Preface

E-government, refers to the utilization of new information and communication technologies (ICTs) by governments being applied to the full range of government functionalities (OECD, 2001). These are the government activities that take place by digital processes over a computer network, usually the Internet, between the government and members of the public. It is the process of transforming the government, so that the use of the Internet and electronic processes become central to the way that government operates. In broader sense, e-government is the use of information technology to provide citizens and organizations with more convenient access to government information and services, and offer delivery of public services to citizen, businesses, and others who are working in the public sector (Bridges dot org, 2003; Kunstelj & Vintar, 2004; Scapin, 2009).

E-Governance is a network of organizations to incorporate government, non-government, profit, nonprofit, not-for-profit, civil societies, research entities, development actors and private sector entities. In the e-governance arena there are no distinct boundaries. The model for e-governance could be a one-stop portal, where citizens have the choice to access variety of information and services the government offers (Garson, 2006).

This casebook has tried to accommodate theories, issues and methodologies in designing, implementing and operating e-government systems. Furthermore, as the acclamation of the e-government systems in various countries, e-governance has been reported to be improved through many services. This casebook also covers a variety of services and applications across the globe that has been improving the overall governance of nations and economies. E-government and e-governance is not a new subject to the contemporary researchers, academics and to the new global leaders. Therefore, the casebook has been concise in synthesizing the theoretical analysis, but focuses more to pragmatic implementations, and emphasizes on e-government systems for targeted to the grass roots e-governance.

OBJECTIVES AND MISSION

This casebook has tried to give a thorough look into hypothetical and empirical aspects of the e-government systems with in-depth analysis of various e-government implementations, put forward several successful e-government projects across the world, and justify the enhancement of e-governance in the society, nation and globe through appropriate implementation of e-government systems. Overall objective and mission of this casebook is to assist its readers to understand the basic natures and aspects of e-government systems; able to design secured, privacy upheld and safe system that would be self empowered, independent, accountable, responsive, easily accessible and transparent; learn to utilize the
e-government systems through comprehensive design, easier functionality, optimum output, less costly, time saving and simple. The mission is to guide its readers in establishing e-government projects focusing grass roots e-governance to empower the people at large for improved governance.

TARGET AUDIENCE

Being a casebook on e-government systems, it has manuscripts covering aspects of the e-society, such as e-learning, e-procurement, e-health, e-democracy, e-complaint, e-emergency, and other e-applications and e-services. Therefore, this book will be useful to the development partners, policy makers, government and non-government staffs, knowledge managers, researchers, academics and individuals. Furthermore, readers of this casebook will be enlightened with various e-government methods and systems across the world, learn about their characteristics, implementation, operation and evaluation plans including technical aspects of e-governance like, infrastructure, legislations, management, evaluation and benchmarking.

ORGANIZATION OF THE CASEBOOK

The casebook has been divided into three sections. First section focuses on foundation, benchmarking and evaluation of e-government projects or programmes discussing laws, jurisdictions, and policy matters related to e-government; benchmarking of e-government system; assessment of e-government policies and systems; comprehensive analysis of e-government implementations; performance and effectiveness measurement of e-government system; and examine their strengths and weaknesses. This section has four chapters, and all of them has tried to focus design, policy, assessment, performance and effectiveness issues on their illustrated cases.

Chapter 1 sets out with basic discussions about establishing grass roots e-government management through community practices and provides thoughts on technical, logical, managerial and policy issues. Governance systems nowadays do not only enclave simply the dissemination of government regulations and directives to their stakeholders, but also target to improve their knowledge and capacity. This research feels that to improve the governance system, inclusion of grass roots participants are necessary and nurturing of community practices targeting to raise their knowledge and skills through an adoptive e-governance framework that would enhance the process. It put forwards a global case, SDNP of UNDP in local perspectives, focusing SDNP Bangladesh.

To strengthen further, Chapter 2 argues that national ICT policy should aim to provide formalized services across a nation while recognizing the importance of localized specific services. Focusing on Indian context, this chapter discusses about various mission mode projects under national e-governance plan (NeGP), and mentions that manifestation of such approach has resulted in 100,000 common service centers (CSC) in rural areas. Furthermore, it is expected that through these CSCs, rural citizens would be benefited to raise their livelihood standards and this process may contribute for effective governance.

Among these formalized services, one essential element is to reach the people at large with faster mechanism of transaction, in terms of information delivery or concluding a financial transaction. Chapter 3 discusses about use of e-filing system that has been introduced in Malaysia. Along this context, this research has made some critical assessment of the system on security, usefulness, easy of access and
users’ retention. The research has also made recommendations to improve the e-filing system focusing e-governance.

The first section concluded with Chapter 4, which highlighted on various policy issues, objectives and action plans of two success cases in Asia on promoting grass roots e-governance. This chapter focuses on two cases (e-Sri Lanka and e-Korea), which penetrated the grass roots reaching out to the community level; act as catalyst to strengthen their national economy and government. The research emphasizes that cumulative human development through community approach would be the next level of knowledge dynamics across the world. It also argues that as much the country provides thrust on capacity development initiatives at the grass roots, the country has more opportunity to achieve better governance.

