Rodrigo Sandoval- Almazán Luis F. Luna-Reyes Dolores E. Luna-Reyes J. Ramon Gil-Garcia Gabriel Puron-Cid Sergio Picazo-Vela

Building Digital Government Strategies

Principles and Practices



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Principles and Practices



Rodrigo Sandoval-Almazán Political and Social Sciences School Autonomous University of the State of Mexico Toluca, Mexico

Dolores E. Luna-Reyes
Department of Industrial and Mechanical
Engineering, Universidad de las
Américas Puebla
Cholula, Puebla, Mexico

Gabriel Puron-Cid
Department of Public Administration
Centro de Investigación y Docencia
Económicas, A.C. (CIDE)
Aguascalientes. Aguascalientes. Mexico

Luis F. Luna-Reyes
Department of Public Administration
and Policy, University at Albany
State University of New York
Albany, New York, USA

J. Ramon Gil-Garcia
Department of Public Administration
and Policy & Center for Technology
in Government
University at Albany
State University of New York
Albany, New York, USA

Sergio Picazo-Vela Department of Business Administration Universidad de las Americas Puebla, Puebla, Mexico

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Foreword

At the dawn of the twenty-first century, we are able to witness the advent of new technologies that are adopted and appropriated by people, businesses, and governments around the world. Social media; cloud computing; open, big, and linked data; and other digital innovations are being used to connect people, to facilitate access to computing resources, to deliver innovative services, and generally to improve our quality of life. Such technologies deeply transform people's daily behavior and interaction with businesses, governments, and each other. They also transform institutions—how they conduct operations, deliver services, and cooperate.

Such transformations are associated with not only benefits but also risks and challenges. Among them are deepening digital and social divides between those who have access and can benefit from new technologies and those who do not have access or cannot benefit from access, exposure of our personal data on digital platforms and consequent threats to our privacy, and manipulation of people's sentiments and fears through precisely targeted political marketing based on the personal data available about them. Examples of government challenges include classification of government information to decide which data can be disclosed to the public and which one should be kept closed on the grounds of national security or individual privacy; countering cybersecurity attacks on nations, institutions, and people; or building capacities within institutions to be able to utilize new technologies and address their negative effects.

The commitment and responsibility to address such risks and challenges rests primarily with government institutions. This commitment includes efficient and equitable delivery of public services, ensuring and protecting social equity and inclusion; building social consensus to address threats of violence, social instability, climate change, and others; and protecting national, urban, and territorial assets and interests. At the same time, governments are expected to respond to citizen needs, to facilitate citizens' participation in public affairs, to increase transparency in their operations and decision processes in order to build trust, to empower various social and economic actors to take responsibility for their own development, and to ensure proper use of scarce public funds. To fulfill their missions and to

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provide effective responses to existing and new problems facing their communities and territories, government organizations should have sufficient resources, capacities, and partnerships.

Undoubtedly, digital technologies serve as essential tools for government organizations today. During the last two decades, governments have been utilizing the latest technological inventions to respond to the problems and challenges faced by their societies and to transform themselves in the process. According to the well-known digital government evolution model, such transformations take place in four distinctive stages: deployment of technology to digitize and automate government operations (Digitization stage); deep transformation of government structures and operations to improve internal efficiency and facilitate institutional and administrative reform (Transformation stage); involving citizens and other non-public actors in government decision-making (Engagement stage); and creating better conditions for pursuing development within healthcare, education, justice, and other sectors and within communities and territories under jurisdiction (Contextualization stage).

Despite ample evidence of digital government evolution provided by government policy and research literature, still many governments around the world lack the resources and capacities to benefit from the strategic use of digital technologies and address associated risks. Such capacities include qualified human resources as well as methodologies, techniques, and guidance for planning, designing, implementing, and sustaining digital government initiatives.

Recognizing the need to assist government institutions in the strategic use of digital technology in various stages of the digital government evolution, this book consolidates knowledge and experiences in seven areas: (1) defining strategies for information systems development and how such systems and strategies can deliver public value; (2) conceptualization of digital government projects, including dimensions of data and information quality, information technology, organizational structures and processes, institutional arrangements, and economic, political, and social contexts; (3) strategies for financing and resourcing digital government projects, including financial management cycle, sources of funding, and principles for sound financial management; (4) delivering one-stop seamless services through networked government underpinned by interoperability standards and intergovernment collaboration; (5) principles for managing government information technology projects including agile deployment of information technology solutions; (6) opening of government data, local open data ecosystems, and collaboration among social actors to promote data-enabled innovation; and (7) the use of social media and other technologies to engage citizens and improve government-citizens interactions.

¹ Janowski, T. Digital government evolution: From transformation to contextualization, Government Information Quarterly, vol. 32, pp. 221–236, 2015.

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In addition to covering these areas by different chapters, another objective of the book is to serve as a reference to relevant concepts, principles, and techniques and a source of meaningful advice for practitioners responsible for planning, implementing, and sustaining digital government initiatives. Written by academics and experts with record of experience conducting digital government projects in collaboration with government agencies, the book is grounded in both theory and practice of digital government.

