JABFR
JOURNAL OF APPLIED
BUSINESS AND FINANCE RESEARCHES

Designation of a Coordinative Conceptual Framework for the Lasting Development and Effectiveness of E-Government

Ali Ghorbani[*1] and Ali Asghar Pourezzat[2]

Assistant Professor of Business Administration, Payame Noor University, IRAN
Professor of Public Management, Tehran University, IRAN
Corresponding author's Email: Ghorbani02@gmail.com

ABSTRACT: Literature review of the electronic government (EG) shows that this area of science has become a jungle of unstructured theories and landscape. This situation evokes the metaphor of Management Theory Jungle developed by Koontz; jungle that limit vision, to the extent that many researchers in this field will not have a comprehensive and top-down view. The current study's approach is comparative and exploratory, looking for a framework that helps the identification of the dimensions, concepts, and indicators of EG as a coherent body and to grow its various aspects in a balanced and targeted way while being executed. This article divides the effective factors on the realization of EG within a conceptual framework into Tri-Categories of Context, Creation process, and Content. Context by having such factors as social culture, organizational culture, management maturity, economic conditions, electronic knowledge of the citizens, demographic conditions, and the specialist human resources, affects the Creation process, and the Content of EG. Creation process which includes the stages of policymaking, development of strategy, identifying CSF's and barriers, identifying expected functions, architecting the structure, implementation, and results evaluation also affects context and content of EG. The Content of EG which is based on the EG effectiveness indicators includes factors such as efficiency, Electronic justice, citizen relationship management, e-transparency, and e-trust also affects the other two dimensions. These Tri-Categories, directly and indirectly form the nature of EG. Lack of attention to this complex relation, will fail the founders of EG in developing countries because they ignore the requirements associated with this complex relation and does not fully identify the system and do not establish it.

Key words: Context, Creation process, Content, Tri-category conceptual framework, theories of E-government

INTRODUCTION

Technology development and its applications increased the desire to use various terms in the re-definition of government, and concepts like the mobile government and pervasive government have been raised. However, the term e-government is considered as a prominent and dominant concept in this area. e-government in its current mode is still considered a new phenomenon and because of that there's a shortage of knowledge about the social, organizational, administrative effects, and its capabilities.

Anyway, e-government is considered an integral part of the everyday governing issues and each day appears more fully; in a way that It is predicted that the future of e-government coincide with new forms of ubiquitous technologies. By the future e-government because of the use of ICT networks and applications, interaction and exchange will be possible in any place and at any time.

Problem statement

The most salient issue in the literature review of e-government is the lack of cohesion and structure in existing theory basics and knowledge in this branch of science! E-government is a field that has become a jungle of unstructured theories; this situation evokes a metaphor by Koontz called Management Theory Jungle (Koontz, 1961); a jungle that limits vision to the extent, that many researchers in this field will not have a comprehensive and top-down view! In other words, the confusion between e-government approaches and theories abounds! Some areas (such as e-government implementation and maturity) have been dealt very extensively and some areas have been under-considered (Such as electronic justice, architecting the e-government, and policy-making for electronic government). This requires that the various theories be organized within a comprehensive framework. Certainly, the full realization of e-government is primarily dependent on

having a good understanding of the nature of e-government's structure. So, the main efforts of researchers in this paper is the integration of e-government literature and the establishment a comprehensive framework for understanding the nature of that and contributing to its realization.

Goals and applications

Science in general is divided into two categories: academic and practical. Academically, the current paper tries to lead the researchers in the field of electronic government to a transparent conceptual framework, in a way that dimensions, concepts, and indicators of e-government be identified in a unique body. One of the primary stimuli for this study in the field of e-government was the extraordinary in-depth and noteworthy classification of the organization theory in the book by Mary Jo Hatch.

But in the practical dimension, this study seeks primarily to drawn a vision for the development of Iran's e-government so that the various measures taken in this area, grow in a targeted and balanced way. Definitely, just to make the current state of affairs electronic in scattered areas with the justification of the resulting efficiency cannot draw a transparent vision of a functioning e-government for the country. Secondly, the present study leads to reveal some secret aspects of the nature of e-government, such as electronic justice, digital gap between citizens, e-maturity of managers, e-government strategies, e-transparency and so on.

History

A review of the research literature shows that so many scientific products has been made in the field of e-government. The majority of the studies done deal with the affective factors on the realization of e-government and the barriers (Lee and Perry, 2002; Chaffrey 1998; Dawes and Pardo, 2002; Garson, 2003; Landsbergen and Wolken, 2001; Laudon, 1985, Pardo and Scholl, 2002). Some researchers have tried to design the maturity models or implementation models of e-government (Ronaghan, 2002; Caldow, 2003; Bhatnagar, 2002; Layne and Lee, 2001; Wescott, 2001; and Misra and Dingra, 2000). Altogether we can say that most researchers have looked at e-government from a technical point of view and not a human one! Hence they have considered stages such as the development of information, communication, interaction and transaction, as the maturity of e-government web sites. Some other have made an assessment of e-readiness of the community (Lime, 2003; Huges, 2002). Of the E-readiness assessment models can be pointed out the computer systems policy project (CSPP), Center for International Development at Harvard University (CID), network readiness index (NRI), The Information Age Partnership (IAP), European Foundation for Quality Management model (EFQM). The other famous theories include the theory of governance regimes by Amoretti (2007), theories of e-government functions, and theories of interaction of information technology and state organizations. Also, some models related to trust, security, and relationship with citizens are presented in e-government (Michel, 2005; Carter and Belanger, 2005; Deloite, 2000; Ciborra, 2005; Zinnbauer, 2004). Considering the dimensions of this introduction reveals that the most significant issue that is seen in the area of electronic government is the lack of coherent in its literature.

Another way of theorizing about e-government is emphasizing the government's role in creating, maintaining, and monitoring e-government systems. This discussion is related to two new topics: the digital state paradigm (DSP) and the digital new public management (NPM) doctrine. These topics can be completed by a third topic that is known as Digital Communitarianism (DC) approach. Digital Communitarianism approach is an alternative and more or less theoretical solution for the two other approaches (Song, 2007). These three approaches have emphasized the state, markets, and society, respectively as a source of power and legitimacy for the electronic government.

Digital state paradigm (DSP), is strongly in favor of state thinking and development. Departure point for this paradigm is the super active government, quality services, and parallel social development. This approach is highly coherent and totalistic, trying to keep the state in the way of public policy making and governance. This approach is advocating gradual reform, increasing cooperation, and integration of the solutions based on the mass market within the broader framework of public services (Ebrahim and Irani, 2005, Alpar and Olbrich, 2005).

Digital new public management paradigm puts emphasis on applying the principles of New Public Management (NPm) in e-government. In a very limited sense, it can be seen as affected from the government's approach to electronic commerce (Stahl, 2005; Eddowes, 2004; McGregor and Holman 2001). This paradigm shares common features with the government re-engineering and pursues efficiency and reduction of costs through competition, outsourcing, models for Public-Private Partnership and commercialization and tries to respect consumers' choice and use market-based mechanisms in the field of services.

Digital Communitarianism is also a theoretical concept which is based on a strong and participatory form of democracy and is associated with the discussion of noble citizens and community (Barber, 1984).

MATERIALS AND METHODS

Theories are the summary of past experiences around a concept and usually arise from the comparative studies or the review of a specific case. They will help us better understand the nature of the case under study (Pourezzat, 2011). So if the

goal is making changes in the traditional structure of a government to realize e-government, the changes should be inferred from theories or they must be done based on comparative studies or case studies. In this study in order to provide a comprehensive framework for understanding the nature of electronic government and its realization, at first with a comparative and exploratory approach, the theories and models stylistics have been studied and then the so-called framework is designed. The results of the comparative study which are based on the conceptual framework have been categorized and can be seen in Table 1.

Designing a conceptual framework for e-government

As mentioned before, the most salient issue in the literature of electronic government is the lack of coherence and structure in the body of knowledge associated with it! Researchers in this study tried to study literature in connection with e-government and provide a comprehensive framework for the realization of electronic government. Figure 1 implies this framework. For the understanding of e-government it is recommended that a Tri-Category conceptual framework be used (Ghorbani and Sarlak, 2011, Hosseini and Ghorbani, 2010; Sarlak and Ghorbani, 2009; Sarlak et al, 2009; Ahranjani and Kabiri, 2002). Based on the new framework that is designed for organizations in the information society, all concepts, events and phenomena of the "IT-based social structures" can be classified, studied, and analyzed in three category: Context, Creation process, and Content.

