Preface

The governance of social systems reflects political values, involving control between citizens and their representatives. These values determine the evolution of the mix among such factors as institutions, technology, history, culture and economics that define political processes. Each of these factors is constantly changing while having an impact on each other.

Experiences involving the mix of these factors take place in anarchic, totalitarian and democratic contexts as well as in societies in transition. Changes among these factors can reinforce or modify the approaches social systems have to govern themselves.

Just as the internet is increasingly changing government processes, recent social networking applications such as Twitter and Facebook have more recently affected democratic processes too, by providing citizens with additional powers and a real capability to influence their government representatives and bypass official communication channels. Some recent examples include, China's July 2009 regional information blockade, including a total shut-down of the Internet, following the Uighur unrests ("full" Internet usage was restored to Xinjiang ten months later). And then, of course, there is Iran where, beginning in June 2009, the organizing power of cell phones and social media, and their ability to capture and disseminate images like the death of a young Iranian woman, Neda Agha-Soltan, arrested the world's attention. Most of the news that reached the West from Iran came via YouTube and Twitter. Thus, Information and Communication Technology is promoting a more democratic governance in today's knowledge society that highlights the importance of analyzing some "best practices" on local, national and regional strategy and practice of e-Governance in different societies from around the world.

This book focuses on the efforts of those societies seeking to become more democratic experiences through the application of advances in information and communication technologies (ICT) in public administration (e-government), and on processes and transformations leading to become more inclusive and participatory societies (e-governance). As such, the contents of this book provides a "snapshot" of the diversity of efforts to identify and understand the conditions for effective approaches and techniques for strengthening the process of democratization by deploying ICT. It does not attempt to offer simple solutions to complex problems but rather document practical approaches and experiences in a variety of local and national contexts, that might provide insights that could be integrated by others in their own context.

Data gathering, information processing and knowledge creation are essential capacities for economic and social development. ICT can enhance the development process in both the developed and developing world by creating new opportunities in the generation, transformation and distribution of information and knowledge, lowering transaction costs, accelerating the process of innovation and building trust

between citizens and Governments. Good governance can contribute to economic growth while economic growth can contribute to good governance.

The rise of ICT led to the creation of the Information Society and the Information Society has led to the present Knowledge Society, where the application of technology evolves in economic, social, institutional and cultural contexts, creating and expanding capabilities and responding to new incentives. This can create a virtuous cycle, triggering a new economy (the Knowledge Economy), where the benefits come from the exchange of knowledge produced locally or imported and adapted to local conditions.

Several research studies point to the potentially, but not inevitable, positive relationship between ICT investment and the increase in productivity and competitiveness. These studies suggest that: (a) the relationship between ICT and growth is obvious in developed economies that have already reached a threshold in its distribution and use; (b) there is a time gap from the start of investment and the resulting increases in productivity and growth due to the process of assimilation and adaptation of ICT; and (c) education, innovation, human capital; social inclusion and a favorable economic environment are keys to exploiting the potential offered by ICT.

Although the conclusions of these research studies vary according to context and implementation strategies, they all seem to concur on one essential aspect: access to information and the production and adaptation of knowledge can transform production processes, increase labor productivity, and improve the living conditions of the citizens.

The experiences described in the chapters of this book can be summarized as follows: ICT is a tool, which coupled with investments in factors of competitiveness, such as innovation, education, social inclusion and government policies facilitating changes, can contribute to economic growth and social development, triggering a virtuous cycle leading to a Knowledge Economy. Furthermore, the diverse ICT experiences described in the following chapters reveal some common factors that limit the deployment and appropriate use of ICT: (a) the limited institutional ability to articulate and promote public policies for the distribution and use of ICT, (b) the limited network coverage and the high costs of access to ICT, and (c) the lack of digital education enabling interaction with ICT and the scarcity of content that is of interest to the local population.

By the same token, there are some factors that are common to the numerous successful experiences in ICT in public administration from around the world. This book presents some of those experiences as "best practices", in order to inspire other countries in the deployment of ICT for better governance in all aspects of human-life. In general, the positive factors characterizing those experiences are:

- political support;
- an integrated and long-term vision;
- institutional and technical capability;
- the participation of the private sector;
- a favorable environment (infrastructure, regulatory framework), and projected levels of investment.

