

Preface

The importance of organizational knowledge has been recognized for over fifty years. In recent years, organizations worldwide have embraced formal knowledge management initiatives as a way to create value from their intangible assets. Knowledge has proven so vital to organizational success that a new organizational form – knowledge-based firms – has emerged. With a slowdown in the world economy, the bursting of the technology bubble, and tighter budgets, the importance of leveraging existing knowledge and expertise has reached new highs. Knowledge management will remain a critical success factor for organizations as the economy recovers.

The purpose of this book is to survey some of the newest trends and findings in knowledge management. The series of chapters included in the book show the wide variety of directions in which knowledge management has evolved and illustrates the wide-ranging impact that knowledge management can effect for organizational success, thus emphasizing the continued importance of knowledge management for organizational success. Each chapter offers a discussion of some unique innovation, but common themes emerge as well. The themes center on methodologies and models, and tools for enhanced knowledge management as well as the competitive advantage that can be achieved by implementing knowledge management.

The chapters in this book are divided into three sections, one per theme. The first section, “Knowledge Management Methodologies,” presents work on innovative approaches and methodologies for undertaking knowledge management. Each chapter highlights a particular aspect of knowledge management and provides a way to improve upon it. The first section contains six chapters.

In Chapter 1, Jewels and Underwood recognize the importance of not only formal knowledge management initiatives, but also the informal knowledge

networks that already exist in organizations. They suggest that organizations must consider the impact of these informal knowledge networks when constructing formal knowledge management policies, procedures, and behaviors.

In Chapter 2, Taylor and Boraie examine knowledge capture from subcontractors by their sponsor organizations. Their study identifies cultural sensitivity and the process of knowledge capture to be the most important variables for successful knowledge capture. The lack of formal methods for capture and management of knowledge from subcontractors led the authors to develop a “Revolving Door” model for knowledge management.

In Chapter 3, Daneshgar studies knowledge sharing, which is arguably the cornerstone of knowledge management. Specifically, Daneshgar presents a methodology for sharing contextual knowledge in virtual communities.

In Chapter 4, Handzic and Bewsell explore the use of corporate memories in enhancing individual working knowledge and performance. They find that approximately one-third of knowledge stored in corporate memories is left untapped. This suggests much room for improvement in the leveraging of knowledge encoded in corporate memories. Quantity, quality, and diversity of the knowledge in the repositories are found to be directly related to their effectiveness.

In Chapter 5, Yada presents a framework for knowledge acquisition. The framework consists of a two-dimensional matrix whose dimensions are (1) consideration of time series data and (2) level of analysis. Yada uses knowledge discovery from sales data to understand how the knowledge discovery process proceeds from purchase history. By understanding how knowledge is discovered, the processes can be further enhanced for organizational gain.

In Chapter 6, Pemberton and Stonehouse conclude the section of the book on methodologies. Their chapter presents a matrix for gauging an organization’s knowledge-centricity. The matrix emphasizes organizational characteristics necessary for success in a knowledge-centric business.

The second section of the book, “Knowledge Management Tools,” presents some of the newest tools for carrying out knowledge management. These can be thought of as the instruments that enable organizations to conduct knowledge management as prescribed in the methodologies of the first six chapters of the book. The second section consists of five chapters.

In Chapter 7, Leung focuses on knowledge management for learning and training. Six major design factors for knowledge management systems are presented. These include media of representation, multiple perspectives, complexity, user control, online support, and navigation aids. By incorporating

these features in knowledge management systems, the systems become potent tools for carrying out organizational knowledge management.

In Chapter 8, Wecel, Kalczynski, and Abramowicz present an open Web-services based system called the enhanced Knowledge Warehouse (eKW). The open and flexible system is extended from a pre-existing one by leveraging the system architecture. The authors discuss the role of eKW in the Semantic Web and how it fits within the broader context of knowledge management.

In Chapter 9, Chaudhry examines the ability of enterprise portals to support organizational knowledge management. The author finds that portals cannot adequately support all aspects of knowledge management, contrary to the marketing claims of many portal product companies. In response to the current shortcomings of portals, Chaudhry suggests several capabilities for future development – ability to handle multimedia, incorporate metadata or taxonomy into their content, and provide tools for data mining and workflow. Despite their shortcomings, portals remain the most promising tool for supporting knowledge management.

In Chapter 10, Lee and Lee discuss Bluetooth wireless networks and present a new approach for finding service capabilities. Because the system is wireless, the environment is dynamic, which raises interesting challenges for discovering and matching services as requested by devices. The trend towards wireless technology continues to grow on a global scale, suggesting that knowledge management via wireless networks can benefit from Lee and Lee's research.

In Chapter 11, Neto and Brasileiro conclude the second section of the text by examining the use of computer-supported collaborative learning tools in conjunction with other knowledge management tools (e.g., mapping tools, repositories). They find that computer-supported collaborative learning supports both knowledge creation and transfer, but that it is not exploited to its full potential. The problem is incomplete integration with other knowledge management tools. Neto and Brasileiro describe an approach to successfully employing computer-supported collaborative learning tools.

The third section of the book, "Knowledge Management for Attaining Strategic Advantage," presents a series of chapters on how innovative knowledge management can help organizations achieve strategic or competitive advantages over their competition. While the first sections of the book focused on specific methods or tools for "doing" knowledge management, this final section presents a broader overview of how value-added is provided to organi-

zations through knowledge management. This section consists of four chapters.

In Chapter 12, Correia and Sarmento draw broad strokes showing how small and medium sized organizations can use knowledge management strategically. The authors use the Portuguese strategy for evolving a knowledge-based society as a case example and develop a list of critical areas of study and practice necessary for successfully leveraging knowledge management.

In Chapter 13, Miller investigates the relationship between an organization's character and its ability to create knowledge, which ultimately impacts the organization's competitive advantage. Miller draws on the Core Competency Model and the concept of Intellectual Bandwidth for knowledge creation to support his arguments.

In Chapter 14, Cook and Cook examine what organizations can do to promote knowledge sharing in order to gain a competitive advantage. They recognize the importance of knowledge sharing as vital to organizational success in the modern economy.

In the final chapter of the book, Hall explores an increasingly important knowledge asset, that of customer knowledge. Historically, knowledge management has focused on employee or organizational knowledge. The author extends the view of organizational knowledge assets to include those of the customer. By exploiting customer knowledge, organizations find another way to leverage knowledge for advantage above their competitors.

Knowledge management is a vast and dynamic field. To attempt to capture every concept of importance in a single book would be futile. However, I believe this book can serve as a colorful snapshot of the most recent innovations in knowledge management. There is thorough discussion of several knowledge management methodologies as well as specific tools for carrying out knowledge management initiatives. The international flavor of this book also suggests it should have wide appeal to academicians and practitioners around the globe.