

## **Pathology of Electronic Government Acceptance Barriers by Tehran Citizens**

**Neda Hamzeali (M.A)<sup>1</sup>, Mehdi Kheirandish (phd)<sup>2</sup>**

<sup>1</sup>(M.A) Department of management, Saveh Science and Research branch, Islamic Azad University, Saveh, Iran

<sup>2</sup>Assistant professor, Department of management, ShahidSattari Air University, Tehran, Iran

---

### **ABSTRACT**

Implementing and developing e-government is one of requirements of present era. Along with these situations, developing countries found that progressing and developing with the previous system is impossible, and then they have performed some actions to deploy and implement e-government. This fundamental change of approach requires supporting different groups and their collective acceptance; Something that is often neglected, and administrators frequently, paying their attention to provision of necessary hardware contexts that mostly, its result has not been what they expected. Accordingly, the basic question of present study is that “what are the main hazards of accepting electronic government”. The statistical universe of this study is citizens of regions 1, 7, 16 of Tehran (433500, 310184, and 332000). In this research, among the total statistical universe of 1075684 people, 384 individuals have been selected by using multistage cluster sampling. However, in order to increase the accuracy, about 1500 questionnaires were distributed. The method of data collecting has been face to face questionnaire and research methods was descriptive- survey one. Research results indicate that among eight components of research, components of perceived security, availability of resources, information quality, perceived awareness and perceived image are affected. At the end, there are some recommendations based on research findings.

**KEYWORDS:**E-Government, ICT (Information and Communication Technology), Acceptance, Citizens.

---

### **1. INTRODUCTION**

In recent years, the development of information and communication technology has had a significant impact on the performance of governments. Governments, throughout the world are trying to implement systems and new services of e-government. They are using information and communication technologies (ICT) to enhance their internal and external operations. Information and communication technologies indicates technologies such as Internet, internal and external networks and other technologies that are including a range of primary infrastructure of implementing to technologies that improve services and operations in an organization. The emergence of e-government is one of the most interesting innovations that have occurred in the field of public management in the 1990s (Evans, 2006; p 209).

In many countries of the world, some researches have been carried out on recognizing and investigating the acceptance of electronic government by citizens. Essentially, e-government is a bilateral phenomenon, in which government and public organizations and websites of these organizations are on one hand, and their audiences, i.e. citizens are on the other hand. Hence, the behavior of citizens in dealing with this phenomenon plays a considerable role to its success. If a country, regardless to the reactions of citizens, try to implement and develop e-government and cannot provide the reason of acceptance among them, will not being so successful.

In this research, we have addressed the acceptance of e-government by citizens of Tehran, and tried to investigate the factors that affecting it. Despite all investments that has been done on implementation of e-government in this city, citizens of Tehran have not shown willingness to use it. Unfortunately, every day we can observe long lines of customers, who are referred to banks and public departments and organizations in this city; citizens, who prefer instead of online interaction with these departments and organizations and using numerous advantages of electronic communication, referred to the relevant department directly, to receive their desired services. Increasing traffic on the streets of this city and large populations of citizens in banks, public departments and organizations implies on this claim, and emphasize this fact, which in practice, investment on e-government in Tehran has not appropriate efficiency.

---

**\*Corresponding Author:** NedaHamzeali,(M.A) Department of management, Saveh Science and Research branch, Islamic Azad University, Saveh, Iran

If the subject of unwillingness in using e-government in Tehran and the reason of this unwillingness does not investigate, spent resources on it are wasted and the electronic government would not achieve any of its goals. According to high speed of the states in using e-government and its increasing development and expansion, more delays in this area will have no result but underdevelopment in the world of information and communication. Our researchers should seriously carry out more research about this issue and investigate the main reasons of rejecting the electronic government by citizens.

The main concern of the present study is recognizing the world of audience and identifying the factors that are formulating citizens' support of e-government project. Accordingly, the basic question of the present study is that "what are the most important pathologies of acceptance e-government based on the model of Sheriff (2001)", and "how are the status of each one in research statistical universe". In this study, we are trying by studying theoretical substructure, find the main components, and based on them pay attention to the pathology of accepting e-government in Tehran.

Performing this research is consistent with the policies of country that are developing e-government and expanding services to citizens, and by finding the reason of disadvantages and traps in this way can provide some useful information to authorities, and prepare the context of institutionalization of related policies and their success.

