Motivations for Implementing E-Government: An Investigation of the Global Phenomenon

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ABSTRACT

Internet communication technology has significantly affected the way information is presented, exchanged and processed. Websites, in particular are being touted as the catalyst by which organizations move away from geographic and time constraints to more immediate, customized responses to customer needs. Governments around the globe are recognizing the power of the Internet and are implementing what has been called e-government, the deployment of digitized inter-connective communication systems linking governmental organizations and its stakeholders such as the public, businesses, and other governments. It is not uncommon for governments to try and harness technological innovation to improve their operations and services. What is extraordinary about e-government is the widespread execution of these programs around the globe. Nation-states around the world from developed to developing, capitalist to communist, democracy to authoritarian are spending resources to make e-government a possibility, or acquiring support from international funding organizations, such as US Agency for International Development (USAID), when resources are not available. This paper explores scholarly literature to identify various motivations for implementing e-government. But, unlike most research on e-government adoption, this paper focuses on the citizen-centric *and* global legitimization pressure factors that impact the decision.

Categories and Subject Descriptors

K.4 [**Computers and Society**]

General Terms

Human Factors, Standardization, Theory

Keywords

E-government, motivations, globalization, implementation, legitimization, citizen-centric, social science, communication.

1. THE IMPORTANCE OF SOCIAL SCIENTIFIC INVESTIGATIONS OF E-GOVERNMENT

E-government is a program which uses technology, specifically web-based technology, to transform how the business of a government is conducted (Wang, 2004). This "business" may include such initiatives as connecting internal government departments, providing information to the public, responding to citizen question and needs, and disseminating and accepting forms and applications (Basu, 2004). According to most researchers, e-government is the use of information technology, specifically the Internet, to deliver government information and services to citizens (G2C), businesses (G2B), and other government agencies (G2G) (Seifert, 2003). For the sake of representing the most widely cited definition of e-government, this paper will define it as a program that utilizes Internet communication technology (ICT) to improve communication, service and transactional processes with its stakeholders.

A significant amount of scholarly literature portrays e-government as a highly beneficial endeavor. Researchers who study e-government distinguish it as a promising vehicle for improving the services nation-states provide to their citizens and businesses, as well as other governments within their borders and those beyond. From basic informational web pages to advanced interactive portals, e-government has been touted as the mechanism by which governments can reduce communication and information costs, increase speed, broaden their reach, and eradicate distance (Jaeger and Thompson, 2003). It has also been recognized as a new way of debating and deciding policy (Basu, 2004). E-government has been compared to an "endless wire" or a new method of "threading together" citizens, business and governments within a nation (Jaeger, 2003). E-government, as it continues to progress in development and deployment, may re-define the relationship between government and the public (Committee on Governmental Affairs, 2001).

Literature suggests that e-government is in its nascent stage (Jaeger, 2003; Leith & Morrison, 2004). Consequently, even the term "e-government" represents an evolutionary process, and is not yet defined by universal standards (Basu, 2004; Jaeger, 2003; Seifert, 2003). E-government has been defined by some researchers in terms of specific actions (e.g., obtaining documents, accessing information, creating a shared database), or simply as the automation of services (Seifert, 2003). A 2002 Improvement & Development Agency study categorized e-government into three high-level types of uses of the web: e-governance, e-services, and e-knowledge. E-governance pertains to the linkage established between citizens, stakeholders and government officials. E-services is the electronic provision of government services. E-knowledge refers to the use of communication technologies to provide and obtain information (Zhou, 2004). The Center for Democracy and Technology categorizes e-government programs by three objectives: 1) to publish or "expand access to government information"; 2) to

interact or "broaden(ing) civic participation in government"; 3) to transact or "make(ing) government services available online" (CDTI, 2002).

Typically, e-government is seen as an incremental progression. West (2004) offers the following four progressive stages of government presence on the web: 1) billboard (displaying information on the web); 2) partial-service delivery (manipulating information databases); 3) integrated service delivery (integrating agency sites); and 4) interactive democracy (government interacting with citizens in momentous ways). Incremental development of e-government is viewed as the most effective method for avoiding errors and preparing affected stakeholders, such as citizens and employees, for change (Fountain, 2001).