Next section forms the core part of this casebook and incorporates six cases focusing on operation, management and innovation aspects of e-government projects or programmes discussing designing of e-government system giving in-depth look into the e-government structure and processes; adoption of appropriate solutions and utilities providing technological and procedural form of the solution; and inclusion of decision supports tools and techniques.

Chapter 5 put forwards a case on the re-organization of the Dutch emergency response sector. It involves the diffusion and implementation of new communication and information technologies (ICTs), the introduction of safety regions and the establishment of co-located emergency response rooms (ERRs). The impact of the reorganization is illustrated by two embedded case studies: new ICTs in the safety-regions Hollands-Midden and Amsterdam-Amstelland. What the case shows is that the implementation of new ICTs in the Dutch safety-sector is not just a matter of technological skills, but of a mutual shaping of the ICTs and the organizations to enhance platform of e-governance, in this aspect the emergency response system serves as an important element.

Chapter 6 is discussing about application development for government purposes, and evaluation of projects utilizing various software technologies like, analogy, crisp and fuzzy estimation and measure models. As a case study from Czech Republic, the chapter introduces selected methods designed for complexity estimation. Each method is introduced first, then its step-by-step computation procedure is described and finally suggestion of software was made, which is supported by computation procedure. However, efforts are given about the implementation of this form of estimation approach in the area of ICT governance, especially at the grass roots e-governance.

Along this application development, easily accessible, simple, user friendly, robust, transparent, responsive and secured applications are essential in establishing multi-dimensional e-government systems. Next three chapters are illustrating the adoption of open source software in building e-government models; improving financial transparency by utilizing web interactions; and improving public service performances through e-complaints via web interfaces. These three cases are from Turkey.

On the way of creating a level playing field in terms of competition and resources, role of free and open source software (FOSS) is gaining its importance in many aspects of information technology systems. FOSS has been increasingly used both in public and private organizations in order to contain costs, increase software transparency, reliability, information security, and many other reasons. Chapter 7 has tried to identify and examine the arguments and actors, who have promoted and opposed the use of FOSS in the Turkish public sector. It also analyzes how these actors organize the processes of adoption and presents the discourses that they used to affect the open source-related policy decisions. In this context, the main aim is to link FOSS to the e-government processes, intending this manuscript as an enabler literature for grass roots e-governance improvement.
Fiscal transparency today is considered as an essential element of good governance. It has been found that e-government technologies, especially the Internet are supportive to the efforts on the part of governments offering unprecedented opportunities to public administrations enabling the dissemination of fiscal information and improving the e-governance system. Chapter 8 is discussing a case of Turkey, where reforms been made through new laws in early 2000 containing various legal and institutional regulations to improve fiscal transparency and encourage the public administrators to use websites to enhance fiscal transparency. This chapter, within the context of evaluating the endeavors in question, examines the websites of municipalities in Turkey in terms of fiscal transparency and eventually presents some suggestions for the improvement of the e-governance system.

To reach out the people at large of a community or a nation, it is imperative to have a common platform of interaction. This applies both to top-bottom interactions, or bottom-top interactions, despite nowadays, it has been argued that there should be both ways of interaction in each channel. Discussing about reaching to the national hierarchy from the bottom level, vice versa, Chapter 9 talks about how an NGO may have its place in e-governance model. This chapter is focused on a project from Turkey, ‘Sikayetimiz.com’, which is an e-complaint on-line model providing various support services to the people at large, discussed about its transformation stages leading to this format, and put forward some important managerial and organizational issues including operational challenges.

Last chapter of this section is on utilizing community knowledge records to improve healthcare system, as an enabler of e-governance. Chapter 10 investigates the potential of community knowledge records (CKRs) in the electronic transformation for healthcare provision in Macau. Of specific interest is the electronic governance (e-governance) context to examine the various ICTs for personalized healthcare support, such as the electronic health (or e-health) records (EHR). This chapter explores the context of citizens’ e-health provision, including the EHRs considered as the digital records of personal medical history, accumulated from cradle to death.

Finally, section three focuses on knowledge management and research, featuring learning and knowledge development; economic empowerment, social empowerment, and sustainable development; and some more lessons learned from various global e-governance systems. This section comprises of four cases, one from UNEP, one from Australia, one from Greece and the last one consists of a research case based on studies conducted in Finland and Germany. The first one, discusses on environmental issues, the next one discusses about the character of Chief Information Officer in the public sector as a role model in improving e-governance, the third one is a research case on an European project, and the final one discusses about an extremely challenging issue on e-governance, which is delivering the benefits of electronic government to the vision impaired communities.