### **The Concept of E-Government**

Twenty first century is called the era of information and knowledge, because information plays main role in it, and is promising a new world with modern methods of using information and knowledge. Information technology is the most important thing in this new era (Talebi; 2001). Information Technology refers to the applying systems, communication networks and computers to handle, process and manages data, in order to acquisition, storage, and shares them. E-government is as one of the most important phenomena that result from using information and communication technology, as well as information management, which provide a very deep evolution in lifestyle, managing and leading the country. Some of the major necessities of implementing e-government in Iran are the following items:

1. **Internal necessity;** this necessity is the same advantages of access to the goals of e-government in Iran.
2. **Universal necessity;** We are not responsible of this necessity, because in future and coming years, most countries should develop their communication system and social activities based on the processing and transferring information. Therefore, all countries, such as our country Iran, should take necessary steps toward cooperate with other countries.

Despite the lack of consensus definition of e-government (Pervitali; 2009) there are two relatively comprehensive definitions; According to United Nation (UN), e-government refer to "using the Internet and Web to provide information and civil services to citizens", and according to Fountain, e-government is "a government that is organized based on virtual organizations and public-private networks, and its structure and capacity depend on Internet and Web" (Valdez, 2011). E-government is converted form of government (from both internal and external point of view) that by using ICT will improve providing civil services, public participation and governance of a country.

E-government is a combination of information technology (IT) and Web network, which aims to direct providing services to citizens, civil servants, business units and other parts of state. The basic property of e-government is providing public services with lower cost and higher efficiency. E-government will try to facilitate the relationship between state and people, and people together. E-Government, no longer is as a simple provider of information or services through internet, but it is known as modified way of citizens' interaction with government (Razed and Grant, 2010).

### **Acceptance and Implementation of E- Government by Citizens**

Many researches have investigated effective factors on accepting e-government by citizens. The research of Sharif *et al.*, in addition to providing a comprehensive model, include the main components of others researches. Therefore, described model has been selected as the main framework of this study. As well as, novelty of variables of Sheriff's model among variables of previous research has been one reason to choose this model. The following are mentioned some components of their model (Sharif *et al.*);

#### **1- Attitude to Use**

##### **1-1- Perceived Awareness**

The history of E- Government progression is very new. Essentially, most of countries still are in initial steps of implementing e-government. Stakeholders are not aware of this innovation in the public system yet

(Sharif; 2011). Research suggests that e-government, in aspect of acceptance and application, has failed to attract and encourage commons toward their acceptance (Viracdiand Williams, 2009). Decision making on accepting e-government will occur between processes of its inventing and implementing. At the stage of invention, the organization will be aware of this invention, and will take an attitude toward it, and try to evaluate this new product. This includes sub-process of awareness, contemplation and willingness (Frambacha and Scale Wart; 2002). In aspect of demand, there should be lots of efforts in order to increase citizens' awareness about moving toward online public services (Virac di and Williams; 2009). Several researchers have proposed awareness as an important independent variable to formulate attitude toward using e-government systems (Sharif; 2011).

### **2-1- Computer Self - Efficacy**

A user, without knowledge of computers skill, will not be able to understand the economic advantages of e-government. Users, who have higher self-efficacy in using computer, will perceive much ease in its application and are more willing to accept computer technology (Gupta, 2008). Several studies that have tried to look for obstacles of accepting e-business and e-government, have shown that self-efficacy and the experience of applying internet, ICT and computer will provide a sense of security in users' attitudes toward using online systems and will affect their willingness to use these systems (Sharif, 2011).

## **2 - Adherence to Use**

### **1-2- Perceived Functional Benefits**

E-government will close citizens to government increasingly. Regardless to the type of country's political system, perceived functional benefits by people will facilitate the relationship between the state and citizens (West, 2006).

In global rankings of e-government, countries, where e-government are more dominant in them and its benefit is more, are in a higher position (Roarisa, 2011). May be citizens and taxpayers feel that they do not receive benefits for their money, and prefer that these advantages emerge as savings in cost and time and better operation of e-government systems. Accordingly, it seems perceived functional benefits is an important indicator in success of government- citizens systems (Wang; 2008).