Although e-government is considered emergent by researchers, it seems to have already achieved global appeal based on such factors as the number of nation-states launching digital government programs and the urgency that permeates planning and development. With the potential advent of the global explosion of e-government, it seemed critical to examine literature from a social scientific perspective to determine its status as a phenomenon and, subsequently, the motivational pressures for governments to pursue such programs. Motivations that stem from the functional relevance of "opening the lines of communication" are discussed. Additionally, an examination is conducted of motivations that transcend beyond the typically familiar "proactive", citizen-centered reasoning for implementing e-government to more "reactive" posturing, such as instituting e-government as a way of legitimizing a nation-states' prominence or even survivability in the global sphere. But, first, an examination of e-government as a global phenomenon is offered.

2. E-GOVERNMENT AS A GLOBAL PHENOMENON

In order to claim that e-government is indeed a global phenomenon, it requires clear definition. As discussed previously, there does not yet exist a globally standardized definition. Furthermore, "digital government", "e-democracy," and "e-services" are examples of the various terms used to describe the same endeavor. For the purposes of this paper, the term "e-government" is used throughout, recognizing that the other terms are equally relevant. As discussed earlier, this study defines e-government as a program that utilizes ICT to improve government communication, service, and transactional processes with its stakeholders.

Adhering to this definition, an examination of governments embarking on e-government programs was conducted. Before discussing its worldwide appeal, it is necessary to identify the level of effort in implementing e-government to illuminate the magnitude of marking it as a global phenomenon.

E-government is costly, involves tremendous risk, requires a skilled technical pool of resources, and a stable technical infrastructure. Implementing e-government necessitates the evaluation of the following risk factors: political stability, adequate legal framework, trust in government, importance of the government identity, the economic structure, the government structure (centralized or not), levels of maturity within the

government and citizen demand (Basu, 2004). Furthermore, inherent issues of e-government include: security and privacy, homeland security, diverse educational levels of users, accessibility issues, prioritization of e-government over basic functions of government, building citizen confidence in e-government, and whether certain forms of government do better with e-government than others (Jaeger, 2003).

E-government programs not only present arduous challenges in its preparation, but also are difficult to successfully execute. According to a 2002 Gartner study, 60% of government agencies have failed or fallen short of e-government modernization efforts. The report also concluded that only 10% of governments would be able to move toward e-government by 2005 (Gartner, 2002). Researchers contend that e-government programs are failing due to a *lack* of understanding of effective planning, development and deployment (Gupta & Jana, 2003).

Even with the overwhelming issues and requirements that are fundamentally integral to implementing e-government, nation-states are desperately trying to execute these programs. Jaeger (2003) contends states that e-government is robust, much more so than experts ten years ago expected, and has "truly become a global phenomenon". It can be said that there is phenomenal urgency and synergy that run through the proposals for e-government, and that nation-states are keenly aware of the potential benefits – some of which seem to overshadow the negative effects of this technology or even the tremendous resource costs. Fountain (2002) writes in her recent book on the impact of innovation on governmental institutions, "In governments around the globe, from Indianapolis to India, from San Francisco to Singapore, from Chile to China, policymakers view the Internet either as a force to increase the responsiveness to government to its citizens or as a means to further empower the state" (Pg. 3).

In reviewing current research on existing e-government programs, wealthy and developing nation-states alike are recognizing its empowering elements. During a 2001 U.S. Congressional Hearing on e-government, Congressional members and technology industry experts concurred that "the future of democracy is digital" and that e-government must be successfully implemented in the U.S. as they are in other parts of the world (Committee on Governmental Affairs, 2001, pg. 10). Governments representing developing nation-states such as those of Namibia, Armenia, Jamaica, Pakistan and others have executed programs to implement some form of e-government (CTDI, 2002). Namibia established a parliamentary web site, which allows citizens to access and react to pending legislation. Armenia has developed an online forum to discuss public policy issues. Jamaica is offering Internet access in local post offices and training postal workers to help citizens learn how to use the technology. Pakistan is using the web as an anti-corruption tool by listing government officials guilty of the crime of corruption to dissuade people to commit similar offenses (CTDI, 2002).

