Research Article

E-GOVERNANCE : ITS ROLE, IMPORTANCE AND CHALLENGES

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Abstract

Poor governance has been undermining the service delivery and development initiatives undertaken by the majority of developing countries. Many of these governments have now started using e-governance as a mechanism to engender change in their governance systems for achieving development goals and to ensure better service delivery to citizens and other stakeholders. Arguably, it also ensures improved public sector efficiency, accountability and responsiveness. The paper argues that a successful adoption of e-governments has the potential to provide better service delivery at reduced costs, increase public sector efficiency, minimise corruption and improve the accountability, transparency and responsiveness of the public sector. It is, however, acknowledged that such initiatives in developing countries are fraught with numerous challenges that include the lack of infrastructure, low tele-density, lack of political commitment and vision, bureaucratic inefficiency and administrative corruption. The framework also identifies the challenges that may face, the external environment they are influenced by, and the role they play in achieving better governance.

Key Words: information and communication technology (ICT); e- governance; developing country; good governance

INTRODUCTION

A worldwide revolution in information and communications technologies is occurring. The Internet, the personal computer, and the mobile phone are fundamentally changing our lives - affecting the way we work, learn and interact. Governments around the world are recognizing the value of e-Government. Properly designed and implemented, e-Government can improve efficiency in the delivery of government services, simplify compliance with government regulations, strengthen citizen participation and trust in government, and yield cost savings for citizens, businesses and the government itself. Not surprisingly, therefore, policymakers and managers are looking to adopt e-Government in countries around the world - ranging from the most developed to the least developed.

Definitions

The word government has been variously defined by different scholars. Etymologically the word government originates from the word "govern" which originates from Old French "governer", or from Latin "gubernare" meaning "to steer or rule", and from the Greek word "kubernan" meaning "to steer", steeped in controlling, or at least having a large (and possibly invasive) role in multiple facets of citizens' lives, (Riley, 2012)

The definition of government is often phrased in terms of key requirements that society places on its government. The New Oxford English dictionary (2001) defines government as; The system by which a state or community is governed or the action or manner of controlling or regulating a state, organisation, or people. Other common definitions include, the exercise of political authority over the actions or affairs of a political unit, people, etc, as well as the performance of certain functions for this unit or body" and "the executive policymaking body of a political unit, community, etc".

Osborne and Gaebler (1992) wrote that: Government is the mechanism used to make communal decisions i.e . It is the way we provide services that benefit all people: national defense, environmental protection, police protection etc. It is the way we solve collective problems.

To a large extent, the phenomenon of e-Government can be explained unambiguously by adopting a definition of e-Government that includes all electronically executed transactions between

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government agencies and citizens. Despite the citizen-centric focus, the definition of e-Government is not limited to a service-based view of offering electronic public services to citizens. It has been observed that e-Government in this information age has also become an interorganisational phenomenon, and that technological improvements have implied more cooperative initiatives between government departments and organizations in complex, diverse and often divided political systems.

Osborne and Gaebler, (1992) defined e-Government as; The government's use of technology, in particular, web-based Internet applications to enhance access and delivery of government services to citizens,business partners, employees and other government entities. It is a way for governments to use the new technologies to provide people with more convenient access to government information and services, to improve the quality of the services and to provide greater opportunities to participate in our democratic institutions and processes.

The World Bank, (2012) define E-Government as; The use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

Generally e-Government is basically the use of Information Communications Technology (ICT) and its application by the relevant government body for the provision of information and public services to the people. In simple terms, e-Government is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees. It is the use of information technology to support government operations, engage citizens, and provide public services in a more efficient and transparent manner.

The aim of e-Government, therefore, is to provide efficient dissemination and management of information to the citizen; better service delivery to citizens; and empowerment of the people through access to information and participation in public and policy decision-making. E-government can support more streamlined and responsive service, wider public participation, and more cost-effective business practices at every level of government. It ranges in complexity from basic access to official information to radically redesigned public processes. Therefore, to envisage e-Government comprehensively, it is necessary to include the concept of "e-Administration" which implies the application of electronic media for the management of the internal public organization.

Differences Between Government And Governace

The difference between government and governance is often raised. Governance, according to the New Oxford English dictionary (1991), is defined as "the action or manner of governing". It is the process by which we collectively solve our problems and meet our society's needs. Government is the instrument we use."

E-Government and e-governance can be defined as two very distinct terms. e-Governance is a broader topic that deals with the whole spectrum of the relationship and networks within government regarding the usage and application of ICTs. It is a group of norms, processes and behaviours that have an influence on the exercise of power, especially from the point of view of openness, participation, responsibility, effectiveness and consistency. e-Government is actually a narrower discipline dealing with the development of online services to the citizen, more then on any particular government service - such as e-tax, e-transportation or e-health (Riley, 2012) . E-Governance is a wider concept that defines and assesses the impacts technologies are having on the practice and administration of governments and the relationships between public servants and the wider society, such as dealings with the elected bodies or outside groups such as not for profits organizations, ngos or private sector corporate entities. It encompasses a series of necessary steps for government agencies to develop and administer to ensure successful implementation of e-government services to the public at large.

