The survival of an organization in this dynamic and competitive environment depends on how effectively it learns to adapt itself to the environment and capitalizes its resources fully. In this globalization era, investments in capital and fixed assets alone no longer guarantee the success of the organizations, if they are not effectively managed.

Information and communication technologies (ICTs) are continuously transforming traditional mode of transactions including government, businesses, and their stakeholders. Along with public awareness and Internet usage the demand for online transactions and simplified, standardized ways to access government information, and services increases. Governments are aware of the limitations of internal administrative practices, and are struggling hard to deliver effective and economical e-government services.

Governments all over the world have deployed thousands of e-government solutions. However, results of such efforts and investments are discouraging: According to World Bank estimates, almost 85% of the systems fail totally or partially, indicating a loss of investment in money and resources. Some of the major issues and challenges governments face all over the world include uneconomical e-government services, inadequacy of ICTs infrastructure, non-integrated e-government services, and so forth. Therefore, there is an urgent need to design and suggest an effective e-business model for the government.

E-business model is used in the literature interchangeably for the government and non-government transactions. There have been several attempts to classify e-business models in order to understand how organizations can sustain themselves in this competitive dynamic electronic environment. Several scholars, academicians, consultants, and industry experts classified e-business models on the basis of several streams. The major categories include product stream, infrastructure stream, and the value stream. These classifications and their interrelationships describe the logic of an e-business model for creating value that lies behind the actual transactions. A successful e-business model represents a better way than existing alternatives. It may offer more value to a discrete group of stakeholders. Or it may completely replace the old way of doing things and become the standard for the next generation of entrepreneurs to beat. The basic objective of an e-business model is to enhance competitive performance of institutions. When a new business model changes the economics of an industry and is difficult to replicate, it can by itself create a strong competitive advantage for the governments.

The objective of this special issue is to promote research initiatives and address some of the pressing issues on the government aspects of e-business. Subsequently, a call for papers was initiated. The central focus of this special issue is on theoretically and empirically based research addressing e-government service delivery to citizens and businesses, cross-agency integration of processes, and analyzing and designing e-business models for value creation in government services.

The call for papers was sent to around 600 research institutions, consultants, academicians, and industry experts all over the world, that attracted enormous interest in addressing e-government issues; and after a stringent blind refereeing
process, six papers were selected for publication in this issue. The manuscripts address a wide range of issues: citizen’s acceptance of e-government, multi-agent, service-oriented architecture, horizontal process integration, Web technologies as a viable service delivery solution, and designing e-business models for value creation in public service networks.

G. P. Sahu and M. P. Gupta, in their research paper “Users’ Acceptance of E-government: A Study of Indian Central Excise,” seek to lay down such a model, which highlights the factors that lead to acceptance or rejection of information technology by government employees. The study pertains to e-government applications in the Central Excise of India which is a part of Department of Revenue under the Ministry of Finance and responsible for collection of indirect taxes like excise levies and service tax. The authors used the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) models to carry out these research initiatives. The study suggests that to achieve higher acceptance, apart from the several other factors identified, user awareness of e-government services is essential. The users’ trust depends heavily on increased transparency and therefore organizational reform must follow to ensure users’ trust, and in turn, success. The recommendations of this study will be helpful in developing and implementing plans in e-government.

Jyoti Choudrie and Vishanth Weerrakody in their manuscript have proposed “Horizontal Process Integration in E-government: The Perspective of a UK Local Authority.” The research is timely, as governments around the globe are becoming technically savvy and the issues of integrating various and diverse departments are becoming important. In this paper the research examines how horizontal integration among the various departments of a local authority in the United Kingdom (UK) occurs in order to deliver e-services to the citizens in the vicinity. The objective is to extract the “success factors” in government intervention that support horizontal and vertical integration based on the strategies pursued in the UK, in order to render favorable results if applied elsewhere. To achieve these objectives, the researchers have selected the four-stage (cataloguing, transactions-based, vertical integration, and horizontal integration) growth model. The authors have illustrated the link between the various information systems and the level of integration required among these systems to overcome the challenges faced by local councils in general in the context of delivering efficient and effective local government services to citizens.

A Web-based system portal (at a conceptual level) has been suggested to overcome these issues. The evidence of the case study suggests that there are still a number of deeper process and systems integration issues that need to be addressed at both local and central government levels before fully integrated services are offered to citizens through a single point of access. The authors concluded the paper with the statement that e-government integration on a horizontal level obtains significant efficiency and effectiveness as more and more public services are being centralized.

