease of application. The usage of ICTs by individuals in community not only fundamentally impact their own lives but also closely related to the transformation of the government and enterprises which supply products and services based on new technologies and ICTs. Moreover some facts on the ICT usage of individuals are; mobile phone penetration is 60%, Internet population is %14 by 2005, citizens that use Internet to acquire information and playing games is 93%, for communication 76%, Internet for training related employment activities is 8% and 3% to purchase products; 6% of households connect to Internet and 41% uses Internet cafes. Within this framework, expansion of ICTs into enterprises and its efficient use have considerable influence in securing a knowledge based economy, generating a higher value and creating new employment opportunities. However, there are obstacles for ICT adoption, such as; security concern, low competency of employees, difficulty of obtaining qualified employees, rapid outdating of ICT, high ICT costs, lack of belief of ICT investment, and lack of employee enthusiasm for ICTs. Moreover the share of ICT expenditures in the GDP is also important. According to OECD IT Outlook Report (OECD IT Outlook Report 2004), Czech

<sup>&</sup>lt;sup>6</sup> www.turksat.com.tr, e-Government Gateway

Republic is the highest ranking country investing in telecommunications, IT services, software and hardware. The Czech Republic is followed by New Zealand, Korea whereas the USA is the 8<sup>th</sup>, Japan is 19<sup>th</sup>, Germany is 20<sup>th</sup> and Turkey is 28<sup>th</sup>.

Turkey's national tendency to e-government could be defined as centralized, even though there are many e-government -like implementations practiced by various government agencies and provincial administrations. The aim of the central government is to implement policies, laws and regulations in compliance with those of the EU, to develop mechanisms in order to make citizens a part of the process, to secure transparency and accountability in public management, to provide comprehensive use of ICTs and to guide to the private sector to benefit from new developments. It is intended to establish an e-government portal to facilitate access to electronic public services from a single point and various platforms, a public secure network which is a common secure communication infrastructure to be installed in order to meet the needs of public institutions, an address recording system, a land registry and cadastre information system to facilitate inquiries on properties on line and to train public employees with regards to the new e-government issues. If we state more specifically, the services aimed to provide for citizens on line are; income tax, declaration and notification, job research services, social security benefits, personal document applications, passport and driver license, car registration, building permissions, declaration to the police, public library inquiries, certificate and delivery (birth & marriage), enrolment to college, change of address and health related services. On the other hand, the services aimed to provide enterprises on line are; social contributions for employees, corporate tax (declaration & notification), value added tax (declaration & notification), registration of a new company, submission of data to statistical agencies, customs applications, environment -related permits and public procurement<sup>8</sup>.

The E-transformation Turkey Project is a substantial one to integrate Turkey with world implementations. Nonetheless, the Project has deficiencies with regards to methodological, theoretical and practical failures. The entire plan is not practically concrete, because the projections are based on a perfunctory collection of figures. The data collection of this million – dollar project is left the shape the country's future with statistics dependent on what is currently available in public databases and private reports. Moreover,

<sup>&</sup>lt;sup>7</sup> State Planning Organization of Turkey, Information Society Strategy, Action Plan, 2006 – 2010,

<sup>8</sup> IDABC, European eGovernment Services, Turkey eGovernment Factsheet, November 2007, http://epractice.eu

some reports are based on estimates instead of realities; sales revenues are not classified properly; vendor, producer and distributor revenues are not specific; sales to free-trade zones are usually regarded as exports; and data related to software are usually related to data of other sectors. The insufficiency of general database that was developed especially for this project based on unscientific hypotheses such as the assumption of highly trained and qualified workforce without scientific or statistical proof. One of the most important problems is to entrust the future of the country to a scientifically doubtful study, especially short of proper database and initiating this high – cost project in a developing country with limited sources. Another deficiency is to compare the project to the EU which is one of the most developed regions of the world and not being realistic. In addition to this, the relevant risks and threats and pertaining solutions to these risks and threats are not stated in the report scientifically, instead the aspirations lead the whole of e-transformation (Alican, 2007).

The guick conception of the design of the project in six months is unusual with its size, scope and importance, and also creates questions pertaining to the effort involved. The high cost of the project, particularly when compared with the aftermath, is sweepingly criticized by experts. The project was designed for the period of 2006-2010. However, the official adoption of the project was realized in July 2006 and considerable amount of time was lost in 2007 parliamentary and presidential elections. Thus, one might consider that this supposedly comprehensive and dynamic project was only designed and is conducted to comply with the EU standards not for the sake of the Turkish public. In addition to this fact, there is no main agency (such a ministry) responsible from the plan. The project is supposed to be applied by the State Planning Organization, R&D is delegated to the Scientific and Technological Research Institute of Turkey and unfortunately, the project does not involve other related government agencies, universities, IT companies, NGO etc. Also, the plan has a weak social content. It has no projection to contribute to the development of Turkey's underdeveloped and disregarded regions by means of ICT usage or production. It does not consider illiterate population, which is more than 10% of the population and others who lack the proper ICT capabilities. The e-transformation project neglects the high failure rates of such projects particularly in developing countries, the complex nature of its design and implementation and does not dwell on how to enhance user-network interaction (Heeks, 2003; Alican, 2007).