Figure 1. The conceptual framework of E-government
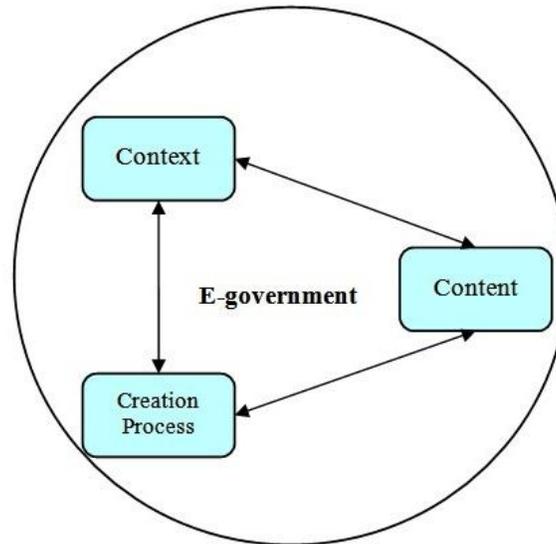
The research literature show that merely imitating how to implement information technology (from other governments) cannot guarantee the success of electronic government (Al-sebie et al, 2007; Wagner et al, 2003; Forlano, 2004). "Context" of e-government is considered as the first category that should be considered for the realization of e-government. Context means the "environment" that electronism should be realized within it! Context can be started from the environment surrounding state organizations and be extended to such factors as organizational culture, electronic knowledge of employees, technology requirements, and administrative maturity. Context is divided into two dimensions: external and internal. External context includes economic, business, political and social factors, and internal context includes resources, capabilities, culture, and policies of the organization (Rahmanseresht, 1999). In the Tri-Category framework, human factor is a part of Context that its capabilities and reactions must be measured using a futuristic approach for the acceptance of e-government before its development. Also, it mustn't be ignored in the time of development. Researchers consider the importance of human resources at par with the other contextual components needed to develop and release e-government! That is the thing which happened in the successful implementations of e-government. Researchers believe that human resources, more than affecting the realization of this emerging phenomenon, have been affected by the leaders of the electronic wave! Paying attention to human resources, especially to prevent resistance to change and establishing culture is important, although over time, the negative effects of lax attention to human factors decreases.

Beyond the models and theories presented in the field of e-government, achieving this in different countries is affected by its Context of implementation. Also, the e-government includes a set of social processes that enable the contextual, social, and organizational role players for restructuring. So, the Context og e-government on one hand affects of Creation process and the Content and on the other hand is affected by them! (Figure 1)

Table 1. Comparative study of components of e-government conceptual framework

Category	Components	Reference
Context	Social and organizational culture	Golipour&Pirannejhad (2009); Markellou et al (2009); Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004); Ho (2002); Cameron & Quinn (1999)
	Management maturity	Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004)
	Economic conditions	Lim (2003); Hughes (2002); Ho (2002); Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004)
	Electronic knowledge	Lim (2003); Hughes (2002); Carter & Belanger (2005); Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004)
	Demographic conditions	Ho (2002); Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004)
	Specialist human resources	Lim (2003); Hughes (2002); Bellamy (2000); Bozeman &Bretschneider (1986); Changalur&Duchessi (1999); Ho (2002)
	Technological infrastructures	Im&Seo (2005); Al-Saber (2007); Ciborra (2005); Davidrajuh (2004); Ho (2002); Ho (2002)
Creation process	Policymaking	Yaghoubi (2007); Garson (2003); Schelin (2003); Gil-García&Helbig (2007); Ebrahim&Irani (2005); Freeman (2007); Song (2004); Anttiroiko (2004); Centeno et al (2005); Gupta & Janna (2003); Peters et al (2004); OMB (2002)
	Development of strategy	Amoretti, F. (2007); Kalathil& Boas (2003); Rodan (1998); Swiss (2003); Kettle (2000); Chadwick (2003); Milner (1999); Accenture (2004); Laudon (2003); Lenihan (2002); OCED (2003); Panagopoulos (2004); Organ (2003); Heeks (1999); Tsagarousianou et al (1998); Ghosh et al (2002); Dahlgren (2005); Coleman et al (2005); Ward et al (2005); Nathan (2003)
	Expected functions	Farhadinejhad (2007); Alvani&Yaghoubi (2004); Golipour&Pirannejhad (2009); Klamo et al (2006); Gil-García&Helbig (2007); Accenture (2007); Backer & Slaton (2000); Keskinen (2003); Anttiroiko (2004); Prins (2002); Kolsaker (2006); Gronlund (2007); European Commisson (1999); Stowers (2004); Mullner& Grimm (2007); Vassilakis et al (2004); Aichoholzer&schumutzer (1998); Melville (2007); OCED (2003); Michel (2005)
	Critical success factors (CSFs) and barriers	Rezaei&Davari (2005); Gil-García&Helbig (2007); Reddick & Frank (2007); Garson (2003); Kramer & King (2003); Dawes &Pardo (2002); Landsbergen, D., Jr, &Wolken, G., Jr. (2001); Pardo& Scholl (2002); Moon (2002); OCED (2003); O'Looney (2002); Bellamy & Taylor (1996); Laudon (1985); Dawes &Pardo (2002); Fountain (2001); Umble et al (2003); Rocheleau (2003); Ambite et al (2002); Cresswell et al (2002); Pardo et al (2001); Pavlichev (2004); Schelin (2004); ASPA & DEPA (2001); Holden et al (2003); Dawes et al (2004)
	Architecting structure	Yaghoubi (2007); Rondeauz (2007); Raymond et al (2006); FSF (2006); Ebrahim&Irani (2005); Scholl (2005); Gronlund (2007); Janssen &Veenstra (2005); Hoffer et al (2002); Schelin (2003); Ho (2002); Hinnant, C. C., & Sawyer, S. B. (2007); Raymond et al (2006); Ross & Vitale (2000); Freeman (2007); West (2004)
	Implementation	Moghadasi (2006); Safari et al (2004); Bateni&Yazdanbakhsh (2007); Reddick (2004); Watson & Mundy (2001); Howard (2001); Layne & Lee (2001); Im&Seo (2005); AL-Sebie et al (2005); Siau& long (2005); Janssen &Veenstra (2005); Ronaghan (2002); Bhatnagar (2002); Wescott (2001); Misra&Dhingra (2002); Caldow (2003)
	Results evaluation	Rezaei&Delvari (2005); Reddick & Frank (2007); Peters et al (2004); Henriksson et al (2007); Brown &Brudeny (2003); O'Looney (2002); Ho (2002); Bradley (2006); OCED (2003); Garson (2004); Mariscal (2003); Warschauer (2003); Davis et al (2002); Hughes et al (2007); Roldan& Leal (2003); Gant (2004); Dawes &Pardo (2002); Lee (2001); Kuan&Chau (2001); Stowers (2004); Swiss (2003); Macintosh et al (2002); Rocheleau (2003); Norris (2003); Orgeron (2007); Andersen &Henriksen (2006); Scavo (2003); Blanger et al (2005)
Content	Efficiency	The majority of research literature
	E-transparency	Saghafi et al (2010); Chadwick & May (2003); La Porte et al (2000); Turban & Chaffey (2002);Banisar (2004); Halchin (2004); Bretthauer(2004); Curtin (2003); Artesi (2004); Roberts (2000); Salem (2003); Jensen (2003)
	Citizen Relationship Management - CiRM	Bretthauer (2004); Schedler (2003); Hood & Peters (2004); Abramson & Morin (2003); Reddick (2005); Fountain (2001); Schelong& Mans (2004); Bannister (2001); Vigoda (2002); Roberts (2004)
	E-trust	Evans & Yen (2005); Reddick (2004); DiPiazza&Eccles (2002); Moloney (2005); Yu et al (2001); Eckman (2001); Mercuri (2003); Prins (2002); Smith (2001); Kofler et al (2003); Slyton& Arthur (2003); Bovens& Stavros (2002); West (2004); Welch &Hinnant (2003)
	E- justice	Saghafi et al (2010);Golipour&Pirannejhad (2009)

The second category of the conceptual framework is the Creation process and considers the development of electronic government. All of the stages include set of the theories and models in the field of e-government development that start from policy making and the establishment of strategies and end in the realization and evaluation. A very important point that should be noted is that the objectives, strategies, functions, and even e-government technology structure depending on the state and its goals, and the Context of e-government implementation may be very different. In fact, the influence of "environment" in the realization of e-government has been considered in the category of "Context" and the influence of "government and its sub-organizations" is considered in the category of "Creation process". In order to understanding "IT-based social structures" more tangible, the concept that in the previous discussions of the Tri-Category conceptual framework was proposed as "structure" by authors, in this study has been considered as "Creation process". The "Structure Architecture" is considered as one of the steps in this process.

