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Chapter 1

Managing Software Architecture in Domains of Security-Critical Systems:
Multifaceted Collaborative eGovernment Projects 1

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This chapter describes the management and technological considerations on software architecture and the executive approach to projects that need security-critical and multifaceted requirements. This results in several agreements, one of which is to promote measures regarding the exchange of information from the private sector through public networks. The authors put forward ways to approach these issues and their difficulties from the perspective that there are technical-administrative e-Government models that can be applied to developing countries and encourage a global alliance - in line with the United Nations Millennium Goals (MDG) - for development that will help attain the remaining goals in the immediate future.

Chapter 2

Big Data on E-Government27

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All aspects of big data need to be thoroughly investigated, with emphasis on e-governance, needs, challenges and its framework. This chapters recognizes that e-governance needs big data to be reliable, fast and efficient. Another principle is that the trust of a citizen is the main concern. The extraction of meaningful data from large variety of data is a critical issue in big data hence new approaches must be developed. This chapter basically discusses the key concepts of veracity in big

data on e-governance. Its main aim is to provide the comprehensive overview big data in e-governance. E-government is still struggling to move advanced level of development. Current e-government applications handle only structured data and sharing between the applications is also difficult.

Chapter 3

Hybrid Biometrics and Watermarking Authentication37

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There are many tools and techniques that can support management in the information security field. In order to deal with any kind of security, authentication plays an important role. In biometrics, a human being needs to be identified based on some unique personal characteristics and parameters. In this book chapter, the researchers will present an automatic Face Recognition and Authentication Methodology (FRAM). The most significant contribution of this work is using three face recognition methods; the Eigenface, the Fisherface, and color histogram quantization. Finally, the researchers proposed a hybrid approach which is based on a DNA encoding process and embedding the resulting data into a face image using the discrete wavelet transform. In the reverse process, the researchers performed DNA decoding based on the data extracted from the face image.

Chapter 4

An Empirical Investigation of M-Government Acceptance in Developing Countries: A Case of Kenya.....62

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Technological development in the past decade has motivated governments in developing countries to focus on leveraging new technologies for efficient and effective public service delivery. M-government has been singled out as one of the fundamental aspect for socio-economic growth in developing countries. Therefore, this study aims at investigating the factors that influence individuals in adoption of new technology, specifically m-government in the context of developing countries. Precisely, this study was to present and empirically validate a research model based on user behavior that examine m-government acceptance in developing countries and

inspect the moderating role of facilitating conditions on m-government adoption. The research model was tested using data from 248 respondents from Kenya, surveyed between August and September 2011. The results indicated that the proposed model explained a variance of 60.5 percent of behavior intention to use m-government. In addition, facilitating conditions were found to be a crucial spur to m-government acceptance in developing countries.

Chapter 5

A Smart Government Framework for Mobile Application Services in Mongolia90
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The Smart Government is the advanced e-Government which has been indicated as an emerging global trend in public service delivery. The utilization of Smart Government mobile service is having various numbers of challenges including complexity of different technologies, and reducing duplication among existing and new systems in the application field. In order to get over these challenges, an integrated, an innovative and common system architecture is required to design for the mobile services of Smart Government. Hence, this study designed and proposed “A Smart Government framework for mobile application services” to integrate common parts of the application service. The research covered mobile application service components, and centered on mobile G2C and C2G interactions in the front-office application domain. In addition, the Federal Enterprise Architecture Framework is used, and designed architecture followed up recommendations are proposed for decision makers, government officials, researchers who related to ICT and e-Government.

Chapter 6

Cloud Computing in E-Governance: Indian Perspective 104
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Cloud Computing is becoming a rapidly accepted and deployed paradigm both by individuals and organizations alike. The government of various countries is also moving its services to cloud to offer better and just in time services to the users. This chapter explores the basic concepts of Cloud Computing, which includes the main features of Cloud Computing, the cloud deployment models, the services offered by the cloud, motivations behind adoption of cloud by organizations, in general and by the Government, in particular. We also lay an insight into the various Cloud Computing initiatives taken by the Government of India to facilitate its citizens with easy access to information/services.

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The ever-developing technology is multifaceted, not only in technical specifications, but also in mode, type and characteristics. New technologies are designed and produced, new ways of using these technologies also are being suggested, tested and adopted. Telecommunications and digital technology provide today remarkable smart technologies that enable people to capture, process, maintain, disseminate and store efficiently all kinds of information at very fast speed, with high degree of efficiency and correctness. Much of government data collected are continuously affected by the development in such technology. Recent trends of technology currently and for 2017 and beyond have shown that the impact of such trends will enhance the impact on the way governments handle data. This chapter presents an overview of such trends. However, a common strategy for government data should be developed in a concise way that will guide the process of dealing with the trends of modern technologies. Therefore government data platform will adopt new technologies, new hardware and software but essentially the way government data is kept and managed still remain the same, just new tools have been adopted.

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The success of government data platforms and systems do not depend only on technology. There are other issues that affect this progress. Some of these are very essential to the continuity and not only the implementation, such as leadership. Other issues are the absence of a clear well adopted policy and legal framework that governs its data, security of data, cyber legislation and laws. The government-provided ICT resources and the infrastructure would also be an important issue that would affect government data. Financing is also another critical issue. For developing countries, sustainability of development is a necessity for best impact of development projects. As it is adopted by the United Nations, sustainable development goals (SDG's for the agenda of 2030) have substantial dependency on information and communications technology. All goals practically require government data in one way or another, and hence sustainable development is directly related to government data should successful development is sought. Other issues include open data, open government. This chapter discusses such issues and sheds light on ways of handling them.

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