E-democracy refers to the processes and structures that encompass all forms of electronic interaction between the Government (elected) and the citizen (electorate).

E-government is a form of e-business in governance and refers to the processes and structures needed to deliver electronic services to the public (citizens and businesses), collaborate with business partners and to conduct electronic transactions within an organisational entity

Importance of E- Government

According to the World Bank (2002) E-Governance has the following benefits;

1. It greatly simplifies the process of information accumulation for citizens and businesses.
2. It empowers people to gather information regarding any department of government and get involved in the process of decision making.
3. E-Governance strengthens the very fabric of democracy by ensuring greater citizen participation at all levels of governance
4. E-Governance leads to automation of services, ensuring that information regarding every work of public welfare is easily available to all citizens, eliminating corruption.
5. This revolutionizes the way governments function, ensuring much more transparency in the functioning, thereby eliminating corruption.
6. Since the information regarding every activity of government is easily available, it would make every government department responsible as they know that every action of theirs is closely monitored.
7. Proper implementation of e-Governance practices make it possible for people to get their
8. work done online thereby sparing themselves of unnecessary hassles of traveling to the respective offices.
9. Successful implementation of e-Governance practices offer better delivery of services to citizens, improved interactions with business and industry, citizen empowerment through access to information, better management, greater convenience, revenue growth, cost reductions etc.
10. Furthermore, introduction of e-Governance brings governments closer to citizens. So much so that today it becomes extremely convenient to get in touch with a government agency. Indeed, citizen service centers are located closer to the citizens now. Such centers may consist of an unattended kiosk in the government agency, a service kiosk located close to the client, or the use of a personal computer in the home or office.
11. E-Governance practices help business access information that might be important for them at a click

E – Government can provide better ways to manage information compared to traditional means. Hypertext enables you to provide access to complex sets of information in relatively easy and user-friendly ways and, combined with databases, it can also provide users with ways to interact directly with the data, i.e. consult it, update it and/or send it to other destinations: in other words, a website can enable users to initiate and/or complete service transactions without recourse to human intervention. The absence of a gate-keeping role on the part of humans not only saves time and money, but it is also likely to help reduce and prevent phenomena such as corruption and bribery, a problem experienced by many governments: by potentially cutting out "middlemen", e-government represent a relatively transparent way of administering services and information, in comparison to traditional means. Having a website also provides governmental bodies with an opportunity to systematically collect information about their clients and users: this includes running surveys, asking users to share their personal data in order to register for specific services (and therefore easily create and maintain a database of users of these services), and generally monitoring the behaviour of visitors to the site (e.g. through statistical analysis, which can be used to establish what information users are most interested in).

An e-government service also creates social benefits for the citizens of a country. For countries that have a widely dispersed population an e-government service allows the citizens situated in remote areas to have access to the same services that citizens within the major cities would enjoy.

The ability of an e-government service to be accessible to citizens irrespective of location throughout the country brings the next and potentially biggest benefit of an e-government service. In several countries there is a high level of voter apathy, either due to grievances with government policy or to voters not bothering to leave their homes to vote. Developing a secure portal online that allow citizens to register their vote would not only give citizens in remote areas the chance to vote from their own home with the click of a mouse but would, in addition, allow the general population with busy working lives the chance to vote very quickly on their lunch break at their desk. Another benefit of implementing an e-government service is the greater transparency of the service provided.

Types / Models Of E Government

E-government offers services to those within its authority to transact electronically with the government. These services differ according to users'

needs, and this diversity has given rise to the development of different type of e-government.

According to the World Bank, (2002); Jeong, (2007) the e-Government delivery models can be briefly summed up as follows;

- G2C (Government to Citizens)
- G2B (Government to Businesses)
- G2E (Government to Employees)
- G2G (Government to Governments)
- C2G (Citizens to Governments)

Government to Government Model (G2G)

According to Gregory (2007) G2G refers to the online communications between government organizations, departments and agencies based on a super-government database. Moreover, it refers to the relationship between governments. The efficiency and efficacy of processes are enhanced by the use of online communication and cooperation which allows for the sharing of databases and resources and the fusion of skills and capabilities. It renders information regarding compensation and benefit policies, training and learning opportunities, and civil rights laws in areadily accessible manner (Ndou, 2004). The vital aim of G2G development is to enhance and improve inter-government organizational processes by streamlining cooperation and coordination.