The third category of the Tri-Category framework considers the Contents of " IT-based social structures". Content includes components that as the general indicators of the assessment of any type of e-government are considered apart from the type of policy, strategy, and structure; and in fact are the "desirable features of e-government". Factors related to Content include those aspects of e-government that usually are not being considered while the electronic social structures are being designed and appear by the passage of time; For example, the main purpose of designing e-government is to increase efficiency and effectiveness of the of government objectives while e-government can make use of general indicators, such as e-justice, e-trust, e-transparency, electronic psychological security, e-privacy, Citizen Relationship Management (CiRM), e-auditing, e-communications, and power structure change. "Creation process" determines with what indicators the "Content" will be evaluated. Also the degree of contextual maturity of e-government is effective in the determination of which. On the other hand, after e-government is developed in a preliminary way and early indicators such as increased speed and accuracy, and cost reduction were achieved; expectations of e-government will increase, and the realization of the other indicators of "Content" will seek fundamental reforms in the new phase called "Creation process". Also, the passage of time, together with the appearance of new indicators of "Content", will be effective for such Contextual components as culture, electronic knowledge, and maturity of managers (Figure 1).

Context

This category prepares the general conditions of the of the realization of e-government. Evolution towards a higher level of e-government maturity requires compliance with a set of specific prerequisites which extends from technical prerequisites to political, administrative, social, religious and cultural prerequisites as the main factors the e-readiness (Im&Seo, 2005; Al-saber et al, 2007; Ciborra, 2005; Davidrajuh, 2004). For example, abilities and knowledge of citizens to use computers, Internet access, and their motivation to take advantage of information systems and services impact on the overall requirements of e-government. This is also relevant to the commercial enterprises and their ability to take advantage of information and communication technologies, especially in B2B, B2C and B2G dealings and networking. So, taking advantage of e-government requires overall e-maturity of society. Degree of electronic maturity of a society is usually assessed by the e-readiness assessment tools. These tools include the e-readiness assessment, divide analysis and barrier analysis.

A specific project of e-readiness has been developed as a result of Computer Systems Policymaking Project in (CSPP). This project deals with the assessment of the five categories of factors affecting e-readiness which include: infrastructure, access, applications and services, the economy, and the main enablers factors (policy, privacy, security, and ubiquity presence). Another model is presented by the information technology group at the Center for International Development at Harvard University (CID) based on which the e-readiness assessment should be considered in five thematic categories: network access, networked learning, networked society, networked economy, and networked policy. Other models of e-readiness assessment include: Network Readiness Index (NRI), The Information Age Partnership (IAP) and the European Foundation for Quality Management (EFQM).

In addition to e-readiness other underlying issues such as e-inclusion, e- literacy and e-divide that have been considered by experts. Electronic divide analysis refers to the gap between state quo and the desired state of citizens from the view of senior managers of e-government. Various divide that can be studied include: technical divide (lack of technical and communication infrastructure), content divide (accountability of the information on the web to citizens' needs), the digital divide (unequal access to computers and the Internet), specialized divide (the knowledge and skills needed to work on internet and computer), perception and knowledge divide (familiarity with the capabilities of information technology and positive attitude toward it), and internal communication divide (degree of fitness between the pattern of functional structure communication and the communicational requirements for electronic government) (Lim, 2003; Hughes, 2002).

Generally, the Contextual circumstances are different from country to another especially from developed countries to developing countries. Based on the claim by Alsebie et al. (2007), e-government is not a spreadable option for most developing countries. Where e-government pioneers are challenged with such issues as the synchronous applicability of technologies, the identification of systems by each other and their unified presence everywhere, the major challenge in most developing countries is access to information networks and the establishment of websites and basic information systems .

Similarly, the added-value of applications in various pioneer e-government countries differs from the rest of the world; because the citizens in the pioneer countries enjoy more capability and opportunities to take advantage of e-government services and participation in the networked world. However, this is not a completely black or white issue. Developing countries for a long time are following the required tools to establish and develop e-government with their little budget.

In general, we can say that the following Context factors should be considered before the development of e-government projects:

A) Social culture; can reduce or increase the resistance to change and sociability. This factor is considered within four dimensions: attitudes, norms, beliefs, and values. Attitudes imply the amount of information, feelings, and behavioral intentions of people about using e-government initiatives. Norms consider social obligations of citizens in the use of IT initiatives. Beliefs imply how beneficial the acceptance and use of e-government for the citizens will be! Values consider the superiority of the establishment and adoption of e-government to non-establishment and non-acceptance of it. For the promotion of appropriate social culture in the establishment of e- government, should use need-shaping, information distribution, and awareness.

B) The organizational culture of state institutions, which include Compete (Market), Create (Adhocracy), Collaborate (Clan), and Control (Hierarchy) culture (Cameron and Quinn, 1999). Research shows the hierarchical culture further guarantees the adoption of information technology.

C) Management maturity; encompasses positive attitude towards the use of e-government, the knowledge of benefits and understanding importance of using it among the executive and operational managers.

D) Economic conditions; include financial capacity to provide facilities for citizens and government agencies to use e-government.

E) Electronic knowledge; has implications for the skill and ability of citizens and state employees for working with electronic devices.

F) Demographic conditions; encompasses age, incomes status, and the like.

G) Specialist human resources; designing software, hardware and macro processes requires technical expertise; and leadership, re-engineering of organizational processes and implementation of e-government at the national organizational level requires managerial expertise.

H) Technological infrastructures; include the hosting and technological communications ability for state institutions, and accessibility to internet with favorable speed for all of citizens.

It is also possible that political issues such as global economic recession, political boycotts, and the like be effective in urging the government to evoke e-government. Table 1 has taken into account the comparative study of the above components.

Creation process

The literature review of e-government development takes into consideration the seven-step Creation process that each of which these steps include same-purpose sets of theories and models in the development of e-government. These steps include:

1) Policymaking; the developing e-government policy should be done according to the Contextual factors. Policymaking is like making a new track to achieve the selected functional goals and is affected by the nature of government intervention, technical / humanities aspects, and the key tools of e-government development.

Garson (2003) divided e-government policies into four main categories: decentralization/ democratization, normative / dystopian, socio-technical systems, and global integration. It seems that the main tension is between the first and second categories of policies because unlike the first approach that is more optimistic and social, the second theory is conflicting or critical about the electronic government (Schelin, 2003).

2) Development of strategy; indicating the path that the government uses information technology for the advancement of its affairs. To identify the strategies of e-government, three typologies is important: the governance style, government intervention, and the state's open or closed approach to network and information architecture. Based on the typology of the governance style, Amoretti (2007) developed a classification of e-government strategies in four categories: Reform-oriented e-Government, Authoritarian e-Government, Managerial e-Government, and Open e-Government (Sarlak and Ghorbani, 2012).

The aforementioned three-layer approaches to e-government are also similar to Amoretti's plan. The Reform-oriented e-Government is convergent with the Digital State Paradigm (DSP) (like many of the countries of Europe, including Germany and France). Managerial e-government is largely based on the Digital New Public Management (DNPM) doctrine (such as England and New Zealand). Open e-government is also close to the concept of digital Communitarianism (such as some aspects of e-government in Sweden and Denmark). Authoritarian e-government that China is a good example of, is considered an important attachment to the e-government approaches, in a way that it reflects the fact that many governments, especially in developing countries, tend by using the Internet to control access it and censor it.

3) Identifying the expected functions; as the concept of e-government revolves more around the axis of government than technology or electronic media, e-government functions come from the government duties. These functions can be

defined under the dimensions of e-management, e-democracy, e-governance, and e-services (Centeno et al, 2005). The functions have to be quantitative, acceptable, and realistic and be defined based on the following evaluation indicators of the organizations. To prioritize functions, the cost, risk, extent, and process type (public, private, joint) should examined.