The report was presented to E-Transformation Executive Board which is liable to assess the report and take measures. However, the Board does not include any members from the software sector to make essential projections and thus lacks of basic capacities. As, the project has not

included experts from the software sector since the beginning of the project, it is short of requisite research methodology, expertise and capacity required. Thus, owing to the lack of satisfactory attention, there could be a mismatch between the content and cover of the project any time. Financing such projects in developing countries is another difficulty. There are no alternatives mentioned in the project such as bank credits, state licensing processes and leasing, to finance the project in case of emergency or failures. Another substantial issue in software issue is the high costs of technology park structures for the majority of software firms and lack of cooperation among them due to competition. On the other hand, current structure of techno parks is akin to facilitate international and multinational investments, increase their revenues, ignore R&D and hurt small and medium sized enterprises. Thus, this complicates to a healthy and sustainable economic contribution, facilitates the outflow of revenue earned in Turkey and hiders the export of small and medium sized enterprises abroad (Alican, 2007; Heeks, 2003).

In addition to these facts, the e-readiness of a country for such a pronounced project is quite important. The e-readiness is an index that determines the readiness phase of a public for a knowledge society with respect to the knowledge and technological infrastructure and the level of utilization of these by a specific country. This index reflects the information on social, political, economic and technological competencies of country with respect to transform into a digital society. This also means to benefit from the global digital economy, e-commerce and the preconditions of implementing the e-government. However, if the above mentioned knowledge considered, one can comprehend how Turkey is ready for a digital society and there is actually not a real e-readiness index for the application of the e-Transformation Turkey Project. Turkey generally holds lower ranges in e-readiness comparisons made internationally in different years but also its position varies in different years. According to the Intelligence Unit of the Economist, Turkey was holding the 39<sup>th</sup> position out 60 countries in 2003; 43<sup>rd</sup> position out of 65 countries in 2004; 43<sup>rd</sup> position out of 65 countries in 2005; 45<sup>th</sup> position out of 68 countries in 2006; 42<sup>nd</sup> position out of 69 countries in 2007; 43rd position out of 70 countries in 2008; and holds the 43<sup>rd</sup> position out of 70 countries in 2009. The primary rankings are possessed by developed countries at all times<sup>9</sup>. The e-readiness index covers a country's e-transformation competency in the categories of connectivity and technological infrastructure, business environment, social and cultural

<sup>9</sup> http://www.bilgitoplumu.gov.tr/Documents/1/Dis\_Baglanti/Haberler/090000\_EconomistIntellig enceUnitE-ReadinessRankings2009Raporu.pdf

environment, legal environment, state policies and vision, as well as relevance to enterprises and other audiences. When the data above is considered, it is obvious that Turkey is not ready to transfer its public administration to a e-government structure, is subject to deficiencies with respect to criterions mentioned above and also one could state that the full implementation of the e-Transformation Turkey Project by the end of 2010 is a very ambitious one. Moreover, the United Nations prepared a e-readiness index in 2008 involving 182 countries and Turkey held the middle rankings with 76<sup>th</sup> similar to the index above. However, the most important difference of this index from the previous one is Turkey's possession of 106<sup>th</sup> position in the human development part which refers to the quality of human capital. As a matter of fact, an assertive project like the e-Transformation Turkey Project requires a well trained human population and public staff, but the position of Turkey in the human development index reflects the inverse case (Naralan, 2009).

Also, another concern is the structure of the telecommunication services in Turkey. Before 2004, the monopoly in the telecommunication sector in Turkey was the Turkish Communication Company (Turk Telekom) owned by the State. However, for the sake of liberalization in the communication market, Turk Telecom was privatized by block sale of its shares and thereby another monopoly was constituted by a private and foreign company under the license of the Turkish Telecommunication Authority (TTA). The aim was to promote the competition in the market in order to provide better and affordable services, but apart from the aim everyone in the communication market has got to deal with Turk Telecom including the State. Therefore, the government has to reach to an agreement at all times with Turk Telecom in order to implement the e-Transformation Turkey Project<sup>10</sup>.