And the lure of e-government is impinging on forms of governments beyond democracies. For example, the communist government of China requested that all local inland and coastal governments implement websites because of the benefits of Internet technology. The paradox is that the Internet provides greater communicative inter-connectedness, something the

government rebukes (Zhou, 2004).

In other words, e-government is costly, difficult to manage, at times antithetical to other actions and motives, yet nation-states of all sorts are trying to establish e-government. Why? An examination of research resulted in two primary motivations for e-government: internal citizen-centricity which governments tend to pronounce as their proactive motivation, and external global legitimization, which are in reaction to global pressures and are less publicized. Both are discussed in the following section of this paper, emphasizing the increasingly competitive, coercive nature of the legitimization motivation.

3. MOTIVATIONS FOR IMPLEMENTING E-GOVERNMENT
3.1 Proactively Responding to Citizen Needs

In his examination of organizational identity, Cheney (1991) considered communication as "constitutive of organization" (pg. 3). He held that rhetoric was a fundamental aspect of the bureaucratic organization since it is communication that holds the organization together (Cheney, 1991). An organization has to manage a variety of audiences and will reinforce certain values to persuade the most dominant audiences (Cheney, 1991). The decision to adopt e-government can be highly motivated by what the decision communicates to its citizens (e.g., "these improvements are based on your needs") and to the rest of the world (e.g., "I am now in concert with what other governments are doing").

When governments proactively decide to adopt e-government they tend to communicate about the citizen-centric improvements that it will provide. The most prevalently cited reason for deploying e-government is the way in which it expands, deepens, and improves communication between government and its stakeholders. It is characterized as giving citizens an easily available forum, opening dialogue and establishing previously inexistent connections with policy makers. Friedman (2000), in his examination of the drivers of innovation, contended that advancements in communication technology lead toward greater democracy since it increases organizational exposure to the public and potentially allows anyone to broadcast news and information.

Also recognized are people's demands for more and improved government services are reflective of the growing use of the Internet (Committee on Governmental Affairs, 2001). People are increasingly using electronic transactions in many areas of their daily life (e.g., banking) and are becoming accustomed to the short time and effort it takes to complete them (Seifert, 2003). Therefore, governments seem to be undergoing intense transformations to use the Internet to deliver services and information according to these new time and effort expectations (Adbul Karim, M.R., 2003).

Even with or without citizen demand, nation-states, which implement e-government, are or at least seem to be advocating increased citizen participation in governance (Seifert, 2003). Increased participation can make citizens feel they have more of a voice in the policies and functions of government, are able to access information that may have once seemed inaccessible, and are able to conduct business with government with more of an

understanding of the processes to do so. For example, the websites of Namibia and Pakistan described earlier were developed so the public could react to current legislation. Researchers contend that with more participation in government, comes increased trust in the government (West, 2004). And increased citizen trust in government (whether justified or not) can result in increased stability.

Governments that embark on citizen–centric e-government programs tend to be more successful. Case study research used for this paper identified citizen demand as a critical success factor (Abdul Karim, M. R., 2003; Basu, 2004; Committee on Governmental Affairs, 2001; Gent 2003; Hazlett & Hill, 2003; Kuk, 2002; Wang, 2002; Zhou, 2004). Also, e-government programs are more capable of success when they adhere to a design methodology that is directed by public needs (Gent, 2003). However, for wealthy and poorer nation-states alike, not all are proactively responding to citizen needs when choosing to adopt e-government even though "a desire to meet citizen needs" may be the message that is communicated. The next section discusses another key motivator that affects nation-states in deciding to adopt e-government which is not always publicly communicated: global legitimization pressures.

3.2 Reactively Responding to Global Legitimization Pressures

The emphasis of improved and simplified communications is inherent in the functionality of e-government. The globalization of e-government carries with it the exciting possibilities of new forms of governance and connectivity between citizens and governments around the world. However, the benefits of e-government adoption around the world may be outweighed by the problematic criterion upon which governments are implementing these programs. Technological determinism contends that the powerful and ubiquitous nature of communication technology and the speed by which it is being implemented may overwhelm the people that plan, develop and deploy this change (Fountain, 2002).