4) Identifying Critical Success Factors (CSFs) and barriers to Development; can be classified in the form of contextual, institutional, structural and procedural, data, and technology factors (Gil-García&Helbig, 2007). Institutional factors include laws and regulations, budget, control systems, corporate culture in the institutions. Various institutional actors have different perspectives about the impact of information technologies on their position within the organization (Klein &Hirschheim, 1993). These conflicting views should be understood to overcome resistance and disorder. Also, the quality of the collection, analysis, sharing, and storing data is highly effective in the success of e-government which in itself is affected by processes of adaptation to new technologies in the organization.

5) Architecting structure; architecture explores the description of the systems and their functions, technical components, and their interconnections. This concept describes the processes and structures that organizations intend to create by the help of information technology. Architecting the structure in state institutions must consider services detail , re-engineering of processes, standards of information items, the manner of computerization, the rate of citizens accessibility, and the security equipment needed.

Several methodologies have been proposed for information systems architecture, some of which include: the System Development Life Cycle analysis, Structured Systems Analysis and Design Method (SSADM), 1Object Oriented Analysis and Design Method (OOADM), designing a prototype, and creating shared functions (Sarlak and Ghorbani, 2012). At this stage, several issues need to be answered: a) should e-government services be provided through a single portal or through separate web sites by individual agencies? b) should there be a common database, or a separate database should be designed for each institution? c) the software infrastructure must be unique or different for each organization?

6) Selecting the method of implementation; outlining the functional steps and actions to move toward the desired state is one of the most important stages in the development of e-government. For implementation, there are four ways; either one of the revolution, gradual, simultaneous, or experimental methods have advantages and disadvantages that should be selected given the type and Context of organization. An interesting point is that in the literature of e-government implementation, most studies have addressed the development steps similar to the model of the United Nations: emerging presence, enhanced presence, interaction, transaction, and integrity (Sarlak and Ghorbani, 1391), and have called the "e-government maturity model"! While these models can be considered as types of the gradual method of implementation. Other mentioned methods have attracted less attention in the literature.

7) Results evaluation; in order to clearly control the objectives and functions, identifying strengths and weaknesses of policies, architecture and other stages of e-government creation process, the possibility of feedback should be provided from citizens; in a way that the possibility of the evaluation of e-government systems at three levels: technical, conceptual, efficiency be provided (Byrd et al, 2006). Feedback results will be useful for the improvement of all six stages of the e-government Creation process.

It must be mentioned here that the above seven steps have been achieved through a review of research literature; while for developing e-government more than anything else there is the need for a "unique and independent impeller institution" which is responsible for all e-government affairs. This institution is responsible for scheduling and budgeting all the stages of the creation process. Also, a set of laws, regulations, supervisor on systems development should be developed. Even more important is that before the architecture of e-government structure, the integrated electronic systems have to be designed for user profiles, smart cards, authentication, and inquiry transactions so that there be a standard and widespread systems organizations dealing with these components.

Content

After explaining the Creation process of e-government, its Content should be reviewed. Content factors are general assessment indicators of any type of e-government with any type of policy and structure. In fact content factors can be used to indicating e-government effectiveness.

A) Efficiency; increase in speed and accuracy, and reduction in costs - this component of the e-government Content is the most obvious and primary purpose of developing e-government in most countries. Along with this indicator, other indicators can be designed to measure the effectiveness of e-government.

B) Citizen Relationship Management - CiRM can be said as a strategy to maintain and optimize relationships, long-term emotional loyalty, and encourage citizen participation with government. Information technology has made it possible for this strategy to focus extensively on the citizens. The main goal of citizen relationship management is establishing and improving relations with citizens through observing their views and managing public affairs. An accountable, accessible, and citizen-oriented government creates opportunities for participation and can establish a close relationship with the citizens and thus, empower democracy and justify its role. Clearly, CiRM adds to the e-government a consumer-oriented strategy. The government is thus able to create a citizen-oriented organizations and public services. Here CiRM fills the gap between

people and government. Citizens' data, citizen participation, and organizational change are considered the three pillars of Citizen Relationship Management (Schellong, 2007).

Citizen relationship management can be divided into three types of cooperative CiRM, operative CiRM, and analytical CiRM. Cooperative CiRM relates to government's ability to attract citizen participation in policymaking and planning of services and also using that as a channel for the provision of services (Kracklauer, 2003). Operational CiRM includes a comprehensive view of the operation process of the citizens' data. The main principles of analytical CiRM include personalization of information services for citizens and getting feedback from the citizens and their criticisms about services, policies, and any political issues (Vigoda, 2002).

C) E-transparency - The e-transparency emphasizes making all sorts of comprehensive information clear by all sectors of government; in other words, e-transparency means that "all operational procedures, laws, and government documents, for the full awareness of citizens to be put on the Internet." Sending information about the data, policies, regulations, meetings schedules, reports and contact information, and searchable databases of information for citizens increases employees accountability (Turban & Chaffey, 2002). E-transparency is based on the premise that the free flow of electronic information from the governance systems to the people and vice versa will enhance and deepen political participation. Transparency leads to freedom, awareness, and public participation in government decision-making; so that the activities of all government employees are publicly visible and traceable (Saghafi et al, 2010). Transparency in government can be considered in various aspects: finance, logistics, workflow, records, special sections, and comprehensive transparency. (http://www.egov4dev.org/transpcateg.htm, Retrieved at: October 11, 2011). Citizens can follow up their application's present condition regarding where is it now, who receives and verifies that, the expected timing, and the reasons for its licensing or rejection. The system is one of the advanced tools for the discovery of corruption and bribery in the administration (Saghafi et al, 2010).

D) Electronic trust - Stompka (1999) has provided an analysis of the relationships based on trust. He considers trust as a kind of "confidence in the immediate possible actions of others" and states that six major factors support trust: reputation, performance, appearance, accountability, commitment, and environmental facilities. Also, Stompka has made a distinction between the instrumental trust (which is associated with specific targets) and value trust (which is based on moral values) and security trust (which is based on legal or quasi-legal obligations) . Government often is means for achieving the goals of its citizens and rarely puts forward moral claims but tries to fulfill its legal obligations; Therefore, it mainly considers instrumental and security trust. Positive and negative factors affecting the trust of e-government are: accessibility, secrecy, deception, the auditing, and Authentication (Rowe, 2007). However, the more the reliability of the operating system software, the less likely will be the chance of manipulation in the network and consequently confidence in e-government systems will increase.

E) E- justice - citizens are confronted with automated systems without trends (rather than individuals) in the e-government. By increasing transparency and reducing the possible discrimination between individuals and groups or different ethnic groups, distributive and interactional justice increases (Evans and yen, 2005; Reddick, 2004).

In addition to the above criteria, it appears that factors such as usability, support and ability to upgrade systems, the ability to meet the needs comprehensively, environmental issues, and reduction of brokerage, and corruption are among other Content factors that in e-government literature have attracted less attention.

DISCUSSION AND CONCLUSION

The number of variables, concepts and, issues to be discussed in the realm of e-government are many and varied, so that considerable literary confusion in the realm of topic is making the navigation difficult. Researchers believe that the Tri-Category conceptual framework is a coherent framework that support a better understanding and evaluation of a more effective strategic planning for the development of e-government. In fact, the conceptual framework opens a way so that the future researchers could study, survey, and understand each component part to have a more comprehensive understanding of e-government.

Contextual differences mentioned in this article have just been explained with the goal of enlightenment for e-government development so as to make transparent a small dark space for academics and politicians. It is evident that each of the mentioned Contextual components in country require special study and the nature and its effects on the development of an electronic state have to be investigated.

The creation process of e-government should be localized by paying a direct attention to the affecting values and ideals and in harmony with each society's capacity. For example, strategies such as tele-working, requires a deep study of human and cultural values and merely its added value cannot justify its usefulness.

Fields of Humanities are strongly influenced by human culture and beliefs and the e-government is no exception. An issue such as justice in e-government are important and as a social factor is particularly noteworthy. In some areas such as citizen relationship management, it is noteworthy that some governments are pursuing a purpose different from the others. E-government relying on modern technology, overshadows cultural capacities. By technology being central in the modern world, culture is marginalized (Gholipour and Pirannezhad, 2009).

REFERENCES

Abramson, M. A., & Morin, T. L. (2003), "E-government 2003. Boulder: Rowman& Littlefield.

Accenture. (2004), "E-government leadership: High performance, maximum value, retrieved from www.accenture.com/xdoc/en/industries/government/gove-egov-value.pdf/.

