Knowledge management (KM) is a nascent, evolving field at the confluence of several management disciplines. One only needs to open a business publication to find articles extolling the benefits of KM. The term KM first began to appear in the management literature only in the late 1980s, while knowledge per se has been important since time immemorial. What then is knowledge management? Is there any substance behind the verbiage and fancy phrases that are so frequently and eloquently offered at keynote addresses, board meetings, and conferences? Some skeptics believe KM to be old wine in new bottles while others are convinced KM is simply just another empty management promise. It is the contention of this book that knowledge management is an important emerging field. Moreover, it is only by embracing knowledge management and becoming knowledge-based enterprises that organizations will find themselves prepared and ready to survive and thrive in a dynamic and extremely competitive business world.

A critical function for all organizations is to have the ability to make rapid decisions. To do this effectively, decision makers require relevant data and information. With the ubiquitous adoption and diffusion of IC²T (information computer and communications technologies) we have witnessed an exponential increase in information, as well as an increase in the reach and range of business activities, and a corresponding decrease in the operationally acceptable time between the trigger event and decision formulation and implementation. Decision makers are drowning in information overload, and yet must make critical decisions that have far-reaching consequences to their organization under severe time compression. Invariably the result is chaos with decisions that are suboptimal.

The tools, techniques, strategies, and protocols of KM address these problems at their very core. KM focuses on providing quality information and germane knowl-
edge to the decision maker. What ensues is the effective and efficient control of the operational environment so that the organization can not only survive, but thrive and continuously enjoy a sustainable competitive advantage.

A critical issue that permeates much of the economic literature is that concerning the theory of the firm versus the theory of markets. Connor and Prahalad (1996) have extended the idea of the resource-based theory of the firm originally discussed by Coase (1937) to recognize knowledge-based transactions. In particular, they emphasize that the advantage of a firm in this context is as a unit that is made up of sub-components (people and tools) which together build a knowledge base that enables the organization to operate effectively and efficiently. Moreover, the structuring of the sub-units and activities within the organization should be such that they support the continual acquiring of this knowledge base incurring minimal transaction costs. Hence, a knowledge-based enterprise is one that, irrespective of industry, functions so that it continually applies germane knowledge to any and all its business activities. Knowledge is central to such organizations, while its appropriate application and use are critical success factors. To achieve this goal, knowledge-based organizations must not only understand the fundamental principles of knowledge management but also incorporate the tools, techniques, strategies, and protocols of KM into all areas of their operations.

It must be borne in mind that to become a knowledge-based enterprise requires much more than the chanting of the KM mantra or displaying the organization’s KM icon. Knowledge-Based Enterprises: Theories and Fundamentals provides an overview of all the key areas within KM. The goal of the book is to open the black box of KM, remove the mystique, replace the rhetoric with reality, and provide the reader with the fundamental principles required for the transformation of an organization governed by the traditional rules of conducting business into a new, dynamic, and responsive knowledge-based enterprise.

Currently, numerous organizations are trying to incorporate aspects of KM in an attempt to address deficiencies within their own organization. Poor performance, ineffective operations, declining market share, or even an attempt to rectify problems with inferior products are matters of concern. However, too many of these measures are attempted without a thorough understanding of what is involved by incorporating KM principles or even a full appreciation of what KM is and is not. It should not come then a surprise that most of the attempts at embracing KM have been futile and unsuccessful. Moreover, this in turn has lead to a disturbing trend in a growing disillusionment with KM and effecting the transition to become knowledge-based.

This book addresses this problem by bringing together all the essential elements of knowledge management, the tools, techniques, strategies, and protocols necessary to create a knowledge-based enterprise. In so doing, it has several differentiating qualities, which set it apart from other books pertaining to KM. First, the book identifies the complex nature of the knowledge construct itself, the underlying du-
alities that exist when trying to understand knowledge, and its philosophical roots. Few books address this issue and such an omission leaves readers with an incomplete understanding of knowledge, and thus its management can never be totally effective. In addition, the book presents a socio-technical perspective to KM. By offering the key people centric, technology centric, and process centric perspectives to knowledge management it is possible to develop a more in depth appreciation of how to combine all these aspects when incorporating KM into an organization. Another unique feature of the book is that it addresses both macro and micro issues as well as internal and external issues relating to KM. These issues are discussed in conjunction with a presentation of leading theories while insights from practice are provided in the collection of international case studies.