The push to implement e-government is not limited to governments of wealthy nation-states, but also governments of poorer nation-states. E-government plans are increasingly being structured and influenced via globalization. According to Welch and Wong (2001), there is an increased need to build data collection systems that makes information readily available on a global scale. In other words, nation-states are recognizing that the future of e-government requires that all nation-states adopt this effort to maintain some level of stability and power in an increasingly connected world. And, being "left behind" will not be an option (Basu, 2004). This notion can seem to contradict the proactive citizen-centric motivation for implementing e-government because it insinuates that governments do not have a choice.

Using Dimaggio and Powell's (1991) theory of "isomorphic institutionalism," it can be argued that nation-states compete for power and legitimization when adopting large-scale technological programs like e-government, and through this competition become more similar (Monir M. & Rahaman, A.S., 2002). The legitimizing pressure is exerted on nation-states by other nation-states upon which they are dependent and or need to join in

collusion to maintain financial and competitive power (Monir M. & Rahaman, A.S., 2002). The rationale for implementing e-government may be embedded in a nation-state's need to remain legitimate or progress to a place of legitimacy.

The act of implementing e-government can in and of itself communicate an empowering image of influence, power, and legitimacy to its citizens and even the rest of the world. When e-government is adopted, then a nation-state has symbolically pronounced that it recognizes the benefits of the communicative power of the Internet. A prominent Congressional member at a 2001 U.S. Congressional Hearing on e-government stated, "In order to get ahead in today's world, you pretty much have to be plugged in and powered up…it is our (Congress's) obligation to see that government does not lag behind in that transformation" (pg.5). As Seifert (2003) stated in his discussion of the legitimization factor of e-government, "Transitional democracies with newer governments may perceive a need to improve openness and citizen opportunities to solidify their legitimacy, and thus may emphasize reforms such as transparency and attracting economic development" (pg. 5).

Welch and Wong (1998) posited that governmental organizations around the world have increased needs to collaborate and cooperate with each other. And, the global pressures to fit global standards in public administration are not appropriate for all bureaucracies but still are viewed as advantageous (Welch and Wong, 1998). The authors state: "Clearly…governments and their bureaucracies, are not only increasingly aware of global pressures for change and reform, they are increasingly making decisions that incorporate global constraints and opportunities into their own domestic agendas" (Welch and Wong, 1998, pg. 43).

Earlier in the paper, I discussed how China, a nation-state that has a history of stifling free expression, has launched an ambitious endeavor to digitize all of its national and local governments. This act can be perceived as a way China is attempting to portray itself as receptive to the needs and the concerns of its people. In her content analysis of China's government web sites, Zhou (2004) states: "The boom (of e-government comes in part from a belief that technology can transform government's often negative image". Yet, as China is presenting an image of "openness and freedom" for its citizens, they are using the Internet to establish more control. Internet communication technology allows for messages to move faster, independent of geography, and thus require more centralized control (Carey, 1997). China is using the Internet to de-centralize control of their populace, which gives the national government even more power in monitoring and directing local communities (Zhou, 2004).

Developing nation-states hope to use e-government to legitimize their placement in the world system, as well as to maintain some level of competitiveness (Gupta and Jana, 2003). Institutionalization theory can explicate the processes by which social processes and pressures can "come to take on rule-like status in social thought and action" (Meyer & Rowan, 1977, p.341). In other words, nation-states can conform to external expectations by adapting to what is considered "appropriate" or accepted behaviors. In response, an organization is "deemed legitimate by its environment" (other nation-states) and receives generalized acceptance and resources (financial backing) (Euske, N.A. & Roberts, K.H., 1987, p. 57-58). Developing nation-states lack well-defined technology programs, and so when they do to decide to launch e-government programs, they are apt to model ones they perceive as legitimate (Monir M. & Rahaman, A.S., 2002).

The most essential factors for developing e-government are having the necessary financial and staffing resources, and having a stable technical infrastructure required of large-scale programs (Basu, 2004). And, in fact, some developing nation-states are receiving some type of assistance in executing their own e-government program. A Jordanian e-government program called REACH (*R*egulatory Framework – *E*nabling Environment – *A*dvancement Programs – *C*apital & Finance – *H*uman Resource Development) has received financial backing to support its program through USAID, a U.S. governmental donor (REACH, 2004). The World Bank, with the cooperation of the Center for Democracy and Technology, has created a comprehensive "best practices" handbook outlining the steps needed for developing countries to begin their own e-government programs (CDTI, 2002).