Accnture (2007), "The Major Trends that will Shape IT. Retrieved November 20, 2007,, from http://www.

Ahranjani, H.M., &Amiri, M., (2002), "The Three Dimensional Model of Analysis of Fundamental Infrastructures and Philosophical Basic of Organization Theories; Management Knowledge, Vol. 15, No. 56, pp 3-21. (In Persian)

Aichoholzer, G. &schumutzer, R., (1998), "Bringing public administration closer to the citizens, paper presented to the conference of the information society forum of the European commotion, 12-13 Novemberm Vienna.

Alpar, P., &Olbrich, S. (2005), "Legal Requirements and Modelling of Process in e-Government. The Electronic Journal of e-Government, 3(3), 107-116. Retrieved November 20,2007, from www. Ejeg.com.

Al-Saber, S., Hossain, K., &Srivastava, A. (2007), "Technology, society and e-government: in search of an eclectric framework. Electronic Government, an International Journal. 4(2), 156-178.

AL-Sebie, M., Irani, Z., &Eldabi, T. (2005), " Issues relating to the transaction stage of the e-government system. Electronic Government, 2940, 446-459.

Alvani, S.M., &Yaghoubi, N.M. (2004), " Public Management and Electronic Government; Management Culture Quarterely, Vol 1., No. 3., pp 5-17. (In Persian)

Ambite, J. L., Arens, Y., Bourne, W., Feiner, S., Gravano, L., Hatzivassiloglu, V., et al. (2002), " Data integration and access. In W. J. McIver & A. K. Elmagarmid (Eds.), Advances in digital government. Technology, human factors, and policy. Norwell, MA: Kluwer Academic Publishers.

Amoretti, F. (2007), " E-Government Regims. In A.-V. Anttiroiko& M. Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 2, pp. 580-587), " Hershey, PA: Idea Group Refrence.

Andersen, K. V., &Henriksen, H. Z. (2006), " E-government maturity models: Extention of the layne and Lee model. Government Information Quarterly, 23(2), 236-248.

Anttiroiko, A.-V. (2004), " Introduction to Democratic e-Governance. In M. Malkia& A.-V. Anttiroiko& R. Savolainen (Eds.), E transformation n Governance (pp. 22-49), " Hershey, PA: Idea Group Publishing.

Artesi. (2004), " Etude des sites Web des collectives Francaises. Nice, Rapport D'Etude.

ASPA & DEPA (2001), " Benchmarking E-government: a global perspective, 22. http://www.unpoan.org/

Backer, T., & Slaton, C. D. (2000), " The Future of Teledemocracy. Westport, Connecticut: Praeger.

Banisar, D. (2004), " The fridominfo.org global survey: Freedom of information and access to government record laws around the worls. Retrieved October 20, 2004, from http://www. Freedominfo.org/survey.htm

Bannister, F. (2001), " Dismantling the silos: Extracting new value from IT investments in public administration. Info Systems Journal, 11, 65-84.

Barber, B. (1984), " Strong Democracy. Particpatory Politics for a New Age. Berkeley: University of California Press.

Bateni, E., &Yazdanbakhsh, M. (2007), " A View to Formation Process of E-government and its upcoming challenges; FeghvaHoquq, Vol. 3., No., 9., pp 59-94. (In Persian)

Bellamy, C. (2000), " The politics of public information systems. In G. D. Garson (Ed.), Handbook of public information systems, New York: Marcel Dekker.

Bellamy, C., & Taylor, J. A. (1996), " New information and communication technologies and institutional change. The case of UK criminal justice system. The International Journal of Public Sector, 9(4), 51-69.

Bhatnagar, S. C., (2002), " E-government lessons from Implementation in developing countries, Regional development dialogues Vol. 23, No. 2.

Blanger, F., Carter, L. D., &Schaupp, L. C. (2005), " U-government: a framework for the evolution of e-government. Electronic Government. An International Journal, 2(4), 426-445.

Bovens, M., & Stavros, Z. (2002), " From street-level to system-level bureaucracies: How information and communication technology is transforming administrative discretion and constitutional control. Pubic Administration Review, 62(2), 174-184.

Bozeman, B., &Bretschneider, S. (1986), " Public management information systems: Theory and prescriptions. Public Administration Review, 46(Special Issue), 475-487.

Bradley, G. (2006), " Social and Community Informatics: Humans on the Net. London: Routledge. Bridges.org (2007), " E-Readiness Assessment. The Web site of bridges.org. Retrieved November20, 2007, from http ://www .bridges.org/ e_readiness_assessment.

Bretthauer, K. M. (2004), " Service management. Decision Science, 35, 325-332.

Brown, M. M., &Brudeny, J. L. (2003), " Learning organizations in the public sector? A study of police agencies employing information and technology to advace knowledge. Public Administration Review, 63(1), 30-43.

Byrd, t. Anthony, Thrasher. Erelyn, Nancy. Teresa, Davidson. W (2006), " "A Process Oriented Perspective of IS Success Examing the Impact of IS on Operational Cost", Omega 34. P448-460.

Caldow, J., (2003), " E-democracy: Putting down global roots, Institute for electronic government, http://ww.ieg.com.

Cameron, Kim S. and Quinn, Robert E. (1999), Diagnosing and Changing Organizational Culture. New York: Addison-Wesley.

Carter, L., & Belanger, F. (2005), " The utilization of e-government services: citizen trust, innovation and acceptance factors. Information Systems Journal, 15(1), 5-25.

Centeno c., van Bavel R., &Bargelman J. C. (2005), " A prospective view of e- Government in the European Union. The Electronic Journal of e-Government, 3(2), 59-66. Retrieved November 20, 2007, from www.ejeg.com.

Chadwick, A. (2003), " Bringing e-democracy back in. Why it matters for future research on e-governance. Social Science Computer Review, 21(4), 443-455.

Chadwick, A., & May, C. (2003), " Interaction between states and citizens in the age of the Internet: "E-government" in United States, Britain, and the European Union. Governance, 16(2), 271-300.

Chaffery, L. (1998), " Information Sharing between & within governments. London: Commonweath Secretariat.

Changalur-Smith, I., &Duchessi, P. (1999), " The initiation and adoption of client-server technology in organizations. Information & Management, 35, 77-88.

Ciborra, C. (2005), " Interpreting e-government and development: Efficiency, transparency or governance at a distance? Information Technology & People, 18(3), 260-279.

Coleman, S., Macintosh, A., &Lalljee, M. (2005), " E-democracy survey 2005. Local authorities experiences of democracy on and offline. "What Work". Key lessons from recent e-Democracy literature. Retrieved March, 2005, from www.e-democracy.gov.uk

Cresswell, A. M., Pardo, T. A., Thompson, F., Canestraro, D. S., Cook, M., Black, L,m et al. (2002), " Modeling intergovernmental collaboration: A system dynamics approach, Proceeding of the 35th Hawaiian International Conference on system Sciences. Los Alamitos, Ca: IEEE Computer Society Press.

Curtin, D. (2003), " Digital government in Eauropean Union: Freedom of in information trumped by "internal security". In national security and open government: Stricking the right bakance (pp. 101-122), " Syracuse, NY: Campbell Public Affairs Institute.

Dahlgren, P. (2005), " Internet, public spheres and political communication: Dispersion and deliberation. Political Communication.

Davidrajuh, R. (2004), " Planning e-government start-up: a case study on e-Sri Lanka. Electronic Government, an International Journal, 1(1) 92- 106.

Davis, S., Elin, L., &Reeher, G. (2002), " Click on democracy: The Internet's power to chang political apathy into civic action. Cambridge, MA: Westview Press.

Dawes, S. S, &Pardo, T. A. (2002), " Building collaborative digital government systems. Systematic constraints and effective practices. In W. J. Mclver& A. K. Elmagarmid (Eds.) Advances in digital government. Technology, human factors, and policy (pp. 259-273), " Norwell, MA: Kluwer Academic Publishers.

Dawes, S. S., Gregg, V., &Agouris, P. (2004), " Digital government research: Investigations at the crossroads of social and information science. Social Science Computer Review, 22(1), 5-10.

Deloite research (2000), " At the dawn of E-government: the citizen as customer. Avaiable at: http://www.deloite.com

DiPiazza, S. and Eccles, R. (2002), " Building Public Trust, the Future of Corporate Reporting. John Wiley & Sons, Inc, NewYork.

Ebrahim, Z., &Irani, Z. (2005), " E-government adoptin: architecture and barriers. Business process Management Journal, 11(5), 589-611.

