Studying Governmental and Security Obstacles of E-Government Realization
Case Study: Chaharmahal and Bakhtiari Governorship

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Abstract
The issue of E-government is one of the most important subjects in information society. E-government is a major and important step for advancement of communications that have been ascertained at the global level. If challenges and obstacles of E-government development can be identified and appropriate strategies can be adopted to eliminate them, E-government implementation will have several advantages for the society. The major purpose of this study was to identify the obstacles of E-government development. These obstacles were classified into two classes of security obstacles and governmental obstacles which were examined using field method. Researcher self-made questionnaire with five-option Likert scale was tool of data collection and the statistical population included all employees of the governorship in Chaharmahal and Bakhtiari province who were estimated equal to two-hundred seventy eight persons in autumn 2013. One-hundred fifty one questionnaires were distributed randomly using Morgan Table. Reliability of the questionnaire was measured through Cronbach's alpha equal to 0.918; then the components were studied by means of SPSS software. The findings demonstrated that both obstacles are proposed for E-government development and totally security obstacles are the most important obstacles in this regard.

Key words: E-government, E-government Development, Security Obstacles, Governmental Obstacles

Introduction
    After the appearance of the World Wide Web and the prefix "E" before different words, a new phenomenon entitled E-government has been created in the recent decade. The term E-government was seriously proposed since the 1990's (Bateni & Yazdan Shenas, 2007: 59-95). This term has been formed affected by major factors such as priority of policy-making, purposes of the government, intention of decision-makers and social and economic grounds in the country (Sotudeh, 2011).

580

Growth and evolution of E-government is very complicated in social, cultural, political and technical terms. Quality of an E-government depends on several factors like the politics and information policy of the government, number of users and their motivation and education level. Propagation of the culture of IT utilization across the country and the government has compelled people to use computer in order to achieve their life aspects (Tohidi, 2011: 1100-1105). Readiness to accept E-government in different countries is different considerably. Intention towards the national E-government depends on factors including economic accessibility, human being, technological resources, government's tendency towards perceiving and supplying needs of people, language, trust and confidentiality. However, many of such factors are deeply rooted in the characteristics of national culture (Khalil, 2011: 388-399). Successful utilization of E-government in Iran requires accurate considerations with regard to cultural background of the society. Understanding the cultural and social obstacles which determine Iran's society readiness to accept changes in governmental services system is one of these issues (Sharifi & Zarei, 2004: 600-619). Therefore, cultural and institutional considerations should be considered in order to be successful in E-government implementation (Shupen, 2009: 118-127).

Research literature
Obstacles of E-government realization

There are several obstacles for realization and implementation of E-government such as technological, economic and financial limitations, the current attitudes in the society at managers and employees as well as citizens' level (Beynon Davis, 2005: 3-20). Obstacles of E-government implementation include the problems related to trust and security, lack of need to the existence of E-government, how users have access to E-government and how the information required by citizens is offered (Hanmer & Al-Qahtani, 2009: 137-143).

Security obstacles

Security means safety, tranquility, peacefulness and so on but about a country there is no plan and policy undoubtedly without security and bases of that political system will be unsteady. Even in Habz, Lock and Russo's viewpoint, establishment of security is the necessity of government existence.

Security, however, has a concept beyond survival and preservation of a country. Basically, security is a conceptual and emotional phenomenon and in other words such confidence must be established in minds of all people, statesmen and decision-makers that security is necessary to continue life without any apprehension and thus the degree of the required security cannot be determined. For this reason it is said that security is a relative status. It is both a relative and a final status, i.e. when the necessary schemes are used to achieve the minimum security, the feeling that it is tried to maintain the survival, preservation immunization of the country against internal and external threats is a kind of tranquility, self-confidence and hope for life durability and activity.

Security of the information technology and single users

The first user who uses the computer has an important role in guaranteeing the computer safety and its software. Totally, other users have a considerable role in ascertaining accuracy in

preservation and security operations. Users who do not have adequate information about computer safety are regarded as one of the largest dangers of computer safety (Saduskawe, Ekes, Demize & Greenberg, 2006).