Although e-government could be a new opportunity to re-organize developing countries' tools and logic for governance, it may widen the gap between the digital "haves" and "have-nots" for those who are unable to acquire international assistance. In reaction to this issue, researchers have proposed establishing global technology principles that call for standardization and international resources allocation to support e-government around the globe (Basu, 2004). However, this standardization can be viewed as a gauge for determining if legitimization has been achieved, and a nation-state has developed e-government according to global rules and not their citizens' needs.

In alignment with globalization theorists, such as Stohl (2001) and Giddens (1999), the effects of modernization will reverberate not just within the economical domain, but also within cultural and organizational dimensions. As nation-states transform their government as a result of their desire to be viewed as politically legitimate and structurally similar, this can drastically change the relationship dynamics between government and citizen.

It is also critical to acknowledge that if e-government is deployed on the basis of legitimization in the global sphere, then e-government can be a divisive element in global power. For instance, if developing countries are unable to implement e-government they fall farther back in the proceeding evolution of mankind (Basu, 2004). Wallerstein (1974) would argue that nation-states need to implement communication technology to survive in the global network (1974). Giddens' (1990) contention that globalization is dialectical (the world comes together and falls apart simultaneously) fits this situation well. The paradox with e-government is that without developing countries accepting the homogenizing impact of relying on global resources and principles, it is difficult for them to retain some level of self-reliance and individual identity. This insinuates that the motivating factor for developing countries to implement e-government should be for the advancement of their governance system according to globally accepted principles (Basu, 2004). The World Bank is recognizing the dialectical distinctions of e-

government noting that the "globalization may very well entail both a reduction of income disparities among countries, and increasing income inequalities within countries (CTDI, 2002).

4. Conclusion

The purpose of this paper was to embark on a preliminary exploration of e-government, confirming researchers' acknowledgements of its globally accepted benefits. The benefits as enveloped in the motivational reasoning for implementing e-government was also examined, highlighting the citizen-centric and global-centric rational for pursuing the tremendous effort of digitizing government.

The motivations described are not necessarily mutually exclusive. The complexity of developing and implementing e-government programs seems to stipulate a complicated decision-making process where these motivating factors have to be taken into serious consideration. It is vital for nation-states to closely evaluate and manage the external pressures to adopt technology and the internal pressures to preserve cultural identity (Stohl, 2000). As Winner (1986) explains:

> "The important questions becomes, "as we make things work," what kind of world are we making? This suggests that we pay attention not only to the making of physical instruments and processes, although that certainly remains important, but also to the production of psychological, social and political conditions as a part of any significant technical change. Are we going to design and build circumstances that enlarge the possibilities for growth in human freedom, sociability, intelligence, creativity and self-government? Or are we headed in an altogether different direction?" (p.17).

Researching e-government from a positivist basis (using empirical methods) may provide understanding for those interested in pursuing e-government solutions (Leith & Morrison, 2004). Using extensive observational and interview methods to assess e-government projects throughout their life cycles, invaluable data can be gathered that can assist e-government policy-makers, designers, developers, consultants and decision-makers in the critical decisions linked to launching an e-government program. There are challenges in research e-government primarily because the programs themselves are in the nascent stage, but communication researchers can embark on the work of exploring case studies to examine the communicative implications and drivers that pervade these programs.

The global phenomenon of e-government represents an extraordinary opportunity for social science researchers. Even though the impact of e-government is tremendous, social science scholars have not paid enough attention to the phenomenon (Buckley, J., 2003; Leith & Morrison, 2004). As researchers Leigh and Morrison (2005) contended, e-government is much more than a technological change; it's a change in the way we think of governance as a whole, and therefore should involve thinkers and strategists in multiple segments of industry and academia. Beyond exploring the communicative functionality of e-government systems, the motivations for deploying e-government can, consequently, result in constructive or destructive outcomes depending on how careful and citizen-centric the deliberation is when deciding to implement e-government. By taking on the issue of e-government globalization, communication researchers can help nation-states recognize the impacts and potentially reform the conditions by which governments choose to digitize its services.

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