Eckman, P. (2001), " Telling list: Clues to deceit in the marketplace, politics, and marriage. New York: Norton.

Eddowes, L. A. (2004), " The Application of Methodogies in e-Government Journal e-Government, 2(2), 115-126.

European Commisson (1999), " Green Paper on Public Sector Information in the Information Society: COM(98)585final, adopted on 20 January 1999. Brussels: European Commission.

Evans, D. & Yen, D. C., (2005), " E-government: An analysis for implemention: Framework for understadig cultural and social impact". Government Information Quarterly.

Farhadinejhad, M., (2007), " E-government and Good Governance; Tadbir, Vol. 17., No. 169, pp 22-27. (In Persian)

Forlano, L. (2004), " The Emergence of Digital Government: International Perspectives. In A.Pavlichev& G. D. Garson (Eds.), Digital Government: principles and Best Practices, (pp. 34-50), "Hershey, PA: Idea Group publishing.

Fountain, J. E. (2001), " Building the Virtual State: Information Technology and Institutional Change. Washington D.C.: Brookings Institution Press.

Free Software Foundation (FSF), " (2006), " The free software definition. Retrieved from www.fsf.org/licensing/essays/free-sw.html/

Freeman, R. J. (2007), " IT Management Issues in Digital Government. In A.-V. Anttiroiko&M.Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 3, pp. 1130-1134), " Hershey, PA: Idea Group Reference.

Gant, J. P. (2004), " Digital government and geographic information systems. In A. Pavlichev& G. D. Garson (Eds.), Digital government: Principles and best practices (pp. 248-262), " Hershey, PA: Idea Group Publishing.

Garson, G. D. (2003), " Public information technology: Policy and management issues. Hershey, PA: Idea Group Publishing.

Garson, G. D. (2004), " The promise of digital government. In A. Pavlichev& G. D. Garson (Eds.), Digital government: Principles and best practices (pp.2-15), " Hershey, PA: Idea Group Publishing.

Gholipour, A., &Pirannejhad, A., (2009), " Promoting Public Trust and E-Demokraci: Explaining E-governmet Role; Human Sciences MODARES, Vol. 12., No. 1., pp219-256. (In Persian)

Ghorbani, A., &Sarlak, M.A., (2011), " "Barriers of E-commerce Acceptance in Export", Academic Lambert Publishing, Germany.

Ghosh, R. A., Robles, G., &Glott, R. (2002), " Free/Libre and open source software: Survey and study. Open source software in the public sector: Policy within the EU. Maastricht: International Institue of Infonomics.

Gil-García, J.R., Helbig, N., (2007), " Exploring E-Government Benefits and Success Factors, Chapter of Book: Encyclopedia of Digital Government (Vol. 3), Edited by: Anttiroiko, A.V., Malkia, M., IGI Global Publication, pp 803-811.

Gronlund, A. (2007), " Electronic Government. In A.V. Anttiroiko&M.Malkia (Eds.), Encyclopedaof Digital Government, (vol.2,pp. 634-642), " Hershey, PA: Idea Group Reference.

Gupta, M. P., & Janna, d. (2003), " E-government evaluation: a framework and case study. Government Information Quarterly, Vol. 20, No. 4, 365-387.

Halchin, L. E., (2004), " The Coalition Provisional Authority (CPA): Origin, Characteristics, and Institutional Authorities. CRS Report for Congress, April 29, USA.

Heeks, R. (1999), " Reinventing government in the information Afe. London: Routledge.

Henriksson, A., Yi, Y., Frost, B., & Middleton, M. (2007), " Evaluation instrument for e-government websites. Electronic Government, an International Journal, 4920, 204-226.

Hinnant, C. C., & Sawyer, S. B. (2007), " Technological Innovation in Public Organization through Digital Government. In A.-V. Anttiroiko&M.Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 3, pp. 1511-1518), " Hershey, PA: Idea Group Reference.

Ho, A. T. K. (2002), " Reinventing local government and the e-government initiative. Public Administration Review, 62(4), 325-344.

Hoffer, J., George, J. F., &Valacich, J. S. (2002), " Modern Systems Analysis and Design. Third Edition. Upper Saddle River, NJ: Pearson Education/Prentic-Hall.

Holden, S. H., Norris, D. F., & Fletcher, P. D. (2003), " Electronic government at the local level: Progress to date and future issues. Public Performance and Management Review, 26(4), 325-344.

Homburg, C., & Bruhn, M. (2005), " Handbuch: Kundenbindungs management. Wiesbaden, Germany: Gabler.

Hood, C. & Peters, G. (2004), " The middle aging of new public management: Into the age of paradox? Journal of Public Administration Research and Theory, 14(3), 267-282.

Howard, M. (2001), " E-Government across the globe: how will e change government? Government Finance Review, 17(4), 6-9.

Hughes, M., Scott, M., & Golden, W. (2007), " Business Process Redesign in Implementing E-Government in Ireland. In A.-V.Anttiroiko&M.Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 1, pp. 151-157), " Hershey, PA: Idea Group Reference.

Hughes, O.E. (2002), " Public management and administration, Palgrave Mcmillan, third edition.

Im, J.H., 7 Seo, J.-W. (2005), " E-government in South Korea: planning and implementation. Electronic Government, an International Journal, 2(2), 188-204.

Janssen, M., & van Veenstra, A. F. (2005), " Stages of Growth in e-Government: An Architectural Approach. The Electronic Journal of e- Government, 3(4), 193-200. Retrieved November 20, 2007, from www.ejeg.com.

Jensen, M. (2003), " Another loss in the privatization war: PubScience. The Lancet, 361(9354), 274.

Kalathil, S., & Boas, T. (2003), " Open network, closed regimes: The impact of the Internet on authoritarian rule. Washington, DC: Carnegie Endowment for International Peace.

Keskinen, A. (2003), " MIDEM. Models for Interactive Decision Making. Electronic Journal of E-Government. 6(1), " Retrieved May 20, 2007, from http://www.ejeg.com/volume-2/volume2-issue-1/v2-i-art6.htm.

Kettle, D. F. (2000), " The global public management revolution. A report on the transformation of governance. Washington, DC: Brooking Institution.

Klamo, L., Huang, W. W., Wang. K. L., & Le, T. (2006), " Successfully implementing e-government: fundamental issues and a case study in the USA. Electronic Government, an International Journal, 3(2), 158-173.

Klein, H. K., &Hirschheim, R. (1993), " Issue and approaches to appraising technological change in the office: A consequentiality perspective. Technology and people, 2, 15-42.

Kofler, R., Krimmer, R., &Prosser,A. (2003, January), " Electronic voting: Algorithmic and implementation issues. Proceedings of the 36th Hawaii International Conference on System Sciences, Honolulu, HI (pp.142a), "

Kolsaker, A. (2006), " Reconceptualising e-government as a tool of governance: the UK case. Electronic Government, an Internatinal Journal, 3(4), 347-355.

Koontz, H., (1961), " The Management Theory Jungle. The Journal of the Academy of Management, Vol. 4, No. 3, pp 174-188.

Kracklauer, A. H. (2003), " Collaborative customer relationship management: Taking CRM to the next level. Berlin, New York: Springer.

Kramer, K.L., & King, J.L. (2003), " Information Technology and administrative reform: Will the time after e-government be different? Unpublished manuscript, Irvine, CA.

Kuan, K. K. Y., &Chau, P. Y. K. (2001), " A perception-based model for EDI adoption in small business using a technology-organization-envirinment framework. Information & Management, 38, 507-521.

La Porte, T., et al. (2000), " Democracy and bureaucracy in the age of the web: Emprical findings and theoretical speculations [draft paper].

Landsbergen, D., Jr, &Wolken, G., Jr. (2001), " Realizing the promise: Government information systems and the fourth generation of information technology. Public Administration Review, 61(2), 206-220.

Laudon, K. C., &Laudon J.P. (2003), " Management information systems. Upper Saddle River, NJ: Prentice Hall.

Laudon, K. C., (1985), " Environmental and institutional models of system development: A national criminal history system. Communications of the ACM, 28(7), 728-740.

Layne, K., & Lee, J. (2001), " Developing fully functional e-government: a four stage model. Government Information Quarterly, 18(2), 122-136.

Lee, G., & Perry, J. L. (2002), " Are computers boosting productivity? A test of the paradox in state governments. Journal of Public Administration Research and Theory, 12(1), 77-103.

