Preface

INTRODUCTION

Welcome to the second volume of Current Issues in Knowledge Management. This book series is dedicated to publishing top research in knowledge management (KM) on an annual basis. Each chapter has been published in Volume II of the International Journal of Knowledge Management with most being expanded to include additional data and discussion that could not be included in the journal version.

Knowledge management is an evolving discipline that is growing and becoming pervasive in many other disciplines. Initial KM research focused on the basics of KM: identifying the key goals of KM, specifying the knowledge artifact, and defining the components and characteristics of a KM system (KMS). This book documents how this initial research focus is changing. Researchers have pretty much established the foundations of KM and are moving towards new issues. Issues of interest include the impact of culture and context on knowledge representation, storage, and use; defining KM success; factors affecting knowledge transfer and flow; creating methodologies to assist researchers and practitioners in the design of KMS; and applying KM to new contexts such as health informatics, military science, and crisis response and management. This volume presents research on these issues with the chapters outlined in the following section.

BOOK ORGANIZATION

The book is designed for KM researchers, students, and practitioners to use to keep current on KM research. The book can also be used in a classroom setting, primarily as a reader rather than as a text. The book is organized into five major parts with a total of twenty-one chapters. These are summarized below:

Section 1: Advances in Knowledge Management Foundations, Chapters I–IV

This section discusses some of the basic issues affecting knowledge management. Chapter I, The Need for Knowledge Management, by Murray E. Jennex, explores the need for knowledge management on a basis other than worker transience and baby boomer retirements. Chapter II, Culture, Context, and Knowledge Management, by Murray E. Jennex, starts the discussion of issues affecting knowledge creation, capture, storage, and use by defining terms and exploring the impact of culture and context on knowledge users. Chapter III, Addressing Contextual Issues in Knowledge Management: A Guiding Framework, by Adekunle Okunoaye and Nancy Bertaux, continues exploring the impact of culture and context on knowledge use and develops a framework for assessing context and culture impacts. Finally,
Chapter IV, *A Model of Knowledge Management Success*, by Murray E. Jennex and Lorne Olfman, provides a theoretically grounded model for assessing KM success and discusses what is necessary to create a successful KM initiative and KM system (KMS).

Section II: Advances in Knowledge Transfer, Sharing, and Flow, Chapters V–IX

This section focuses on research on issues that affect the flow of knowledge in an organization. Chapter V, *Think Social Capital before You Think Knowledge Transfer*, by Karma Sherif and Sherif Ahmed Sherif, applies social capital and network concepts to knowledge transfer using case research from Egypt. Chapter VI, *Human Effect of Knowledge Sharing: Cooperative Type and Reciprocity Level in Community of Practice*, by Jaekyung Kim, Sang M. Lee, and David L. Olson, uses quantitative research of a community of practice (CoP) to discover how participation levels of individuals contributing to KM affect knowledge flow. Chapter VII, *Toward a Receiver-Based Theory of Knowledge Sharing*, by Sharman Lichtenstein and Alexia Hunter, uses case studies to explore receiver motivations and behaviors in knowledge flow. Chapter VIII, *A Dialectic on the Cultural and Political Aspects of Information and Knowledge Sharing in Organizations*, by Dennis Hart and Leoni Warne, discusses why improvements in technology have not resulted in better knowledge transfer by applying organizational culture and power structure concepts to barriers to knowledge flow. Finally, Chapter IX, *Conceptualization of Cultural Dimensions as a Major Influence on Knowledge-Sharing*, by Abel Usoro and Matthew H. S. Kuofie, continues the exploration of the impact of culture on KM by proposing a conceptual model that incorporates cultural factors that influence knowledge transfer.

Section III: Advances in Knowledge Management in Organizations, Chapters X–XIV

This part focuses on how knowledge management has been used in organizations. Chapter X, *Integrating Knowledge Management with Program Management*, by Jill Owen, explores how KM can be used to improve project management process maturity. Chapter XI, *Developing and Analyzing Core Competencies for Alignment with Strategy*, by Keith Sawyer and John Gammack, explores how KM can be used to help organizations discover their core competencies. Chapter XII, *A Case-Classification-Conclusion 3Cs Approach to Knowledge Acquisition: Applying a Classification Logic Wiki to the Problem-Solving Process*, by Debbie Richards and Megan Vazey, explores how applying problem classification and KM collaborative technologies (wiki) improves problem-solving in organizations. Chapter XIII, *Knowledge Management Systems: Towards a Theory of Integrated Support*, by Dick Stenmark and Rikard Lindgren, explores how to integrate KMS into organizational work practices and processes. Finally, Chapter XIV, *Community of Practice: Aligning Knowledge Work with Organizational Knowledge Strategy*, by Gerlinde Koelegreiter and Luba Torlina, furthers the KM integration discussion by exploring how to link informal community of practice work processes into formal organizational work processes.

Section IV: Advances in Knowledge Management Development Methodologies, Chapters XV–XVII

This part proposes methodologies to assist KM designers and developers in designing and building KMS. Chapter XV, *A Method for Knowledge Modeling with Unified Modeling Language (UML): Building a Blueprint for Knowledge Management*, by Sung-kwan Kim, Seongbae Lim, and Robert B. Mitchell,
applies UML to the analysis of KMS requirements. Chapter XVI, Improvement of Software Engineering Processes by Analyzing Knowledge Intensive Activities, by Jane Fröming, Norbert Gronau, and Simone Schmid, describes the use of the knowledge modeling and description language (KMDL®) for analyzing knowledge-intensive business processes. Finally, Chapter XVII, Using Social Networking Analysis to Facilitate Knowledge Sharing Amongst Senior Managers in Multinational Organizations, by Bonnie Wai-yi Cheuk, applies social networking analysis to identify critical knowledge flow paths and repositories.

Section V: Advances in Knowledge Management Application, Chapters XVIII–XXI

This part explores new applications of knowledge management to organizational needs. Chapter XVIII, Leveraging Current Experiences for Future Actions: An Exemplar of Knowledge Reuse, by Alton Chua and Wing Lam, describes how the United States Army uses knowledge management to improve reuse of lessons learned. Chapter XIX, Knowledge Characteristics, Knowledge Acquisition Strategy and Results of Knowledge Management Implementations: An Empirical Study of Taiwanese Hospitals, by Wen-Jang (Kenny) Jih, Cheng Hsui Chen, and Andy Chen, explores hospital application of KM. Chapter XX, Emergency Preparedness and Information Systems—A Case Study Using Wiki Technology, by Murali Raman, Terry Ryan, Lorne Olfin, and Murray E. Jennex, describes the use of collaborative KM technology (wiki) to improve the emergency planning process. Finally, Chapter XXI, Knowledge Management and Hurricane Katrina Response, by Tim Murphy and Murray E. Jennex, documents the use of knowledge and KM collaborative technology (wiki) to rapidly develop and deploy systems to aid Hurricane Katrina victims in finding survivors and shelter.