Governmental obstacles

E-government is a set of new legal conventions, methods, rules and changes in cases such as electronic signatures, e-archive, freedom of information, data protection, computer crimes, intellectual property rights and information documents copyright to perform electronic activities in the government and sign one or more digital contracts that must be protected through a formal rule and support this kind of process (Valentina, 2006).
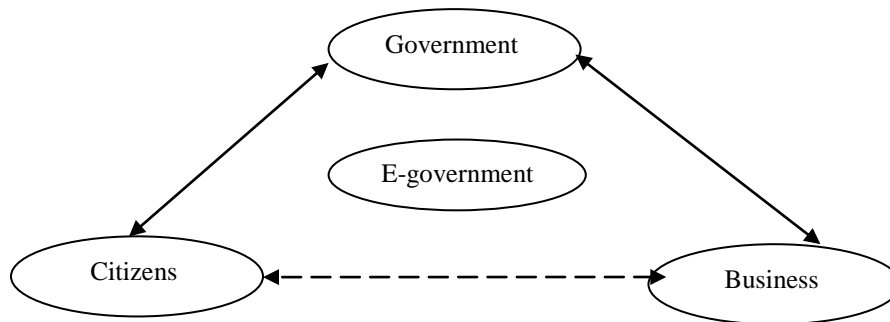

Figure 1- Relationship between different sectors in E-government (Fathian, 2009: 228)

GTG ⟷ GTG and CTG GTB ⟵ and BTG

Questions

1- What are the security obstacles of E-government?
2- What are the governmental obstacles of E-government?
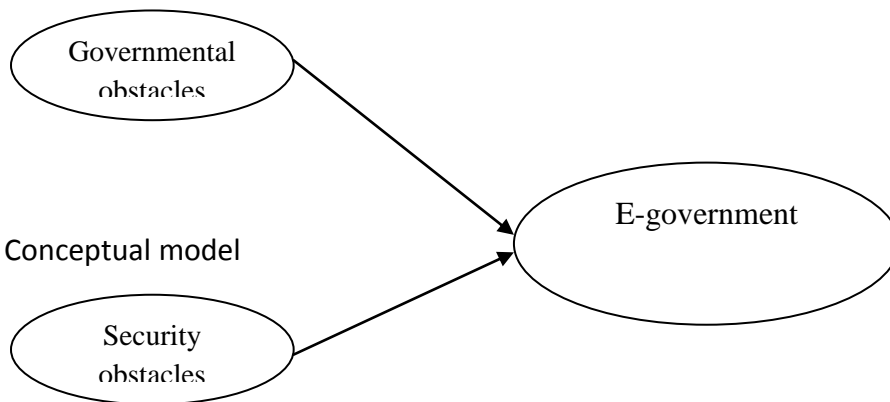

Figure1: Conceptual model

Methodology

The statistical population was consisted of all employees of the governorship in Chaharmahal and Bakhtiari province who were estimated equal to two-hundred seventy eight persons in autumn 2013. Cohen, Morgan and Kejcie Table was used to determine the required size (Danaee Fard et al., 2005). Thus the research sample was obtained equal to One-hundred

fifty one persons through stratified random sampling method. Questionnaires were distributed among the employees and all of them were returned. Final corrections were made after the pre-test execution in a sample with 30 persons and then the final questionnaire was prepared. Accordingly, content validity of the questionnaire was ascertained (it answers the question whether content of the measurement tool represents the content or sum of the characteristics intended to measure or not).

Value of Cronbach's alpha for variables:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\Sigma_{si}2}{S^2x}\right)$$

Governmental obstacles: 0.83

Security obstacles: 0.971

Total variable (non-realization of E-government): 0.904 and it is equal to 0.918 for all variables of the questionnaire.

SPSS software was used to do the above task.

Data analysis

First significance of two factors related to obstacles of E-government realization was studied using regression test to perceive which obstacle has a higher effect.

Table 1- Mean, standard deviation and variance of research variables in the sample under study

Model	Coefficients' non-standard		Coefficients' standard	t	Significance
	B	Standard error			
(Constant)	3.255	1.553		2.096	0.038
Security obstacle	1.018	0.049	0.544	20.582	0.000
Governmental obstacle	0.961	0.051	0.500	19.028	0.000

Results of Table 1 show that R^2 is equal to 90% and it means that 90% of changes related to the dependent variable (obstacle of E-government realization) is covered by the independent variables (the two obstacles). Given to the obtained significance values and that the test was performed at level 0.05 and these values are less than 0.05, these two obstacles are significant and effective.

Considering the obtained coefficients, the highest coefficient belongs to security obstacle. It means that this obstacle has had more effect on non-realization of E-government. Now this test is performed through sex separation.

Studying the questions

Table 2- Studying the questions related to governmental obstacles of E-government development

Row	Title	Mean	T
1	Inter-management cooperation regarding the E-government	3.586	1.15
2	Higher levels' support from E-government	3.5166	1.15
3	Employees' skill regarding the E-government	3.7648	1.175
4	Appropriate legal framework for the E-government	3.6357	1.05
5	Ascertained standards regarding the E-government	3.8245	1.075
6	Cooperation among the governmental sector and the private sector regarding the E-government	3.7848	1.15

Results of Table (2) reveal that all questions are significant with regard to the mean (equal to 3) and non-existence of adequate standards in this regard is the most important factor among the obstacles of E-government development.