Lee, J. N. (2001), " The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. Information & Management, 38, 323-335.

Lenihan, D. G. (2002), " Realigning governance: From e-government to e-democracy. Ottawa: Center for Collaborative Government.

Lim F. (2003), " Implementing E-government strategy in scotland: current situation and emerging issues, Journal of electronic commerce in organization Vol.1, No. 2.

Macintosh, A., Malina, A., & Farrell, S. (2002), " Digital democracy through electronic petitioning. In W. J. Mclver& A. K. Elmagarmid (Eds.), Advances in digital government. Technology, human factors, and policy (pp. 137-148), " Norwell, MA: Kluwer Academic Publishers.

Mariscal, j. (2003), " Digital divide in Mexico. Mexico City: Centro de Investigation y DocenciaEconomicas.

Markellou, P., Panayiotaki, A., &Tsakaidis, A. (2007), " Level-Based Development of E-Government Services. In A.-V. Anttiroiko& M. Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 3, pp. 1167-1173), " Hershey, PA: Idea Group Reference.

McGregor, M. A., & Holman, J. (2001), " Communication technology at the Federal Communications Commision: E-government in the public interes? Government Information Quarterly, 21(3), 268-283.

Melville, R. (2007), " E-Social Policy and E-Social Policy and E-Social Service Delivery. IN a.-v.Anttiroiko&M.Malkia (EDS.), Encyclopedia of Digital Government, (Vol. 2, pp. 726-733), " Hershey, PA: Idea Group Reference.

Mercuri, R. (2003), " On auditing audit trails. Communications of the ACM, 46(1), 17-20.

Michel, H. (2005), " E-Administration, e-Governance and learning city: A typology of Citizenship management using ICTs. The Electronic Journal of e-Government, 3(4), 213-218. Retrieved November 20, 207, from www.ejeg.com.

Milner, E. (1999), " Electronic Government: More than just a "good thing"? A question of "ACCESS". In H. N. Hague & B. D> Loader (Eds.), Digital democracy (pp. 63-72), " London and New York: Routledge.

Misra D.C., Dhingra A. (2002), " E-government maturity model, National informatics center, Department of information technology, New Dehli.

Moghadasi, A., (2006), " E-government Implementation Models, Tadbir, Vol. 16, No. 160, pp33-37. (In Persian)

Moloney, K. (2005), " Trust and public relation: Center and edge. Public Relations Review.

Moon, M.J. (2002), " The evaluation of e-government among municipalities: Rhetoric or reality? Public Administration Review, 64(4), 424-433.

Mullner, T., & Grimm, D. (2007), " Application for Comprehensive E-Government. In A.-V. Anttiroiko& M. Malkia (Eds.), Encyclopedia of Digital Government, (Vol. 1, pp. 56-62), " Hershey, PA: Idea Group Reference.

Nathan, A. (2003), " Authoritarian resilience. Journal of Democracy, 14(1), 6-17.

Norris, D. F. (2003), " Leading-Edge Information Technoligies and American Local Government. In: G. D Garson (Ed.), Public Information Technology; Policy and Management Issues (pp. 139-169), " Hershey: Idea Group Publishing.

OECD. (2003), " The e-government imperative. Paris, France: Organization for Economic Co-operation and Development.

OECD. (2003, September), " Checklist for e-government leaders. Retrieved from www.oecd.org/publications/Pol-brief/

O'Looney, J.A. (2002), " Wiring government. Challenges and possibilities for public managers. Westport, CT: Quorum Books.

OMB, (2002), " E-government strategy implementing the president's management for E-government, 27, February, Washington. D. C.

Organ, J. (2003), " The coordination of e-government in historical context. Public Policy and Administration, 18(2), 21-36.

Orgeron, C.P. (2007), " Theory-Based Models of E-Government Adoption. In A.-V. Anttiroiko& M. Malkia (Eds.), Encyclopedia of Digital Government, (Vol, 3, pp. 1536-1540), " Hershey, PA: Idea Group Reference.

Panagopoulos, C. (2004), " Consequences of the Cyber state: The Political Implications of Digital Government in International Context. In A.Pavlichev 7 G.D. Garson (Eds.), Digital Government: Princples and Best Practices, (pp. 116-132), "Hershey, PA: Idea Group Publishing.

Pardo, T. A. Scholl, H. J. (2002, January 10), " Walking atop the cliff: Avoiding failure and reducing risk in large scale e-government projects. Paper presented at the 35th Annual Hawaii International Conference on System Sciences, Hawaii.

Pardo, T. A., Cresswell, A. M., Zhang, J., & Thompson, F. (2001), " Internationalizational knowledge sharing in public sector innovations. Best Paper proceedings of the academy of Management Conference. Briarcliff Manor, NY: Academy of Management/ Pace University.

Pavlichev, A. (2004), " The e-government challenge for public administration education. In A. Pavlichev& G.D. Garson (Eds.), Digital government: Principles and best practices (pp. 276-290), " Hershey, PA: Idea Group Publishing.

Peters, R. M., Janssen, M., & van Engers, T.M. (2004), " Measuring e-Government Impact: Existing Practices and shortcomings. ACM International Conference Proceeding Series, vol. 60, pp. 480-489. Proceedings of the 6th international conference on Electronic commerce. Retrieved April 23,2007, from http://delivery.acm.org/10.1145/1060000/1052281/p480-peters.pdf?key1=1052281&key2=18214477117coll=&di=ACM&CFID=15151515&CFTOKEN=6184618

Pourezzat, A.A. (2011), " Merging Ministries: Trial and Error, or Planned; Khabaronline, Retrieved at: August 17, 2012; http://www.khabaronline.ir/news-150447.aspx (In Persian)

Prins, J. (2002), " E-government and its implications for administrative law: Regulatory initiatives in France, Germany, Norway, and United States. London, Uk: Cambridge.

Rahmanseresht, H., (1999), " Theories of Organization and Management from Modernism to Post-Modernism; 1st Ed., Tehran, Cultural Institute of Technique and Art, pp 1210122. (In Persian)

Raymond, L., Uwizeyemungu, S., & Bergeron, F. (2006), " Motivations to implement ERP in e-government: an analysis from success stories. Electronic Government, an International Journal, 3(3), 225-240.

Reddick, C. G. (2004), " A two-stage model for e-government growth: Theories and empirical evidence for U.S. cities. Government Information Quarterly, 21(1), 51-64.

Reddick, C. G. (2005), " Citizen interaction with e-government: From the streets to the servers? Government Information Quarterly, 22, 38-47.

Reddick, C. G., & Frank, H. A. (2007), " E-government and its influence on managerial effectiveness: a survey of Florida and Texas City managers. Financial Accountability 7 Management, 23(1), 1-26. Retrieved April 23, 2007, from http:// www.blackwe-synergy.com/doi/pdf/10.1111/j.1468-0408.2007.00417.x.

Rezaei, H.R., &Davari, A., (2005), " E-Government, Tadbir, Vol. 15, No. 146, pp 17-22. (In Persian)

Roberts, A. (2000), " Less government, more secrecy: Reinvention and the weakening of freedom of information law. Public Administration Review, 60(4), 308-320.

Roberts, N. (2004), " Public deliberation in an age of direct citizen participation. American Review of Public Administration, 34(4), 315-353.

Rocheleau, B. (2003), " Politics, accountability, and government information systems. In G. D. Garson (Ed.), Public information technology: Policy and management issues (PP. 20-52), " Hershey, PA: Idea Group Publishing.

Rodan, G. (1998), " The Internet and political control in Singapore. Political Science Quarterly, 113(1), 63-89.

Roldan, J. L., & Leal, A. (2003), " A validation test of an adoption of the Delone and McLean's model in the Spanish EIS field. In J. J. Cano (Ed.), Critical reflections on information systems: A systemic approach (pp. 66-84), " Hershey, PA: Idea Group Publishing.

Ronaghan, S. A. (2002), " Benchmarking E-government: a global perspective. Assessing the progress of the UN member states. United nations division for public economics and public administration, American society for public administration, New York, Avaiaible at: http://www.unpan.org/e-government/benchmarking20%e-gov20%2001.pdf

Ronaghan, S. A. (2002), " Benchmarking E-government: a global perspective. Assessing the progress of the UN member states. United nations division for public economics and public administration, American society for public administration, New York, Avaiaible at: http://www.unpan.org/e-government/benchmarking20%e-gov20%2001.pdf

Rondeauz, G. (2007), " Successful Implementation of an E-Government Project. In A.-V. Anttiroiko& M. Malkia(Eds.), Encyclopedia of Digital Government, (Vol. 3, pp. 1485-1491), " Hershey, PA: Idea Group Reference.