I trust that this book will empower its readers with awareness, knowledge, and capacity to plan and implement technological change to serve their institutions and constituencies better.

Elsa Estevez
Institute for Computer Science and Engineering (UNS–CONICET)
Department of Computer Science and Engineering
Universidad Nacional del Sur
Bahía Blanca, Argentina

Acknowledgments

This book is the result of the collective effort of a research team that collaborated over a period of about 3 years, but it summarizes insights and experiences of more than a decade working together. This volume would not have been possible without the hard work and collegiality of the team; the series editor, Christopher Reddick; and the staff at Springer.

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Toluca, Mexico Albany, NY, USA Cholula, Mexico Albany, NY, USA Aguascalientes, Mexico Puebla, Mexico Rodrigo Sandoval-Almazán Luis F. Luna-Reyes Dolores E. Luna-Reyes J. Ramon Gil-Garcia Gabriel Puron-Cid Sergio Picazo-Vela

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Authors' Biographies

Rodrigo Sandoval-Almazán is Professor of the School of Political and Social Sciences of the Autonomous University of the State of Mexico (UAEM) in Toluca, México. He has been professor of the Graduate School of Public Administration (EGAP) and Business Administration (EGADE) of the Institute of Technology and Superior Studies of Monterrey (ITESM). He is a member of the Mexican National Research System Level 2. He has authored or coauthored research articles published in *Government Information Quarterly, Information Polity, Convergencia Revista de Ciencias Sociales, Sapiens Research.* In 2013 he won the 2nd Latin American Award for Public Administration (INAP). He was the Editor of the *Academic Journal RECAI (Journal of Studies on Accounting, Management and Informatics*) sponsored by the UAEM. Dr. Sandoval Almazán is a member of NovaGob and some editorial boards e-government journals. His research interests include e-government, open government, information technology organizations, online social networks in government and public innovation.

Luis F. Luna-Reyes is an Associate Professor of Public Administration and Policy at the University at Albany in Albany, NY. He holds a Ph.D. in Information Science from the University at Albany, and he is also a member of the Mexican National Research System. Luna-Reyes is one of the top 20 digital government researchers world-wide. His research focuses on electronic government and on modeling collaboration processes in the development of information technologies across functional and organizational boundaries. His research interests are related to areas such as inter-organizational collaboration, information sharing, success of government-wide Web sites, and information policy to promote economic exchange in the NAFTA region. He is the author or co-author of articles published in *Government Information Quarterly*, *Public Management Review*, *European Journal of Information Systems*, *Information Polity*, *Gestión y Política Pública*, *System Dynamics Review*, and *Information Technology and Management* among others.

Dolores E. Luna-Reyes is Professor in the Industrial and Mechanical Engineering Department at Universidad de las Américas Puebla, México. She holds a Ph.D. in Industrial Engineering from Texas A&M University. She is a member of the Mexican National Research System. She is a founding member of the Mexican Society of Operations Research and belongs to the Digital Government Society. Her research activities focus on e-government, information systems, inter-organizational collaboration, and the application of operations research to e-government, production and logistics systems. She is the author or co-author of articles published in *Public Management Review, Information Polity, Expert Systems with Applications, Journal of Heuristics, Annals of Operations Research* and *TOP*. Her most recent projects are on manufacturing cell formation, facility location, as well as the study of success factors in e-government projects. She has experience as a consultant in production and logistics systems. She has been a consultant in lean systems since 2008.

J. Ramon Gil-Garcia, Ph.D., M.S. is an Associate Professor of Public Administration and Policy and the Research Director of the Center for Technology in Government, University at Albany, State University of New York (SUNY). Dr. Gil-Garcia is a member of the Mexican National System of Researchers and of the Mexican Academy of Sciences. In 2009, he was considered the most prolific author in the field of digital government research worldwide and in 2013 he was selected for the Research Award, which is "the highest distinction given annually by the Mexican Academy of Sciences to outstanding young researchers." Dr. Gil-Garcia is the author or co-author of articles in prestigious international journals in *Public Administration, Information Systems*, and *Digital Government* and some of his publications are among the most cited in the field of digital government research worldwide. His research interests include collaborative electronic government, interorganizational information integration, smart cities and smart governments, adoption and implementation of emergent technologies, digital divide policies, new public management, public policy evaluation, and multi-method research approaches.

Gabriel Puron-Cid is Professor at the Department of Public Administration of the Centro de Investigación y Docencia Económicas, A.C. (CIDE). His areas of research are adoption and impact of technology innovations using data, technology, and analytical methods for policy analysis, performance management and evaluation, public budgeting, and government accounting in the public sector (e-government, open government and open data). His background is multidisciplinary and complementary (accounting, public administration, and information systems). He has a solid formation in public administration theory, practice, and applied analytical and methodological tools based on years of experience in government, teaching, consulting, and training in the U.S. and Mexico. Today he is collaborating in several international research projects funded by the National Council of Science and Technology (CONACYT), the INEGI and the CIDE in Mexico and the GTZ, the United Nations, the World Bank and the Center for Technology in Government (CTG) at the international level.