Preface

At the beginning of the 21st century, we enter into a new era of both globalization and the use of knowledge management (KM) in achieving strategic objectives. This book is designed to bring the theory, research, and thought leaders together in establishing both the salient capabilities of KM in multinational organizations as well as the approaches that may be employed in attaining those objectives.

In approaching the topic of multinational knowledge management, it was apparent from the beginning that the book needed to be based on the experience and knowledge of practitioners and researchers from wide and diverse backgrounds and from different parts of the globe. To this end we have brought together leaders from Australia, Canada, Denmark, France, Hong Kong, India, New Zealand, Scotland, Spain, Switzerland, the United Kingdom, The Netherlands, and the United States to share their knowledge and research on the topic of strategic knowledge management in the multinational organization.

Targeted at KM practitioners, researchers, and students of knowledge management, the text is divided into four general sections:

- Organization
- Technology
- Organizational Learning
- Leadership

The approach is consistent with the Four Pillars of Knowledge Management, first postulated by Baldanza and Stankosky in 1999. The approach to describing knowledge management has sustained the test of time and has been the basis of numerous papers, research projects, and books, and ultimately is highly suited to examining knowledge management in this setting.

ORGANIZATION

The first section deals with organizational consideration in utilizing knowledge management in a multinational setting. Obviously, the level of complexity associated with the multinational are much increased over that of an organization operating in a single market.

In Chapter I we start by examining the human aspect of KM and in particular the human resource management (HRM) component in facilitating knowledge transfer. HRM practices relevant for absorptive capacity of subsidiary employees form two groups—cognitive (job analysis, recruitment, selection, international rotation, career management, training, and performance appraisal) and stimulative (promotion, performance-based compensation, internal transfer, orientation programs, job design, and flexible working practices). The application of cognitive HRM practices enhances the ability of knowl-
edge receivers to absorb transferred knowledge, while the use of stimulative HRM practices increases their motivation. Temporary and permanent types of international assignments respectively influence the ability and motivation of expatriate managers to share their knowledge.

In Chapter II we examine knowledge creation techniques facilitated by commitment-based value systems within the multinational organization, and in particular the implications for almost every aspect of a firm’s strategy and business model, especially its ability to leverage these networks to create value through innovation. Most multinational firms are ill-equipped to take advantage of the knowledge creation derived from high-value relationships with suppliers and customers. This chapter shows the importance of developing a corporate strategy which takes into account ways in which an innovation focus must integrate with installed business processes. Choosing the most appropriate value networking strategy can have serious implications for success. In this chapter we add to studies on knowledge creation and knowledge transfer in multinational corporations by proposing a conceptual model of commitment-based value networking strategy.

The objective of Chapter III is to assist executives in understanding how to encourage their members to reap benefits from using the knowledge management systems within the multinational setting by examining the cultural aspects of knowledge sharing. Organizations distribute their resources around the world to reduce cost and remain competitive. As a consequence, globally distributed working teams are common, thereby rendering a need for knowledge sharing cross-culturally. The chapter presents a series of studies investigating the impact of cultures on how people handle knowledge management issues. It shows how in-group/out-group relationships determine people’s attitudes towards knowledge sharing in a global working environment.

In Chapter IV we examine the organization from the knowledge worker perspective: using the case study approach, we examine the case of the first-level call center technician. Such technicians are ideal candidates for knowledge management tools. The chapter ends with recommendations for IT practitioners who are interested in implementing these tools in their call centers.

The move to the multinational setting for most organizations comes through the establishment of both an international customer base and through the use of outsourcing. Chapter V continues the case study approach examining cases in India, The Gambia, and Nigeria as a background for an empirically grounded framework of KM. Cultural diversity and gaps in the provision of infrastructure make managing knowledge challenging but necessary in developing countries. These cultural and infrastructural issues are also related to governmental, educational, political, social, and economic factors. These environmental factors interact with organizational variables and information technology to enable or constrain knowledge management processes in the creation and protection of knowledge resources. The framework is designed to assist organizations to prepare their KM projects, to reveal problems during the project, and to assess its outcomes.

In the final part of our section on Organization, Chapter VI continues the examination of culture in the multinational organization. We examine the factors contributing to process-based approaches and community-based approaches. Although culture has been cited widely as a challenge in knowledge management initiatives, and although many studies have considered the implications of organizational culture on knowledge sharing, few empirical studies address the influence of culture on the approach taken to knowledge management. Using a case study approach to compare and contrast the cultures and knowledge management approaches of two organizations, we postulate different ways in which organizational culture influences knowledge management initiatives as well as the evolution of knowledge management in organizations.
TECHNOLOGY

In Section II we examine the technological aspects of KM in the multinational setting. The potential benefits of utilizing KM technologies in multinational and global organizations are of particular significance due to the inherent geographic distance and diversity of such organizations. Unfortunately, the process of constantly changing technology can be extremely disruptive at both the individual and organizational level. In Chapter VII, we explore the relationship between KM technology change within the organization and the Theory of Organizational Loss of Effectiveness (LOE). The Theory of Organizational Loss of Effectiveness is predicated upon organizational behavior resulting from a loss of stability (e.g., technology change) within an organization. The loss of stability, in the context of this theory, occurs when a defined set of symptoms develop in individuals and groups undergoing a change in technology. The assertion is that the development of these symptoms is predictable, and when viewed collectively, results in an organizational loss of effectiveness.