The plan demonstrated, such as raising the number of computers in Turkey, is underestimated owing to sweeping reforms necessitated in education and the cost of increasing the number of computer hardware. As mentioned before, the fact of seven computers per one hundred people indicates a rapid need for enhancement. On the other hand, training people to use e-government applications are also imperative. Growth rates targeted for the software sector and ICTs sector are far from reality. The plan foresees more than 300% growth in the market size and 500% in export volume of Turkey in less than 5 years. The time period intended for growth considers no chance for education on computerization and adoption of the new system. Therefore, one can conclude that the project is far from being

<sup>&</sup>lt;sup>10</sup> Information Society Strategy, Action Plan, 2006-2010, (see also www.dpt.gov.tr).

productive and competitive and could bring about rejection and failure (Alican, 2007).

As to efficiently apply the E-transformation Turkey Project in the telecommunications market the New Telecommunications Law was enacted for providing interconnection licensing, universal services and numbering in compliance with the EU Acquis. Therefore, the legislation was enacted to comply with the EU accession process not for the sake of the Turkish public. Moreover, in order to make application of the E-transformation Turkey Project via the e-Government Gateway special security measure such as electronic signature and comprehensive codes are necessary. But, these devices are used by only a minority of civil servants in major state agencies. So, one might wish to state how the e-Transformation Turkey Project along with the e-Government Gateway will be fully operational on these grounds by the end of 2010 with these security deficiencies. Furthermore, as to execute such a detailed and comprehensive e-structure, a secure Internet network as well as a pronounced and contemporary Security Law on Information and personal data protection are supposed to exist. However, it is not clear what is supposed to be done in the case of data abuse and hacking. There must be a code solely designed to settle the electronic crimes and malfunction of the system; but, the situation relative to this issue is another question mark<sup>11</sup>.

### **CONCLUSION**

With the overwhelming influence of globalization, the e-government has become a growing implementation in modern public administrations in the entire world. The e-government is simply to benefit from the resources of Internet in order to deliver public services to citizens and enterprises. The current ICTs, especially the Internet and web technologies facilitate to enhance access, transparency efficiency and quality of public administration. The e-government applications are akin to be more responsive to the needs of citizens and enterprises are also more transparent, cost – effective, flexible, accessible, rapid and efficient.

However, the e-government projects may fail, particularly in developing countries. The reasons could be defined as incompetence in implementation, lack of expertise, reluctance of senior administration, the absence of necessary procedures, interoperability and technical standards, being short of basic incentives and institutional structures, lack of financial

<sup>&</sup>lt;sup>11</sup> The eEurope+ Interim Report, June 2003; Information Society Strategy, Action Plan, 2006-2010, (see also www.dpt.gov.tr).

sources, unupdated technology, poor web expertise, privacy issues, lack of financial sources, updated technology, web expertise, privacy issues, support from officials, staff resistance and public resistance.

The E-Transformation Turkey Project, the Information Society Strategy, is subject to most of the difficulties enumerated above. The plan was designed and begun implementing without necessary care, on a relatively expeditious schedule, looking especially resolve in terms of the goals far from being realistic and might be subject to high rate of cost and failure. First of all, since these sorts of projects could result in failures in various instances in the world, as to render the e-government services via Internet and using ICT technologies, the technical and bureaucratic infrastructure and managerial processes must be ready and dependable. However, this billion dollar project is rested on perfunctorily collected data and what is available in the disposal. So, the goals could have been set misleading and deceptive. Furthermore, in the project, the human resource to implement the project is considered highly capable and qualified as well as there is no measure for any risk, failure or delay within the implementation of the project in case of additional financial, human, software, hardware or network necessities. That's why the project is a doubtful one when the failure percentages in the world is considered as well as to apply it with limited financial and human resources and compare it to the ones implemented in the EU which is one of the most developed regions in the globe. Moreover, according to the e-readiness index of to the Intelligence Unit of the Economist, Turkey always holds the middle ranks and primary ranks are shared by the developed countries. With respect to the e-readiness index of the UN, the situation is similar, but is worse when the human development is considered. Therefore, it is very assertive to finish such a comprehensive project with limited financial and human sources.

The project was initiated officially in 2006 and planned to be done by the end of 2010. However, the actual initiation of the project was mid – 2006, a substantial amount of time lost in 2007 parliamentary and presidential elections and the 2008 global economic crisis adversely affected Turkey too. Therefore, the termination of the project by 2010 is a big question mark. Additionally, in the project, all the regions of Turkey are considered developed and it is not clear how the less developed regions of Turkey will be included in the application phase when the digital infrastructural deficiencies and incompetent human resource taken into consideration. In addition to this, the project envisaged a devolvement in the export volume of Turkey with respect to technological and production improvements, but the downturn experienced in 2008, 2009 and its continuing effects decreased the production and exports as well as the rate

of unemployment increased. So, the potential macroeconomic advantages were not acquired.