In recent years, the countries represented in this book have invested significant effort and resources in ICT initiatives, and in general there has been progress. Important lessons have been learned:

- it is essential to work with a medium and long-term vision, concrete goals, and a will to coordinate between and among different initiatives;

- there is a gap in the know-how to absorb available technological resources and use them to benefit development needs. ICT investments must be combined with people's ability to use them in a creative and appropriate way;
- the rate of technological innovation accelerates technological obsolescence. Solutions must be designed to ensure the sustainability of the infrastructure;
- many organizations are aware of their limits and how these can be tackled by using ICT, but few know how to accede to financing;
- there seems to be an opportunity for the establishment of mechanisms to transfer technology between and among countries in this book and other regions of the world;
- in poor and marginalized areas, the biggest challenge is to demonstrate the benefits of using ICT.

In particular, we would like to draw the basic principles for a global ICT-based strategy from the best practices presented in our book that incorporates the integral dimension of e-governance, within the context of "managing changes" at local, national and regional levels, bearing in mind that there are no simple solutions and the "factors" and mix of factors are constantly changing. In the list below, for each element of the strategy, we indicate the corresponding chapters of the book:

1. **Creation of a favorable environment for the distribution and use of ICT:** For ICT to contribute to development, the environment must facilitate its spread and use in institutional, business and social contexts. The strategy will support the development of initiatives that contribute to complete the process of liberalization of the telecommunications market, increase the use of ICT, combine regulatory measures with public-private initiatives to extend connectivity and adapt tariffs, and create assurance and confidence in the public, social and commercial use of ICT through the formulation and application of norms, edicts and/or laws, among others. (chapters 4, 13, 15, 16)
2. **ICT in support of the modernization of the State:** ICT is a key tool for the modernization and transformation of the State, within the continuous effort to improve trust between citizens and Government. This strategy pursues initiatives aimed at establishing a modern, professional and transparent public administration, so as to improve the efficiency and transparency of the management of expenditures, promote the participation of society in the formulation of public policies, improve and extend the coverage of public services, especially to the excluded sectors, increase fiscal responsibility, and decrease fraud. (chapters 4, 6, 7, 14, 17, 25)
3. **ICT in support of competitiveness:** This strategy promotes initiatives that support innovation and the transfer and implementation of ICT to increase productivity, competitiveness and sustainable economic growth, which are determining factors in achieving a dynamic economy. The strategy prioritizes the needs of the SMEs, micro-firms and rural producers, as well as the needs of sectors offering a high potential of economic development and job creation like the ICT sector, which is favored by its own technological advantages to compete in a global market. (chapters 3, 9, 10, 12, 21)
4. **ICT in support of social development:** Social development is a fundamental element to reduce poverty, promote equality and improve the well being. The distribution and appropriate use of ICT can accelerate social development and broaden its impact, especially in the areas of health and education. (chapters 1, 2, 5, 11, 18, 19, 20)
5. **ICT in support of regional integration:** The creation of Regional Public Goods aimed at implementing sustainable economic growth and reducing poverty contributes to regional integration,

providing the economies with a better position to face the forces of globalization. ICT can contribute to the process of regional integration, specifically in the promotion of regional infrastructure, the consolidation of regional markets, and the strengthening of institutions. (chapters 22, 24, 26).

Besides the components of the global strategy emerging from the examples discussed in the book, we would like to add a further element that complements the strategy. It is an element that in our view will become more and more central for any future discussion on E-Governance:

6.   **ICT in support of the environment and in responding to natural disasters:** The protection of the environment and the management of natural resources are increasingly important factors for achieving sustainable development and improving quality of life in general. This strategy proposes to utilize ICT in addressing environmental issues and protecting natural resources, and in preventing, mitigating and managing natural disasters.

The current volume of programs and financial initiatives of the multilateral development organizations and national agencies around the world requires an effective coordination effort, so that initiatives complement each other, avoiding duplication. To this end, it is imperative to strengthen communication between involved organizations and to consider their plans in the design and continuous evaluation of projects. Since every country is different, an international effort toward harmonization should be pursued in the process involving the integration of ICT in public administration and democratization.

We hope this book will contribute to global efforts in order to ensure that all countries generate the political will needed to effectively use ICT and expand their Knowledge Economy to become more democratic and participatory knowledge societies, in a new world ruled by a new e-Governance.

We wish you a very good reading!

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