Governments depend on other levels of government within the state to effectively deliver services and allocate responsibilities. In promoting citizen-centric service, a single access point to government is the ultimate goal, for which cooperation among different governmental departments and agencies is necessary. G2G facilitates the sharing of databases, resources and capabilities, enhancing the efficiency and effectiveness of processes. It represents internal systems and procedures which form the backbone of public organizations. G2G involves sharing data and conducting electronic transactions between governmental actors. This includes both intra and inter-agency interactions between employees, departments, agencies, ministries and even other governments.

Government-to-Business (G2B)

Government to business, or G2B, is the second major type of e-government category. G2B can bring significant efficiencies to both governments and businesses. G2B include various services exchanged between government and the business sectors, including distribution of policies, memos, rules and regulations. Business services offered include information, new regulations, downloading application forms, lodging taxes , renewing licenses, registering businesses, obtaining permits, and many others. The services offered through G2B transactions also play a significant role in business development, specifically the development of small and medium enterprises (Pascual, 2003). The opportunity to conduct online transactions with government reduces red tape and simplifies regulatory processes, therefore helping businesses to become more competitive.

Fung (2002) asserts that, Government-to-Business (G2B) model have been receiving a significant amount of attention, partly because of the dynamic nature of commercial activities in general and the potential for reducing transaction costs through improved procurement practices. Moon (2003) argued that G2B applications actively drive e-transaction initiatives such as e-procurement and the development of an electronic marketplace for government purchases; and carry out government procurement tenders through electronic means for exchange of information and goods. Shifting government transactions online provides the opportunities for companies to simplify regulatory processes, cut through red tape, keep legal compliance, and carry out operations faster and easier through electronic filing and statistical reporting. Rather than travelling to a government office to fill up paper forms, a contractor, for example, will find it more convenient to apply for building permits over the Internet. The delivery of integrated, single source public services also creates opportunities for businesses and government to partner together to offer a hybrid of public and commercial services under the same umbrella.

Government-to-Citizens (G2C)

G2C deals with the relationship between government and citizens. It allows citizens to access government information and services instantly, conveniently, from everywhere, by use of multiple channels. Government-to-Citizens (G2C) model have been designed to facilitate citizen interaction with the government. The focus of G2C is customer centric and integrated electronic services where public services can be provided based on a "one-stop shop" concept. This implies that citizens can carry out a variety of tasks, especially those that involve multiple agencies, without needing to initiate contacts with each individual agency. A single access point also

reinforces citizen participation in democratic processes since they can access administrative proceedings readily and articulate their needs more conveniently to public officials. (Ndou, 2004)

While e-Administration initiatives improve internal government processes, e-Citizens and eServices deal with improving communication and quality of service between government and citizens. Finally, e-Society initiatives concern interactions of government with businesses and civil communities. As each domain develops and progresses, e-Government initiatives may increasingly fall into overlaps.

In applying the idea of G2C, customers have instant and convenient access to government information and services from everywhere anytime, via the use of multiple channels. In addition to making certain transactions, such as certifications, paying governmental fees, and applying for benefits, the ability of G2C initiatives to overcome possible time and geographic barriers may connect citizens who may not otherwise come into contact with one another and may in turn facilitate and increase citizen participation in government (Seifert, 2003).

Government to Employees (G2E)

Government to employee is the least sector of e-government in much e-government research. Some researchers consider it as an internal part of G2G sector and others deal with it as a separate sector of egovernment (Riley, 2001). G2E refers to the relationship between government and its employees only. The purpose of this relationship is to serve employees and offer some online services such as applying online for an annual leave, checking the balance of leave, and reviewing salary payment records, among other things (Seifert, 2003). It is a combination of information and services offered by government institutions to their employees to interact with each other and their management. G2E is a successful way to provide e-learning, bring employees together and to encourage knowledge sharing among them. It gives employees the possibility of accessing relevant information regarding compensation and benefit policies, training and learning opportunities, and allowing them access to manage their benefits online with an easy and fast communication model. G2E also includes strategic and tactical mechanisms for encouraging the implementation of government goals and programs as well as human resource management, budgeting and dealing with citizens (Ndou, 2004).

Challenges of Implimenting E Government

There are several challenges that can delay progress towards realizing the promise of egovernment.The variety and complexity of e-government initiatives implies the existence of a wide range of challenges and barriers to its implementation and management.

ICT Infrastructure

The implementation of e-government initiatives face some technological difficulties such as lack of shared standards and compatible infrastructure among departments and agencies. ICT infrastructure is recognised to be one of the main challenges for e-government. Internetworking is required to enable appropriate sharing of information and open up new channels for communication and delivery of new services (Ndou, 2004). For a transition to electronic government, an architecture providing a uniform guiding set of principles, models and standards, is needed. Sharma & Gupta (2003) point out that implementation of the whole e-government framework requires a strong technology infrastructure. In order to deliver e-government services, government must therefore develop an effective telecommunication infrastructure.