Nonetheless, the studies on e-government administration are done by experts from various institutions. But, there should be a fundamental agency such as a ministry responsible for the execution of the project in an intact, effective and source saving process. Therefore, it would be wise to accept that the e-transformation implementations are adopted by both the state structure and public slowly and incrementally as well as risks, failures and delays are always possible. So, there shall be precautions for immediate issues. In other words, e-government is not a linear process. Henceforth, it is necessary to be revised, changed or delayed when needed. Consequently, this unrealistic project, could end up with a failure instead of boosting the sectors of economy and could also yield to failures within the public administration.

#### REFERENCES

- Alican, F. (2007). Experts without Expertise: E-society Projects in Developing Countries -The Case of Turkey. Information Polity, 12, 255-263.
- Bekkers, V. & Homburg, V. (2007). The Myths of E-Government: Looking Beyond the Assumptions of a New and Better Government. The Information Society, 23, 373-382.
- Bolgherini, S. (2007). The Technology Trap and the Role of Political and Cultural Variables: A Critical Analysis of the E-Government Policies. Review of Policy Research, 24(3), 259-275.
- Calista, D. & Melitski, J. (2007). E-government and E-governance: Converging Constructs of Public Sector Information and Communications Technologies. Public Administration Quarterly, 31(1), 87-120
- Coursey, D. & Norris, D. (2008). Models of E-Government: Are They Correct? An Empirical Assessment. Public Administration Review, May/June, 523-536.
- Dovifat, A., Bürüggemeier, M. & Lenk, K. (2007). The "Model of Micropolitical Arenas" A Framework to Understand the Innovation Process of E-Government-Projects. Information Polity, (12), 127-138.
- Heeks, R. (2003). Most E-government for Development Projects Fail: How Can Be Risks Reduced?. Manchester: Institute for Development Policy and Management, IDPM i-Government Working Paper No.14.
- Irknin, I. (2007). Electronic Government and Society. Sociological Research, 46(2), 77-92.

- Naralan, A. (2009). Türkiye'de E-Hazırlık ve E-Devletleşme. Atatürk University Journal of Economics and Administrative Sciences, 23 (1), 1-17.
- Reddick, C. (2007). E-government and Its Influence on Managerial Effectiveness: A Survey of Florida and Texas City Managers. Financial Accountability and Management, 23(1), 1-26.
- Robbins, M., Simonsen, B. & Feldman, B. (2008). Citizens and Resource Allocation: Improving Decision Making with Interactive Web-Based Citizen Participation. Public Administration Review, May/June, 564-576.
- Rocheleau, B. (2007). Whither E-Government. Public Administration Review, 67(3), 584-588.
- Roy, J. (2006). E-government and Local Governance in Canada: An Examination of Front Line Challenges and Federal Tensions. Public Administration Quarterly, 10(2), 218-255.
- Tolbert, C., Mossberger, K. & McNeal, R. (2008). Institutions, Policy Innovation and E-Government in the American States. Public Administration Review, May/June, 549-552.
- Tolbert, C. & Mossberger, K. (2006). The Effects of E-Government on Trust and Confidence in Government. Public Administration Review, May/June 2006, 354-369.
- Torres, L., Pina, V. & Acerete, B. (2006). E-Governance Developments in European Union Cities: Reshaping Government's Relationship with Citizens. International Journal of Policy, Administration and Institutions, 19(2), 277-302.
- Trimi, S. & Sheng, H. (2008). Emerging Trends in M-GOVERNMENT, Communications of the ACM, 51(5), 53-58.
- Sinngh, G. & Belwal, R. (2007). E-governance and Corruption Developments and Issues in Ethiopia. Public Organization Review, (17), 195 -208.
- Yang, K. & Rho, S-Y. (2007). E-Government for Better Performance: Promises, Realities and Challenges. International Journal of Public Administration, (130), 1197-1217.
- State Planning Organization of Turkey, Information Society Strategy, Action Plan, 2006-2010, http://www.dpt.gov.tr
- State Planning Organization of Turkey, Information Society Strategy, http://www.dpt.gov.tr
- IDABC, European e-Government Services, Turkey e-Government Factsheet, November 2007, http://epractice.eu
- OECD IT Outlook Report 2004.
- OECD Report for e-Transformation Turkey Project, http://www.bilgitoplumu.gov.tr
- www.turksat.com.tr, e-Government Gateway
- The eEurope+ Interim Report, June 2003, http://www.dpt.gov.tr