Ross, J. W., & Vitale, M. R. (2000), " The ERP Revolution: Surviving vs. Thriving. Information Systems Frontiers, 2(2), 233-241.

Rowe, N.C., (2007), " Trust in Digital Government, Chapter of Book: Encyclopedia of Digital Government (Vol. 3), Edited by: Anttiroiko, A.V., Malkia, M., IGI Global Publication, pp 1572-1576.

Safari, H., Khoshsima, GH., Mohammadian, A., Moslehi, A., Haki, K., Farazmand, E., &Tamizi, A., (2004), " The Model of E-government Mature in Commercial Ministries of Iran, Management Knowledge, Vol. 17., No. 63., pp 53-78. (In Persian)

Saghafi, F., Aliahmadi, A., Rahimian, H., &Dolatabadi, H.K., (2010), " Designation of Conceptual Model of Citizen Participation and Justice-Oriented in the context of E-government Based on Value Thinking Methodology; Tomorrow Management, Vol. 9., No. 23., pp 3-16. (In Persian)

Salem, J. (2003), " Public and private sector interest in e-governance: A look at the DOE's pubscience. Government Information Quarterly, 20(1), 13-27.

Sarlak M.A., Abolhasani, H., A., Forozandeh. D., L., &Ghorbani, A. (2009), " Investigating on E-commerce Acceptance Barriers in Dried Fruits Producing- Exporting Companies of Iran, *World Applied Sciences Journal,* 6 (6): 818-824.

Sarlak, M.A, &Ghorbani, A., (2012), " E-Government: Concepts, Theories, Applications; Publication of Knowledge Reference, Tehran, pp 51-118. (In Persian)

Sarlak, M.A., A. Ghorbani, (2009), " "Success Factors of Internet-Banking in Iran", IADIS International Conference WWW/Internet 2009, Rome, Italy, 19 - 22 November 2009.

Sarlak, M.A., A. Ghorbani, M. Babaeian, (2010), " "A Modified TAM for Verification of E-Commerce Adoption Factors in SMEs" IADIS International Conference on Internet Technologies & Society, Perth, Australia 29, 30 November and 1 December 2010.

Scavo, C. (2003), " World Wide Web Site Design and Use in Public Management. In G. D. Garson (Ed.) Public Information Technology: Policy and Management Issues (pp. 299-330), " Hershey, PA:Idea Group Publishing.

Schedler, K. (2003), " Local and regional public management in Switzerland. Public Administration, 81(2), 325-344.

Schelin, S. H. (2003), " E-government: An overview. In G. D. Garson (Ed.), Public information technology: Policy and management issues (pp. 120-137), " Hershey, PA: Idea Group Publishing.

Schelin, S. H. (2004), " Training for digital government. In A. Pavlichev @G. D. Garson (Eds.), Digital government: Principles and best practices. Hershey, PA: Idea Group Publishing.

Schellong, A., & Mans, D. (2004, May 24026), " Citizens preferences towards one-stop government. Paper presented at the DG.O 2004—The National Conference on Digital Government Research, Seattle.

Schellong, A., (2007), " Citizen Relationship Management, Chapter of Book: Encyclopedia of Digital Government (Vol. 1), Edited by: Anttiroiko, A.V., Malkia, M., IGI Global Publication, pp 174-182.

Scholl, H. J. (2005), " E-government- induced business process change (BPC): An empirical study of current practices. International Journal of Electronic Government Research, 1(2), 25-47.

Siau, K., & long, Y. (2005), " Synthesizing e-government stage models- a meta- synthesis based on metha ethnography approach. Industrial Management & Data Systems, 10594), 443-458.

Slyton, R. & Arthur, J. (2003), " Public administration for democratic Society: Instilling public trust through greater collaboration with citizens. In M. Makia, R. Savolaines, & A. V. Anttrroiko (Eds.), E-transformation in governance: New directions for government (pp. 110-130), " Hershey, PA: Idea Group Publishing.

Smith. R. (2001), " Authentication: From passwords to public keys. Reading, MA: Addison-Wesley Professional.

Song, H. J. (2004), " Building E-Government through Reform. Governance Research Series 2. Seol: EwhaWomans University Press.

Song, S.-H. (2007), " Digital Government in the USA. In A.-V.Anttiroiko& M. Malakia (Eds.), Encyclopedia of Digital Government, (Vol. 1, pp. 349-354), " Hershey, PA: Idea Group Reference.

Stahl, B. (2005), " The Ethical Problem of Framinge-Government in Terms of e-COMMERCE. The Electronic Journal of e-Government, 3(2), 77-86. Retrieved November 20, 2007, from www.ejeg.com

Stompka, P. (1999), " Trust. Cambridge, UK: Cambridge University Press.

Stowers, G. N.L. (2004), " Issues in E-Commerce and E-Government Service Delivery. In A. Pavlichev& G. management in government. In G. D. Garson (Ed.), Public information technology: Policy and management issues (pp.170-189), " Hershey, PA: Idea Group Publishing.

Swiss, J. E. (2003), " Information technology as a facilitator of results-based, an International Journal, 1(1), 49-60.

Tsagarousianou, R., Tambini, D., & Bryan, C. (1998), " Cyberdemocracy. Technology, cities and civic network. London; New York: Routledge.

Turban, E. Chaffey, D., (2002), " Electronic commerce, a managerial perspective. 2nd ed , Prentice Hall.

Umble, E. J., Haft, R. R., &Umble, M. M., (2003), " Enterprise resource planning: Implementation procedures and critical success factors. European Journal of Operational Research, 146, 241-257.

Vassilakis, C., Lepouras, G., Rouvas, S., &Ggeorgadis, P. (2004), " Intergrating e-government public transactional services into public authority workflows. Electronic GovernmentD. Garson (Eds.), Digital Government: Principles and Best Practices, (pp, 169-185), " Hershey, PA: Idea Group Publishing.

Vigoda, E. (2002), " From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. Public Administration Review, 62(5), 527-540.

Wagner, C., Chung, K., lee, F., & IP, R. (2003), " Enhancing E-government in Developing Countries: Managing Knowledge through Virtual Communities, The Electronic Journal on Information Systems in Developing Countries, 14(4), 1-20. Retrieved November 20, 2007, from http://www.ejisde.org.

Ward, S., Gibson, R., &Lusolim W. (2005), " The promise and perils of 'virtual representation.' The public view. An NOP option survey of online political transaction in the UK. Retrieved February, 2005, from www.esri.salford.ac.uk/ESRCesearchproject/papers/Virtual-representation-report -full-2005.pdf/.

Warschauer, M. (2003), " Technology and social inclusion: Rethinking the digital divide. Cambridge, MA: MIT Press.

Watson, R.T., & Mundy, B. (2001), " A strategic perspective of electronic democracy. Communications of the ACM, 44(1), 27-30.

Welch, E. &Hinnant, C. (2003, May), " Internet use, transparency, and interactivity effects on trust in government. Procedings of the 36th Hawaii International Conference on System Sciences, Honolulu, HI (pp. 144), "

Wescott, C. G., (2001), " E-government in the Asia-pacific region, Asia development bank (ADB), Manila, Philippines.

West, D. M. (2004), " E-government and the transformation of service delivery and citizen attitudes, Public administration review, Vol. 62, No. 4. Pp 16-18

Yaghoubi, N.M., (2007), " E-government: A Transition Method, Quarterely of Management Studies, Vol. 50. Pp 97-117. (In Persian)

Yu, H., Kundur, D., & Lin, C. Y. (2001), " Spies, thieves, and lies: The battle for multimedia in the digital era. IEEE Multimedia, 8(3), 8-12.

Zinnbauer, D. (2004), " Institutional transparency, global governance, and ICT: Why and where to? New York: Social Science Research Council. Retrieved July 3, 2004, from http://www.ssrc.org/programs/itic/publications/knowdege-report/memos/Zinnbauermemo.pdf

Zinnbauer, D., (2007), " Transparency and Information Disclosure in E-Government, Chapter of Book: Encyclopedia of Digital Government (Vol. 3), Edited by: Anttiroiko, A.V., Malkia, M., IGI Global Publication, pp 1566-1571.