Organizations need well-architected systems for effective KM. Chapter VIII begins with a review of approaches adopted by organizations for developing KM solutions. It defines a set of components that can form the building blocks for developing such systems. The relevance of the principles of service-oriented architecture (SOA) to KM solutions is demonstrated. The author presents the architecture of a generic knowledge management system based on the components defined and the principles of SOA, and then discusses the patterns for implementing the architecture followed by maturity levels of knowledge management systems.

Having established in Chapter IX the need for well-formed and sustainable architectures for knowledge management systems within the multinational setting, Chapter IX now examines the use of such technologies from an industry perspective: how information and knowledge management technologies and globalization have changed how firms in service industries formulate, implement, and sustain competitive advantage. The authors underline this with results from a research project that contributes to our understanding of the relationships between global knowledge management technology strategies and competitive functionality from global IT. Based on field research this study found that global knowledge management technology strategies have a positive impact on competitive advantage from information technology applications functionality from global IT. This study provides recommendations to international engineering, procurement, and construction industry executives regarding the impact of knowledge management strategies and global information technology on competitive advantage of firms in their industry.

In Chapter X raises issues concerning data, information, and knowledge sharing in organizations, and in particular compares an organizational cultural analysis of why such sharing is often difficult to achieve with an organizational political one. The issues raised are often insufficiently attended to by practitioners who are attempting to build technological information and knowledge management systems. The driver for the chapter is that despite impressive advances in technology, and technology’s now almost ubiquitous presence in organizations, as well as academic study over several decades, many of the benefits originally expected concerning improved data, information, and knowledge sharing have not materialized as expected. Basic reasons for this lie in the lack of attention to the cultural foundations of organizations, and because matters relating to organizational power and political matters are often misunderstood, overlooked, or ignored. These different perspectives are discussed and contrasted in order to tease out the important differences between them and assess the prospects for a synthesis. It is concluded that while there are important commonalities between the two perspectives, there are also fundamental differences, notably regarding what are causes and what are effects and, therefore, how to go about effecting change regarding data, information, and knowledge sharing.
Finally for this section, we examine the trends that are evolving in terms of technologies that can be used to enable knowledge management in multinational organizations. In Chapter XI we examine the large number of tools available in the software industry to support different aspects of knowledge management. Some comprehensive applications and vendors try to offer global solutions to KM needs; other tools are highly specialized. In this chapter, state-of-the-art KM tools grouped by specific classification areas and functionalities are described. Trends and integration efforts are detailed with a focus on identifying current and future software and market evolution.

**LEARNING**

In Section III we examine the concept of organizational learning in the multinational setting. Chapter XII examines the important opportunities afforded by taking a more inclusive approach to the foreign subsidiary host country workforce (HCW). The authors argue that past international management writing and practice, with its expatriate bias, has neglected consideration of this important resource. Not only can the HCW help expatriate managers be more successful and have a better experience in the host country, but it can contribute to and benefit from the corporate knowledge base, leading to more effective global knowledge management. The authors discuss means by which a multinational corporation can effectively include the HCW in its knowledge management activities.

Chapter XIII deals with the concepts of standardization in the multinational setting. The chapter presents a case of knowledge sharing between multinational companies. The companies cooperated to develop a common best practice for the development of company standards through sharing their practices. The chapter describes how this best practice was developed and tested, and experiences in this successful project may help other multinationals also profit from knowledge sharing.

One of the keys for overcoming these difficulties is to manage knowledge-based resources appropriately. However, in order to be able to manage these resources, the multinationals need to know, with complete transparency, just what these resources are, and this is achieved by quantifying them. The quantification of knowledge-based resources and the preparation of intellectual capital statements represent two strategic challenges for the multinational organization. In Chapter XIV we discuss the approaches to quantify such knowledge, given the complexity of the multinational setting and then the presentation of quantified knowledge through the use of intellectual capital statements. This chapter has two basic aims. First, it analyzes the complex dynamics of knowledge flow transfers in multinational firms. Second it addresses the measuring and reporting of knowledge-based resources in multinational organizations.

As innovation and technology management grow in complexity, the need for inter-organizational cooperation increases. Part of this cooperation requires the understanding of how knowledge management and learning processes may function to support a successful research and development collaboration in multinational organizations. To further this understanding, Chapter XV introduces a typology to help categorize various collaborative efforts within a research joint venture environment. The typology is based on two dimensions—the locus of the research joint venture knowledge and the knowledge management approach. This matrix leads us to deduce that different research joint venture (RJV) strategies can emerge as a result of these two dimensions. Finally, an evaluation of this relationship is completed using information and practices from data acquired from a broad-based study of European-based RJVs.