In the days of global warming, environmental issues represent some of the world’s greatest crises and at the same time, most significant opportunities. The United Nations Environment Programme (UNEP) is a global leader in tackling such issues, and UNEP’s Global Environmental Outlook (GEO) relies on contributions from many experts from all regions of the world. Because capacity development is critical to UNEP’s ability to fulfill its mandate, UNEP collaborated with the International Institute for Sustainable Development (IISD) to commission more than 50 experts to develop training resources for integrated environmental assessment and reporting at the sub-global level. Chapter 11 is discussing these capacity development issues using format of eLearning. This research has further developed a blended learning, Train-the-Multipliers program to train facilitators. The research argues that this form of eLearning implementation has clearly demonstrated potential and is advancing e-governance at global, regional, national and sub-national levels in the area of environmental assessment and reporting.
Chapter 12 presents a model which depicts the critical role of Chief Information Officers (CIOs) and assists in understanding the demands and effectiveness of CIOs in the public sector. The chapter explores the literature on public sector CIO addressing personal and professional characteristics. It also reviews the literature pertaining to the responsibilities and career advancement and future directions in Government departments. The authors adopt a qualitative methodology by which semi-structured interviews are conducted with CIO representatives from a State Government in Australia. From collation of the interview results, utilizing a ‘mind mapping’ strategy, the chapter identifies a model that adequately reflects the critical factors required for a public sector CIO. The chapter concludes that there are certain unique characteristics and responsibilities that a public sector CIO must possess yet a private sector CIO does not require. The chapter also acknowledges the importance of outlining a future direction of the role; something which is neglected by the literature.

Vision impaired people are in a distinctive disadvantage when using computer screens based on visual presentation of data. Furthermore, their situation becomes increasingly critical, as most society services, such as e-Commerce, e-Business, e-Health, and e-Government are on-line. However, effective ICT can open up new communication channels and functionalities for even totally blind people, which would not have been available for them otherwise. Chapter 13 discusses on the activities public authorities need to take when assisting vision impaired people, especially in the field of e-Government. This research has put forward a study, what the Finnish and German authorities have made to support vision impaired people.

Chapter 14 describes experiences acquired during a research work conducted as part of the European project Tell Me (www.tellmeproject.eu). The project envisaged to support the pan-European creation of Living Labs as new forms of cooperation between government, enterprises, citizens and academia for a successful transfer of e-Government, e-Democracy and e-Services state-of-the art applications, solutions, know-how and best practices. This chapter explores the potential of providing an existing system (DEMOS) allowing moderated and goal-oriented discourses between the citizens and the policy makers to become parts of open-ended ventures to allow the creation of collaborative networks for electronic democracy.

CONCLUSION

As mentioned above, electronic government (e-government) is the provision of government information and services in the networked environment, intended to make government more accessible to citizens, businesses and other government agencies. However, most of the e-government systems at the earlier stages are being built to exactly mimic the age-old conventional procedures or processes, and virtually computerized the traditional methods and procedures. The notion was to minimize the design and implementation cost and at the same time to expedite the transformation process faster, without much entering into basic research. The electronic solutions were implanted into government offices without looking into the transformational aspects (mental, organizational, physical, logical, technological, economical, cultural, working style, etc.) and not providing the entire eco-system for long-term sustenance (Timonen, O’Donnell & Humphreys, 2003; Accenture, 2004; Katre, 2007; Paul, 2008).

At the same time, most of the early implementers were naïve in formulating e-government system, and they were experimenting through various implementation techniques by replicating an existing system imported from elsewhere, often creating a circle-of-repetition by duplication of efforts and over utilization of resources. As a result, a majority of the earlier implemented e-government systems in
many countries could not see the light of success. Moreover, this failure of the system cascaded, especially in developing countries where funding is scarce, technology is inadequate, skill is low, policy is hazy, culture is eccentric and mindset is turbulent (Gupta & Jana, 2003; Brown, 2005; Kovačič, 2007; Choudrie, Wisel & Ghinea, 2009).

Furthermore, e-government has little impact in the absence of any effort or thrust at the national level that includes policy makers, government and non-government agencies, academics, researchers, entrepreneurs and individuals. Most of the success cases of e-government around the globe that has been incorporated in this casebook portray effective participation and sustained patronage from the government, the entrepreneurs, the civil society, the research sector, the development partner and the academia. This has also been observed that majority of the stakeholders within an accomplished e-government system become benefited from being within the system, not from being an outsider.

This casebook has tried to include researches, cases, and studies accommodating various e-government systems across the countries focusing inherent benefits of e-government within the system to improve the livelihood of the communities, people at large and individuals. Ranging from design, implementation and operation of e-government systems, this casebook has tried to provide analytical approach into the system through available techniques and methods. These incorporate benchmarking on implementations, ranking of the system, evaluation in terms of its usefulness, effectiveness and impact in the society (measuring short, medium, and long-term implications), and ultimate benefit (societal, entrepreneurial, public, edutainment, etc.) of the system in the overall improvement of the government system focusing grass roots e-governance.

REFERENCES


Bridges dot org (2003). *Provincial Government of the Western Cape Cape Gateway Project Evaluation*, A report of the Knowledge Economy & E-Government Branch of the Provincial Government of the Western Cape and bridges.org