### **2-2- Perceived image**

Perceived image implies that citizens think accepting electronic government will improve their position in society. Interaction with e- government systems, instead of referring to public organizations, will lead to sense of superiority and citizens feel that they are in a high position (Sharif, 2011).

Acceptance of e-government depends on believing this belief that public organizations have the ability of effectively providing services. This is mentioned as a Credit, in electronic commerce. Credit will affect customers' belief about honesty and sensitivity of organization toward customers. Citizens in electronic government also are willing to receive Internet service from an organization with a good reputation (Scope, 2010). Preliminary studies of "Kartner" and "Belanger" indicate that perceived functional benefits and perceived image are effective factors on citizens' willingness to use e-government services (Wang, 2008).

## **3 - Assurance to Use**

### **1-3- Perceived Trust and Perceived Security**

Along with applying ICT to provide services by the states, the issue of privacy and data security has become important (Gupta, 2008). Trust is an expectation, in which relying on other's promise is possible. A lot of researches have performed on the reliability of electronic services (Scope, Carter and McBride, 2010). Many of research papers indicate that security and keeping private privacy are critical factor of accepting e-government (Sharif, 2011). Citizens should trust public organization that provides services. Inserting statements about what a site does about the security and private privacy of individuals, is a valuable asset to ensure people who are concerned about it, and will encourage people to use services and information of e-government.

### **2-3- Perceived Information Quality**

Perceived information quality, perceived services quality and perceived benefits are some valid parameters in the rate of e-government success (Wang, 2008).

Since in interaction that are related to e-government, citizens do not experience face to face relationship, quality of presented information is as an online gateway that provide the first impact on citizens (Courcy and

Norris, 2008). The type of citizens' attitude toward the quality of information has impressive impact on using, user satisfaction and perceived benefits about system and service quality. It means that authorities should paying great attention to improve information quality (Wang, 2008).

**4 - Ability to Use**

**1-4 Perceived Ability to Use**

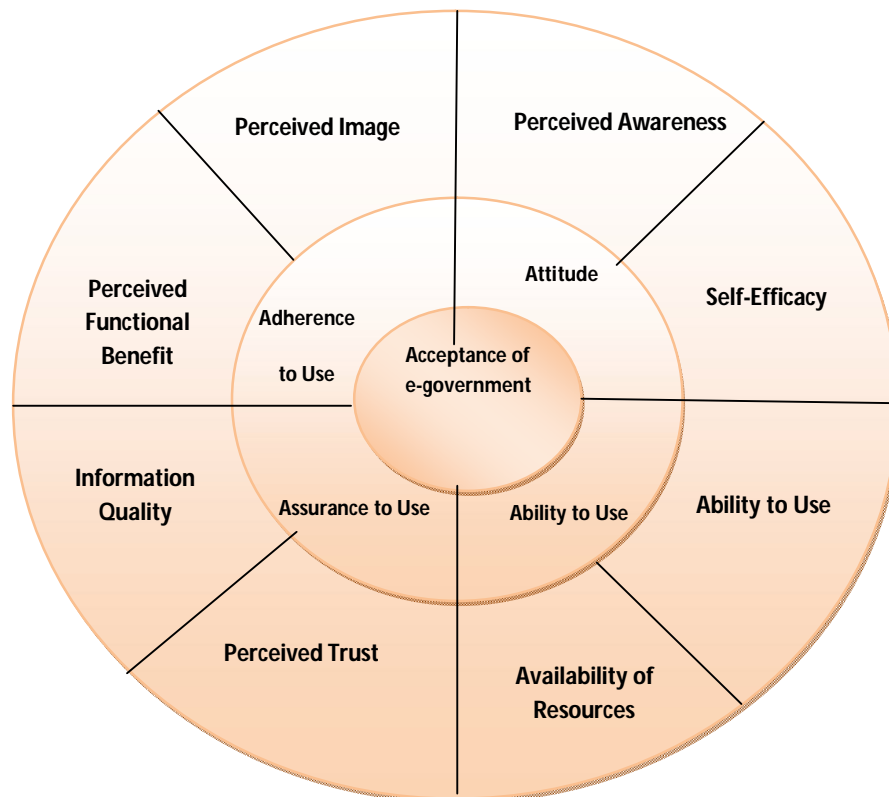
Focusing on the ability of providing online services will develop this hypothesis, in which Internet skills along with increasing security can enhance tendency of choosing the communicating channel (Razed and Grant, 2010). If users do not have the ability of using technology to access useful information and services, will not find e- government useful, and as a result e-government will fail. This will lead to the rejection of system by citizens (Sharif, 2011). In order to prevent a digital gap in using public services, citizens should be equipped with basic skills to use information and communication technologies, as well as high-speed Internet, in all parts of society (Viracdi and Williams, 2009).