Specifically, the book is divided into four sections. Section I, “Understanding Knowledge,” defines the elusive and complex knowledge construct, and clarifies “knowledge economy,” how organizations should behave in such an environment, and presents the major theories pertaining to knowledge creation. This is done in three chapters: Chapter I, “Overview of the Networked Knowledge Economy,” discusses the “knowledge economy” and contrasts it with previous economies. Chapter II, “Understanding the Knowledge Construct,” presents what knowledge is and Chapter III, “Creating Organizational Knowledge,” outlines the major philosophical implications connected with the dualities of the knowledge construct.

Section II, “Infrastructures Required to Support Knowledge-Based Enterprises” presents the three fundamental infrastructure blocks essential for any knowledge-based enterprise: human, business, and the technological infrastructures. Chapter IV, “The KM Business Infrastructure” presents the leading theories and techniques to develop a solid business infrastructure, while Chapter V, “The Organization’s Human Infrastructure” presents the leading management theories pertaining to various people issues including culture, structure, leadership, and management. Chapter VI, “The KM Technological Infrastructure” discusses the key technologies needed to support and enable any KM initiative. Taken together, this section provides the fundamental socio-technical issues critical for transforming an enterprise into a knowledge-based enterprise. These topics are all subjects that could in themselves be books; however, the goal of this section is to bring all these concepts together so that a complete picture of the essentials for establishing an appropriate infrastructure can be presented concisely and yet completely.

In Section III, “Becoming a Knowledge-Based Enterprise,” macro management issues that are significant to knowledge-based organizations are discussed. These comprise of Chapter VII, “KM and Strategy,” Chapter VIII, “Managing Knowledge Complexity,” and, finally, Chapter IX, “Learning Organizations,” which emphasizes the need to apply continuous rather than discrete approaches to knowledge management and the relevance of organizational memory and organizational learning.

The concluding section, Section IV, “Realities for Knowledge-Based Enterprises” presents a compilation of international case studies pertaining to various KM ini-
tiatives, which will help to develop an appreciation of the challenges and benefits derived from becoming a knowledge-based enterprise:

- **Case 1:** “IT Platform for Study and E-Collaboration” by Witold Abramowicz, Tomasz Kaczmarek, and Marek Kowalkiewicz discusses a Polish experience of implementing a knowledge sharing and e-collaboration environment.

- **Case 2:** “Distributed Knowledge Networks” by Mogens Kühn Pedersen discusses distributing knowledge in the construction industry in Denmark.

- **Case 3:** “Keller Williams Realty” by Roberta Lamb consists of a discussion of framing a structure for knowledge sharing in the U.S. real estate industry and has a follow up part B that discusses how Keller Williams Realty cemented these KM relationships.

- **Case 4:** “Contingency-Driven Knowledge Management in Palliative Care” by Graydon Davison discusses the role and usefulness of KM in a generally considered “fringe” area of healthcare: palliative care.

- **Case 5:** “Managing Knowledge in Project-Based Organizations” by Jacky Swan, Anna Goussevskaja, and Mark Bresnen discusses the critical role KM plays in project-based organisations in the UK.

- **Case 6:** “Knowledge Management in Practice” by Brian Donnellan, Martin Hughes, and William Golden discusses the need for the tools and techniques of KM in the semiconductor industry in Ireland.

It is our expectation that after reading this book, all readers—executives, middle-level managers, and students—will gain a new appreciation of KM. We hope that those of our readers who have no professional ties to business and its management will also be able to embrace the promise and potential that KM provides not only in the life of organizations but, at a fundamental “gut level” in practically all aspects of our “daily lives.” Even shopping involves, at a very basic level, several elements of knowledge management and creation of structure from the chaos of Web or even shelf offerings. Finally, we hope that our professional colleagues will enjoy reading a text presenting a personal view of this new, exciting, and challenging field of KM.

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**References**