Efficient realization of e-government through the Web, from a citizen’s perspective, is asserted by perceived usefulness along with the ease of its use. To achieve this, the government needs reliable Web technologies that are efficient, speedy, and support a transparent framework while disseminating information to the public and to other agencies that perform activities related to government administration. Dilip Kumar Sharma, Gopalji Varshneya, and Ashwani Kumar Upadhyay presented “AJAX in Development of Web-based Architecture for Implementation of E-government.” The paper analyzes the diffusion of Web technology named AJAX (Asynchronous JavaScript and XML) in facilitating e-government architecture and enhancing its potential by ennoblement of modern Web features. After having a discussion on alternative Web technologies for interactive Web development, the authors recommended the use of AJAX, as it allows updating only a specific section of any Web page, hence, the process consumes lesser bandwidth and increases the speed of interaction. In high congestion networks, AJAX can come as a rescuer for being functional even in less available bandwidth situations. It also provides a clean and simple interface to the users with ease of access, so that even a non-technical user can use the interface with full effect. Using a market study, authors’ study consolidated feasibility of AJAX for e-government applications.

There is an emergent need for the governments to make a decision as to which business models to adopt, and consideration should be
given to what coordination challenges different business models may engender, as well as which ones are worthwhile to invest their resources. Marijn Janssen and George Kuk, in their paper on “E-government Business Models for Public Service Networks,” provided a framework that examines the business and the coordination logics underpinning an e-government business model that involves the design and implementation of a public service network. The authors have drawn upon the literature on resource-based view and dynamic capability and coordination theory to develop a framework to examine three types of e-government business models. The authors tested these three models using three cases—portal, business orchestration, and shared services. The framework is useful to understand and analyze the relation between service offering and the challenges of coordinating public service networks to ensure that it covers all basic network coordination forms. The business processes resulting from this framework are expected to improve service offerings for customers. The case studies show that, not only that it is imperative to understand the service provisioning logic to gain advantages of each other’s resources, but also the need for knowledge management capabilities to improve their service offerings. The bottom line is that the service offering is determined by public organizations’ ability to coordinate the interdependencies among network members by minimizing resource consumption and adapting to these situations using their intra- and interagency capabilities.

Jonna Järveläinen, Eija Koskivaara, Päivi Pihlaja, Hannu Salmela, Jarmo Tähkäpää, Timo Kestilä, and Jarmo Tähkäpää, in their paper on “Value-creating e-government Business Models for Early Childhood Education in Finland,” applied Amit and Zott’s e-business value creation methods to an e-government environment, namely early childhood education in Finland (ECE). A collaborative action research study was used to find out what kind of information is required to forecast the demand of ECE services, and how is the overall guidance of the ECE services and entrance into the ECE services managed? In the ECE processes (B) interest cluster the work focused on recognizing routine work in day-care centers, which has been done manually, and then attempting to find a technological solution that would transform the manual work to automatic. Interest cluster C initially had four main themes, which were integrated into two main areas. Each working group generated several IT solutions for different ECE development problems, which mirror the value creation methods presented by Amit and Zott. The method used in this study emphasized interorganizational collaboration in analyzing the business rationale behind different ideas.

There is a need to view the implementation of e-government initiative by considering not only technological build ups but also by understanding the variety of institutional, organizational, and managerial dimensions. Tagelsir Mohamed Gasmelseid has proposed “A Multi-Agent Service-Oriented Modeling of E-government Initiatives.” The paper emphasizes the need for an integrated architectural approach for the management of distributed e-government services by coupling service-oriented architectures with multi-agent technologies. The growth of e-government applications under this architecture follows a waterfall-like conventional modeling perspective closely related to the Layne and Lee model, which includes four phases of e-government growth: cataloguing of information on a Web site, transactions on a Web site, vertical, and horizontal integration. The author has taken a case study of Sudan to illustrate his point using this growth model. After describing the telecommunication infrastructure used for the implementation of the e-government in Sudan, the paper adopts a distributed e-government deployment approach, service-oriented architectures coupled with multi-agent systems’ technologies. The architecture proposes the use of remote transaction journaling and electronic vaulting systems to facilitate “data and system mirroring.” The author has suggested implemen-
tation of this work using XML and “Concordia” to gain the functionalities of “mobility,” “accessibility,” and “interoperability.” The proposed model can be used in the future on a larger scale for the provision of sophisticated services (such as electronic medicine and computer supported collaborative work systems).

Many people provided useful help during the preparation and production of this special issue. First of all, I would like to thank all authors who submitted papers for this special issue—not only the authors whose papers have been selected, but also all other authors who submitted papers. Due to the limited volume of the journal, I had to make some tough decisions to exclude several interesting papers. Due to the large number of submissions received, reviewing all the papers was not a trivial task. I would like to thank everyone who helped with the review process. Without their timely effort and constructive criticism, this special issue would not have been possible. Unfortunately, I am unable to thank each of them individually here due to the large number of people involved, but their support is greatly appreciated. Dr. Mehdi Khosrow-Pour, editor-in-chief, and Ms. Kristin M. Klinger, acquisitions editor, have been extremely helpful in their usual friendly and organized manner. They provided valuable assistance and practical guidance throughout different stages that helped me to march toward excellence in my efforts.

I hope you will find this special issue informative, thought provoking, theoretically challenging, and practically useful. We welcome any comments, feedback, suggestions, and constructive criticisms.

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