Contents

List of Tables, Figures, and Boxes Introduction		i: x
Part 1. Foundations of Knowledge Management		
1.	Historical Foundations of KM	,
	KM: A Self-Regulating Social System	23 23
Pa	rt 2. Transforming Government with KM	43
3.	The Technology and Processes Subsystem	45
4.	Knowledge Processes and Policy Directives	64
5.	Principles and Processes in Implementing KM	83
6.	Building a Collaborative Learning Culture	106
7.	KM and Organizational Learning	125
Pai	t 3. KM Systems in the Public Sector	147
8.	KM and Innovation in Government	149
9.	Knowledge Management in the Public Sector	168
10.	The Public-Sector Chief Knowledge Officer	188
Part 4. Stories of Public-Sector KM in Action		
11.	Knowledge Management at NASA	
	Edward Hoffman, Jon Boyle, and Anthony J. Maturo	209
12.	KM at the Army's Communications-Electronics Command Susan L. Nappi	227
13.	KM at the Virginia Department of Transportation Maureen L. Hammer	240

viii CONTENTS

14. Conclusion: Knowledge Management's Role in the Drive to Transform Government	257
Transform Government	
Glossary 2	275
Bibliography 2	91
About the Author 3	03
About the Invited Contributors 3	05
Index	

List of Tables, Figures, and Boxes

Ta	bl	es

1.1	Twentieth-Century Efforts to Reform Government	11
2.1	A Comparison of Tacit and Explicit Knowledge	32
3.1	Five-Model Comparison of Perceived Critical KM Components	47
3.2	Knowledge Management Process and Supporting ICT Tools	51
3.3	Benefit Factors and Their Constituent Components	61
4.1	Four E-Government Collaboration Efforts Reviewed	70
4.2	KM Capabilities to Transform Information into Meaningful	
	Knowledge	75
4.3	Additional Services Model (SRM) Domains and	
	Capabilities with KM	77
5.1	Successful KM Implementation Principles and Practices	90
5.2	•	
	Leadership	92
7.1	Alberta, Canada, Knowledge Management and Learning	
	Organization Framework	133
Figu	res	
1.1	From Data Processing to Full Knowledge Management Systems	9
1.2	Key Components of Early E-Government Systems	13
2.1	Fundamental Mechanisms, Processes, and Payoffs in a	
	Public-Sector Knowledge Management System	26
2.2	How KM Subsystems Interact to Produce Learning and	
	Generative Change	27
4.1	Mechanisms Facilitating Knowledge Management and	
	Agency Collaboration	67
4.2	KM in the Federal Enterprise Architecture Reference	
	Model (FY07)	74
4.3	Service Interface and Integration Service Areas	79

x LIST OF TABLES, FIGURES, AND BOXES

4.4	Evolution of Business Models into the President's Management	
	Agenda (PMA) of 2002	81
6.1	Organizational Factors Affecting the Culture of an Organization	112
7.1	A Model of the Knowledge Management and Organization	
	Learning System	127
7.2	A Model of Single-Loop Learning	131
7.3	The APHIS Organizational Learning Cycle	135
8.1	How Learning and Knowledge Shape an Organizational	
	Learning System	153
14.1	A Model of the Forces Shaping Transformation in Government	258
14.2	KM in the Federal Enterprise Architecture Reference Model	
	(FY07)	262
14.3	A Continuum of Content Delivery Models with Illustrative	
	Pedagogies	272
Boxe	es	
1.1	The Federal Enterprise Architecture Program	12
4.1	Enterprise Architecture at the Department of Defense (DoD)	76
5.1	So What Is a Knowledge Audit? What Will It Investigate and	, 0
3.1	Evaluate?	94
5.2	Mission Statement of the KM.gov Taxonomies and Semantics	
	SIG	101
5.3	Some Technologies Used in Running Communities of Practice	102
6.1	Three Examples of a Culture of Collaboration in the	
	Canadian Government	117
6.2	Great Lakes Interagency Task Force Collaborative Actions	120
6.3	Leadership Guidelines for Government CIOs and CKOs	123
7.1	Four Descriptions of Learning Organizations	129
7.2	A California City's Transformation to a Learning Organization	130
7.3		139
9.1	Building an Information-Sharing Culture in Europe	185
10.1	Excerpts from a Job Description for a Chief Knowledge	
	Officer at GSA	192
10.2	· 1 · · · · · · · · · · · · · · · · · ·	193
10.3	Required Qualifications for a DoD KM Specialist	204