**2-4 Availability of Resources**

The rate of availability of resources is another issue that is closely related to the acceptance of e-government. The ability of government to design and implement a particular innovation, and willingness to accept a certain amount of risk is related to the rate of resource (Pervitali, 2009).

Where computers, Internet and advanced information and communication technologies are not available, citizens are economically poor, are not highly educated, are not aware of advanced technologies, socially and culturally are unfamiliar to advanced technologies, and do not have the necessary skills to use technology and there is no belief to use benefits of applying electronic government. Accordingly, there is a clear relationship between availability of the resources and acceptance of electronic government (Sheriff, 2011).

**Graph 1 - Conceptual Model of Research**



**Research Background Inside The Country:**

In our country, Iran, there is few research that has been performed on acceptance of e-government; Here, we're mentioned the research of "Danaee Fard" et al. This research has been done in 2010, and the authors

have explained the role of important individual, organizational and social variables of accepting this technology. Variables such as perceived risk, security and private privacy, lack of infrastructures, characteristics of systems and Web will be investigated.

#### **Outside The Country:**

The acceptance of e-government has been evaluated and pathology in many countries, which here, two newest and the most perfect one in developed and developing countries have been indicated:

The first one is the research of “Mahmoud Akhtar Sharif” et al that has entitled as “the acceptance model of e- government “that has performed in 2011, in Canada (a developed country). In this research, some variables such as availability of resources, computer self-efficacy, applying native language in public and governmental websites, etc. will be studied.

The second one is a research that has been done in a developing country, Gambia. In this study that is entitled as “the evaluating the acceptance of e-government by citizens” and has conducted in 2011, the impact of external variables of perceived functional benefit and perceived ability to use on attitude and behavior of citizens will be examined.

### **METHODOLOGY**

This research in aspect of data type is qualitative and in aspect of goals of study is applied one. Themethod of presenting research in this study is descriptive (survey).It is descriptive because it provides a picture of present situation, and it is survey because it tries to collect data from the statistical universe by using a questionnaire.

The statistical universe of this study is citizens of regions 1, 7, 16 of Tehran (433500, 310184, and 332000). In this research, among the total statistical universe of 1075684 people, 384 individuals have been selected by using multistage cluster sampling. However, in order to increase the accuracy, about 1500 questionnaires were distributed. In order to determine target sample the following statistical formula has been used, in which the confidence level was 95% and error of estimate was 0.045.

$$n = \frac{NZ_{\frac{\alpha}{2}}^2 P(1 - P)}{E^2(N - 1) + Z_{\frac{\alpha}{2}}^2 P(1 - P)}$$

In which:

$$1-P = \frac{1}{2} \quad P = \frac{1}{2} \quad E = 0.05 \quad Z_{\frac{\alpha}{2}} = 1.96 \quad N = 1075684 \quad n = 384$$

The main instrument in this research is a questionnaire contain of 37 questions that is designed based on questionnaires of different researchers.

After developing validity questionnaire, questionnaire has been reviewed and approved by using the validity of content and the ideas of experts and scholars.

In order to assess the reliability of the questionnaire, the Cronbach's alpha coefficient has been used. To compute “ $\alpha$ ” coefficient, also the SPSS software was used, in which “ $\alpha$ ” level for questionnaires became 0.94, and it determined that the questionnaire is valid.

#### **Research Hypotheses**

1. In Tehran, there is no proper attitude (awareness and computer self- efficacy) toward e-government.
2. In Tehran, the e-government has not adherence to use for citizens (perceived benefits and perceived image).
3. In Tehran, citizens do not trust e-government (perceived trust and security and information quality).
4. In Tehran, citizens have no ability to use e-government (the ability to use and availability of resources).

#### **Data Analysis**

In descriptive section, the present situation has been described and evaluated, and many statistical parameters such as frequency, percentage and the average of changes have been used.