Table 2- Studying the questions related to security obstacles of E-government development

Row	Title	Mean	T
7	To what extent does the senior management consider information security as an important priority?	3.7648	1.1
8	Which actions related to information security are supported by senior management?	3.6258	1.125
9	To what extent is education offered to employees about information security?	3.6357	1.025
10	To what extent are the new and up-to-date antiviruses used?	3.7749	1.225
11	Is there a unit called information security management?	3.5662	1.02
12	Is users' access to information controlled?	3.7648	1.025

Results of Table (2) reveal that all questions are significant with regard to the mean (equal to 3) and not using the new and up-to-date antiviruses is the most important factor among the security obstacles of E-government development.

Results

Question 1- What are the security obstacles of E-government development?

Providing security is one of the most basic necessities of data transfer and it has a special status through ever-increasing development of networks. Security is defined in the form of functions such as confidentiality, message comprehensiveness, authentication, undeniability and accessibility.

Network security is generally used to protect boundaries of an organization against hackers. Nowadays network security is an important issue for governmental companies and large and small firms. Advanced threats by terrorists in cyberspace, dissatisfied employees and

hackers demand a systematic approach to create network security. Indeed E-government security in an advanced form is not a choice; rather it is a necessity.

Whatever the E-government is highly accurate and efficient it will not be faced with public acceptance until it is not ascertained in legal and security aspects. Therefore, technical and promotional orientation should be towards the direction that technology is accepted by them through providing tranquility of citizens.

Despite the government has extended the concept of E-government, but it has not explained the role of practical rules and strategies for information security in its theoretical models given to results of previous tables. In other words, the essential policy-makings and guarantees for realization of structural dimensions and elements of protection, mutual relation, buses and outputs in theoretical models of E-government have not been identified.

Software development and increased security in E-government structures are one of the important factors in acceptability and extension of E-government processes. If the necessary ground to supply such cases is provided, public application of electronic structures are developed and facilitated; risk of using such structures is decreased by preserving high security degree and hence citizens' trust and satisfaction are enhanced.

The obtained results are consistent with new researches of the U.S government (2011) that believes security problems and cooperation of the central and middle management are the biggest problems of E-government. Also they are consistent with Sabri studies (2008) for presenting a multi-layer model to evaluate information security in E-government.

These results are consistent with Naseri Rad's research (2013) regarding lack of reliability, lack of security and privacy control as obstacles of E-government implementation.

Question 2: What are the governmental obstacles of E-government development?

Given to above results, adequate attention has not been paid to increased access to the internet and E-government constitution to serve the citizens and at the same time possibility of producing the content of culture of citizenship by citizens in the approach of lawmakers and planners in Iran. The effective and vital role of governments in developing citizenship education and granting freedom in cyberspace should be considered. In fact, the cyberspace has numerous capabilities for culture of citizenship education and also training electronic culture of citizenship can help proper utilization of extensive possibilities of cyberspace by users and culture of citizenship development. Analysis of the government approach to electronic citizen is important, because type of behavior of the government towards users can indicate that using the virtual capacities by users and developing the electronic culture of citizenship have been to what extent considered. In other words, to what extent the government has been able to look at the unlimited boundaries of internet and results of using it through a realistic view.

In order to recognize the government's approach towards the E-government the most basic resource is rules of this scope. As authorities and freedom of citizens are determined by enacting laws in real world, rules of each country guarantee rights of people in cyberspace. There must be horizontal and vertical buses in E-government to transfer message from citizens to the government (and vice versa) and from citizens to citizens. There must be this confidence that voice of all citizens is heard without considering their education level and background.

Any new technology needs legal acceptability for development before public acceptability so that all its capacities are used. It means if we intend that the E-government process is faced

with public acceptance, the required legal contexts should be provided, risk percentage should be reduced by recognizing all probabilities in the process of E-government and public confidence in E-government-based structures should be increased.

The obtained results are consistent with Jalali's research results (2005) regarding the role of E-government in decreasing bureaucracy as well as Giurian's results (2012) regarding lack of regular plans and unawareness of public managers from the importance of information technology.

Existence of governmental and security obstacles in Chaharmahal and Bakhtiari Governorship is consistent with results of studies by Holden and Morris (2003) in which it is believed that five obstacles of lack of web-specialist technology or employees, lack of financial resources, lack of web technology or web experts, consequences of security and the need to up-to-date the information technology prevent E-government development. Similarly, the results are consistent with Rajab Beigi's studies (2004) who believed that lack of need to existence of E-government, lack of senior managers' support, inability to delimit confidential and non-confidential information, extravagant costs of maintenance and development of information networks and information bases, lack of specialized forces of information technology in some countries, problems related to protection manner of personal information of people, how users have access to the E-government and analysis and re-engineering manner of public services to utilize the E-government are the obstacles of E-government development.

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