Chapter XVI aims to provide a complete characterization of the different perspectives of customer relationship management (CRM) and its potentialities to support knowledge management practices in a multinational context. It describes the strategic and technological dimensions of CRM and how its adapt-
tion supports the development of a learning and customer-focused organization, with special emphasis on multinational corporations. CRM strategic approach entails the adoption of customer-focused initiatives and the development of learning relationships with customers. On the other hand, its technological dimension integrates a variety of different information and communication technologies, which makes a powerful system for improving the process of knowledge acquisition. This way, different subsidiaries of a multinational corporation can develop their learning capability so that they can better identify local market demands. As a result, the corporation is able to more accurately create a global knowledge stock about its different markets in different regions of the world.

In Chapter XVII we use organizational learning as a lens to study how firms implement the enterprise system (ES). In approaching this topic the authors discuss the critical organizational factors affecting organizational learning in ES implementation, and how these elements shape the learning process and thereby influence ES implementation outcomes. In approaching this, the authors conducted a comparative case study with two organizations that recently adopted ES and achieved significantly different results. Based on the empirical findings, we propose a framework that describes how organizational factors affect the four constructs of organizational learning in ES implementation context—knowledge acquisition, information distribution, information interpretation, and organizational memory.

LEADERSHIP

In the final section of the book, we examine the role of leadership in the development, utilization, and management of knowledge in the multinational setting. Central to this aspect is the understanding that without appropriate leadership knowledge, management initiatives are destined to fail to meet expectations. Given the complexities of the multinational setting, the need for strong leadership is even more essential than in the context of a single market system.

The discussion in Chapter XVIII begins with an analysis of several knowledge management strategies in high-technology industries (computer, telecommunications, and pharmacy). In these cases diversity encourages implementation of knowledge management tools. The precision of these tools indicates the firm’s competence in managing and diffusing knowledge. An important conclusion that can be drawn is that several factors (redundancy, diversity, discussion, and duration) can reinforce these competences and, in fact, network mechanisms in organization.

Chapter IXX focuses on two distinct challenges for leaders in the multinational organization: outsourcing and virtual teams. Both of these have become feasible because of technological advances and have features that have an impact on how organizations manage knowledge and consequently have strategic significance. In addressing these two challenges, we examine how they impact the way organizations run their business operations and how they impact the leader’s role. Both these distinct features—outsourcing and virtual teams—have one thing in common: the explicit and tacit knowledge of the organization is no longer confined within the organization.

In the 21st century, the move towards customer-oriented, team-based organizational structures is becoming more pronounced in the marketplace. Chapter XX examines the practice of managing knowledge workers within the business environment of a matrix-organized multinational organization, using oil and gas contractor Production Services Network (PSN) for illustration. We look at the influence of business needs and human, organizational culture and strategic factors on KM; the importance of communicating business drivers; adverse demographics; and outline some future trends that managers and KM staff in multinational matrix organizations should be preparing for. It is hoped that discussing examples of KM in practice, within the context of globalization, demographic changes, and rapid developments in
technology, markets, and business relationships, will ground some familiar theory in some new and evolving territory, providing interest to both academics and practitioners.

In Chapter XXI we look at knowledge management practices in the context of the international setting. In particular we examine knowledge management practices in Israel, Singapore, The Netherlands, and the United States. A distinguishing feature of the successful post-Network Age enterprise is its intrinsic entrepreneurial character that manifests itself in key organizational knowledge practices relating to organizational culture, processes, content, and infrastructure. This chapter reports on the outcome of field research in which entrepreneurial firms in four geographic regions were analyzed with the help of a diagnostic research tool specifically developed for profiling organizational knowledge-based practices. The diagnostic tool was applied in firms located in the United States, Singapore, The Netherlands, and Israel. Key practices that were found to be common to leading-edge firms in all regions included: a propensity for experimentation, collective knowledge sharing, and collective decision making. The chapter describes the research in terms of a cross-cultural comparison of the four regions, derives key determinants of competitiveness, and profiles regional characteristics that enhance innovation and entrepreneurship.

Finally in Chapter XXII we look at establishing a global customer relationship management strategy. To date, what little research has been conducted in the area of CRM strategy development has been confined to a single country (the United States). Global CRM strategy development issues have yet to be specifically addressed, particularly which elements of CRM strategy should be centralized/decentralized. This study examines the complexities of global CRM strategy using the case of a leading financial services company. Interviews were conducted in 20 countries. Global head office and external IT consultant perspectives are also considered. Our findings confirm that a hybrid approach has wide practical appeal and that subsidiary orientation towards centralization/decentralization is moderated by firm/market size and sophistication.

CONCLUSION

In conclusion, it must be said that many books and articles could and will be written on the four major elements of knowledge management outlined in this book. Knowledge management is, for many organizations, still in the process of development; and the true capabilities of KM, especially in the context of multinationals and in the global economy, may be a source of great competitive advantage. As such this book is designed to enlighten the reader to these capabilities and demonstrate that not only is KM desirable in the multinational setting, it is all but required.

REFERENCE