Inferential section, also has been studied the statistical relationships between research variables. In this section, in order to data analyze, the Kolmogorov-Smirnov test, mono-sample T test and Friedman test, respectively are used to study normality of variables distribution, investigate pathology, and to prioritize the component of model.

The results of studying personal characteristics suggest that 3.63 percent of respondents were between 20 - 40 years old, as well as 1.66 percent of respondents were male and 1.32 percent were female; about 4.68 percent of them were married and 9.29 percent were single; the level of respondents' education was as follows: 47 percent, Diploma, 0.08 percent Associate Degree, 21 percent BA, and 22 percent higher than BA.

### Research Findings

In order to investigate the normality of research component, Kolmogorov - Smirnov test is used. The results of this test are presented in the following table. As it can be seen in Table 4-5, since all obtained significance numbers are greater than error level of 5 percent, the null hypothesis, which indicates normality of data is not rejected. Therefore, it can be saying that all components have normal distribution.

**Table 1 - the results of the Kolmogorov - Smirnov test, to investigate data normality**

Variable	Significance level	Error value	Conformity of hypothesis	Conclusion
Availability of Resources	0.467	0.05	H <sub>0</sub>	Normal
Perceived Awareness	0.324	0.05	H <sub>0</sub>	Normal
Computer-Self Efficacy	0.620	0.05	H <sub>0</sub>	Normal
Perceived image	0.576	0.05	H <sub>0</sub>	Normal
Ability to Use	0.720	0.05	H <sub>0</sub>	Normal
Information Quality	0.207	0.05	H <sub>0</sub>	Normal
Perceived Benefits	0.315	0.05	H <sub>0</sub>	Normal
Perceived security	0.430	0.05	H <sub>0</sub>	Normal

**The First Research Hypothesis:** there is no proper attitude (perceived awareness and computer self-Efficacy) toward acceptance of e-government, in Tehran.

**Table 2 – T of Uni-Variable for Test of the First Hypothesis**

Proper Attitude	Secondary Hypotheses	N	Mean	SD	T	Df	sig	Conclusions
	Perceived awareness	1488	2.3671	015610	-9.07	1487	0.00	H <sub>0</sub> Rejected
	Computer Self-Efficacy	1488	3.2988	023630	48.771	1487	0.00	H <sub>0</sub> Confirmed

**The Second Research Hypothesis:** the e- government in Tehran has not appropriate adherence to use for citizens (perceived benefits and perceived image).

**Table 3 - T of Uni-Variable for Test of the Second Hypothesis**

Adherence to Use	Secondary Hypotheses	N	Mean	SD	T	Df	sig	Conclusions
	Perceived Benefit	1488	3.5024	029054	62.265	1487	0.00	H <sub>0</sub> Confirmed
	Perceived Image	1488	2.4501	031121	-55.783	1487	0.005	H <sub>0</sub> Rejected

**The Third Research Hypothesis:** there is no proper level of confidence (perceived trust and security and information quality) toward e- government, in Tehran.

**Table 4 - T of Uni-Variable for Test of the Third Hypothesis**

Trust	Secondary Hypotheses	N	Mean	SD	T	Df	sig	Conclusions
	Perceived Trust	1488	2.3410	022133	-59.424	1487	0.005	H <sub>0</sub> Rejected
	Perceived Quality	1488	2.1530	024425	-24.160	1487	0.008	H <sub>0</sub> Rejected

**The Fourth Research Hypothesis:** In Tehran, citizens has no necessary ability to use and applying e-government (the ability to use and availability of resources).

**Table 5 - T of Uni-Variable for Test of the Fourth Hypothesis**

Ability to Use	Secondary Hypotheses	N	Mean	SD	T	Df	sig	Conclusions
	Ability to Use	1488	3.1084	019878	21.091	1487	0.005	H0 Confirmed
	Availability of Resources	1488	2.2741	021399	-49.404	1487	0.005	H0 Rejected

According to the results, the variables of perceived benefits, self-efficacy, and ability to use have been confirmed by higher mean. i.e., three abovementioned variables are in ideal and proper level of accepting e-government, in Tehran. The results, also suggest that perceived security, availability to use, information quality, perceived awareness, and perceived image are not confirmed by lower mean, i.e. the five abovementioned variables are not in ideal and proper level of accepting e-government, in Tehran.