Privacy

Privacy and security are critical obstacles in implementation of e –government. Privacy refers to the guarantee of an appropriate level of protection regarding information attributed to an individual (Basu, 2004). Government has an obligation to ensure citizens' rights regarding privacy, processing and collecting personal data for legitimate purposes only (Sharma & Gupta, 2003). Concerns about website tracking, information sharing, and the disclosure or mishandling of private information are universally frequent. There is also the concern that e-government itself will be used to monitor citizens and invade their privacy. Both technical and policy responses may be required when addressing the privacy issue in an e-government context. In addition, there is a need to respond effectively to privacy issues in networks in order to increase citizen confidence in the use of e-government services. Citizen confidence in the privacy and careful handling of any personal information shared with governmental organizations is essential to egovernment applications Basu (2004).

Security

Security of an information system means protection of

information and systems against accidental or intentional disclosure to unauthorized access, or unauthorized modifications or destruction (Layton, 2007). It refers to protection of the information architecture including network, hardware and software assets and the control of access to the information itself. Sharma & Gupta, (2003) asserts that, security can be classified into two elements: network security and documents security. It should include maintenance and e-infrastructure protection in the form of firewalls and limits on those who have access to data. Furthermore, the use of security technology, including digital signatures and encryption, to protect user IDs, passwords, credit card numbers, bank account numbers, and other such data being transmitted over the Internet and stored electronically is essential to fulfilling security goals in e-government applications (Feng, 2003)

Policy and Regulation Issues

Feng (2003) points out that e-government is not a technical issue, but rather an organizational issue. Implementation of e-government principles and functions requires a range of new rules, policies, laws and governmental changes to address electronic activities including electronic archiving, electronic signatures, transmission of information, data protection, computer crime, intellectual property rights and copyright issues. Dealing with e-government means signing a contract or a digital agreement, which has to be protected and recognized by a formalized law, which protect and secure these kinds of activities or processes. In many countries, e-business and e-government laws are not yet available. Establishing protections and legal reforms will be needed to ensure, among other things, the privacy, security and legal recognition of electronic interactions and electronic signatures.

Lack of Qualified Personnel and Training

Another major challenge of an e-government initiative can be the lack of ICT skills. This is a particular problem in developing countries, where the constant lack of qualified staff and inadequate human resources training has been a problem for years (UNPA&ASPA, 2001). The availability of appropriate skills is essential for successful e-government implementation. Egovernment requires human capacities: technological, commercial and management. Technical skills for implementation, maintenance, designing and installation of ICT infrastructure, as well as skills for using and managing online processes, functions and customers, are compulsory. To address human capital

development issues, knowledge management initiatives are required focusing on staff training in order to create and develop the basic skills for e-government usage.

Digital Divide

The ability to use computers and the Internet has become a crucial success factor in egovernment implementation, and the lack of such skills may lead to marginalization or even social exclusion. The digital divide refers to the gap in opportunity between those who have access to the Internet and those who do not. Those who do not have access to the Internet will be unable to benefit from online services ((UNPA & ASPA, 2001).). In the case of the digital divide, not all citizens currently have equal access to computers and Internet, whether due to a lack of financial resources, necessary skills, or other reasons. In fact, computer literacy is required for people to be able to take advantage of e-government applications. Government should train its employees and citizens in basic skills of dealing with the computer and Internet in order to let them participate in e-government development applications. In addition, this lack of access among vulnerable or low-income citizens prevents them from being archiving, electronic signatures, transmission of information, data protection, computer crime, intellectual property rights and copyright issues. Dealing with e-government means signing a contract or a digital agreement, which has to be protected and recognized by a formalized law, which protect and secure these kinds of activities or processes. In many countries, e-business and e-government laws are not yet available. Establishing protections and legal reforms will be needed to ensure, among other things, the privacy, security and legal recognition of electronic interactions and electronic signatures.

Leaders and Management Support

The literature shows that without support from the top management, an innovation is less likely to be adopted. Thus, e-government implementation needs the support from the highest level of government for successful implementation. Top management support refers to the commitment from top management to provide a positive environment that encourages participation in egovernment applications. Therefore, it plays a significant role in the adoption and implementation of e-government (Ndou, 2004).

CONCLUSION

E-government has the potential to greatly improve

how government operates internally and how it serves its customers. E-government is much more than a tool for improving cost-quality ratios in public services. It is an instrument of reform and a tool to transform government. Thus, eGovernment is not primarily about automation of existing procedures (which may or may not be effective), but about changing the way in which government conducts business and delivers services.

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