**Friedman Test**

Finally, the Friedman test is used to prioritize the variables. In this test, lower mean of ranks will lead to more significant variable (in this study, attitude toward e-government)

**Table 6 - Friedman Test to Compare Four Parameter of E-Government (Ranking)**

Parameters	Mean of Rank
Proper Attitude	1.22
Adherence to Use	2.45
Ability to Use	3.12
Assurance of Use	3.21

**Conclusions and Recommendations**

Reducing the level of costs, promoting the level of satisfactory among citizen and improving the way of doing affairs has always been the goals of organization, and to accomplish these goals, various programs have been developed by experts. By development of information and communication technology (ICT) and its optimal efficiency in the private sector, e-government has been at the top level of the states' business programs in order to fulfill the aforementioned objectives, so that by improving speed and the quality of providing and performing services will prepare every things to acquire citizens' satisfactory and provide more legitimacy; obviously performing such a huge project, while necessary condition and prerequisites are not prepare to providers and recipients, only will be adding technology to old technologies, and its outcome is only disappointment of organizations in designing and implementing such projects. The current problem of e-government policy makers is promoting the interest of users in the field of hardware. However, the pathology of rejecting such projects requires a comprehensive attention at this issue, and will start with this question that "what properties will lead to tendency of recipients to use e-government services". According to scholars, different factors are affecting this matter. In this study, among different patterns, Sharif's model is used, which its comprehensiveness is more appropriate than others.

The results show that people in Tehran have a good attitude towards the components of perceived benefits, self-efficacy and the ability to use, which can be proper stimulus in institutionalizing and intensification of applying this trend. However, the use of e-government is along with some damages that the most important one in statistical universe point of view include perceived security, availability of resources, information quality, perceived awareness and perceived image. Accordingly, in order to reduce injuries of accepting and improving the situation of components, the following items should be considered;

1. It is recommended that the trend of acculturating programs being investigate in areas that are the needs of majority of people. This will mean public invitation. Currently, the most of projects involved a certain range of individuals, so that, even in some cases there is no obligation and coercion to use e-government services. This will lead to increasing approach of citizens and e-government.
2. Planning advertising programs by organizations, in order to introduce sites and explain how to use them. This will reduce the citizens' idea about difficulty of applying technique as much as possible. It should be noted that, the approach of e-government policy makers, should be attracting maximum user. On the basis of research results, there is mainly less difficulties related to young and educated people. Supportive programs should encourage everyone to being actual users of e-government services.

3. Efforts to develop and deploy high-speed Internet lines at various locations and situations. Currently, using internet is vulnerable on different dimensions of cost, speed and coverage and in various locations. Planning some programs based on the three aforementioned bases can prepare situation to attract more audience.

4. Establishment of institutes of learning computer skills through both public cultural clubs and public media and other communal centers in different regions of city. This concept that generally is associated with empowering (knowledge and skills) of citizens is known as social entrepreneurship, and will provide necessary self-confidence to communicate and continues using e-government services. Moreover, it will make communicating with citizens, as much as possible, easy and close.

5. Actual intensification of this motto that “nowadays, illiterates are not who cannot read and write, but they are those who do not know anything about computer skill”; this concept involves a cultural effort. It is clear that by developing the level of literacy in the community, the attempt of citizens to improve personal knowledge will move toward developing computer skills.

6. Experimental implementing web sites in different knowledge and ethnicity levels. Accordingly, by using the previous feedback, preparing the field to make web sites more desirable to user will be possible.

7. Adopting measures to increasing security of personal information can improve citizens’ willingness to services. In this regard, authorities’ commitment and inserting security statements on web sites will lead to citizens’ convenience.

8. Accurate updating websites information can prevent pessimism of citizens, and develop this idea that maintaining the quality of websites and the increasing use of citizens are some of the main concerns of service providers.

9. Organizations by adopting a systematic approach should choose this ongoing movement as their main approach, and involve in improving acculturating of this worthwhile movement, and without any pre-assumption should postulate that the amount of investment in this field will bring about economy and benefit to society.

## REFERENCES

- Brown, M. & Brudeny J. L.(2001), “Achieving advanced electronic government services: an examination of obstacles and implications from an international perspectives”, paper presented at the national public management research conference, Bloomington, IN, 2-24.
- Coursey, D. & Norris, D. F.(2008). Models of E-Government: Are They Correct? An Empirical Assessment. *Public Administration Review* • May | June 2008, 523-535.
- Ebrahimi, Safar and Bakhtiari, M.(2001), "E-Government", *Proceedings of the International Conference on Electronic and Internet cities*, Kish, 11-13.
- Frambacha, R. T., & Schillewaert, N.(2002). Organizational innovation adoption A multi-level framework of determinants and opportunities for future research. *Journal of Business Research*, 55(2002), 163– 176.
- Gupta, B., Dasgupta S. & Gupta A.(2008). Adoption of ICT in a government organization in a developing country: An empirical study. *Journal of Strategic Information Systems*, 17(2008), 140–154.
- Heeks, R. & Bailur, S.(2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, 24(2007), 243–265.
- Hu, Y.-C., & Liao, P.-C., 2011. Finding critical criteria of evaluating electronic service quality of Internet banking using fuzzy multiple-criteria decision making, *Applied Soft Computing*, 11, 3764–3770.
- Kelly, Carol(2003) *Electronic Government Strategies. A mate group, advisory service.*
- Kim, D.J., Kim, W.G., & Han, J. S., 2006. A perceptual mapping of online travel agencies and preference attributes. *Tourism Management*, 28(2), 591–603.
- Lee, J. & Rao, H. R.(2009). Task complexity and different decision criteria for online service acceptance: A comparison of two e-government compliance service domains. *Decision Support Systems*, 47(2009), 424–435.



- Lee, Jungwoo.(2010). 10 year retrospect on stage models of e-Government: A qualitative meta-synthesis. *Government Information Quarterly*, 27(2010) 220–230.
- Previtali, P. &Bof, F.(2009). E-government adoption in small Italian municipalities. *International Journal of Public Sector Management*, 22(4), 338-348.
- Parasuraman, A., Zeithaml, V. A., &Malhotra, A., 2005. E-S-QUAL: A multiple-itemscale for assessing electronic service quality. *Journal of Service Research*, 7(3),213–233.
- Rorissa, A., Demissie, D. &Pardo, T.(2011). Benchmarking e-Government: A comparison of frameworks for computing e-Government index and ranking.*Government Information Quarterly*.
- Raised, W.R & Grant, G. G.(2010). Critical issues pertaining to the planning and implementation of E-Government initiatives. *Government Information Quarterly*, 27(2010), 26–33.
- Schaupp, L. C., Carter, L. & McBride, M., E.(2010). E-file adoption: A study of U.S. taxpayers' intentions. *Computers in Human Behavior*, 26(2010), 636–644.
- Shareef, M. A., Kumar, V., Kumar, U. &Dwivedi, Y. K.(2011). E-Government Adoption Model(GAM): Differing service maturity levels. *Government Information Quarterly*, 28(2011), 17–35.
- Talebi, H. (2001) "Lectures at the First Conference on the role of information technology jobs" Tehran.
- Tap Scott· Donald(1996) "the digital economy: promise and peril in the age of networked intelligence". New York: Mc Grew Hill Publishing .
- Valdés, G., Solar, M., Astudillo, H., Iribarren, M., Concha, G. & Visconti, M.(2011). Conception, development and implementation of an e-Government maturity model in public agencies. *Government Information Quarterly*, xxx(2011), xxx–xxx.
- Verdegem, P. &Verleye, G.(2009). User-centered E-Government in practice: A comprehensive model for measuring user satisfaction. *Government Information Quarterly*, 26(2009), 487–497.
- Wang, Y., & Liao, Y.(2008). Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success. *Government Information Quarterly*, 25(2008), 717–733.
- Weerakkody, V. & Williams, M. D. (2009). Guest editorial: From implementation to adoption: Challenges to successful E-Government diffusion. *Government Information Quarterl*, y 26(2009), 3–4.
- West, M. Darrell.(2006). Global E-Government.Darrell\_West@brown. Edu(401), 863-1163.
- Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerageservices, *International Journal of Service Industry Management*, 15(4), 302–326.
- Yang, Z., Peterson, R. T., & Huang, L., 2001.Taking the pulse of internet pharmacies, *Marketing Health Service*, 21(2), 5–10.