THE COMPLETE GUIDE TO

KNOWLEDGE MANAGEMENT

A Strategic Plan
to Leverage Your Company's
Intellectual Capital



EDNA PASHER TUVYA RONEN

Additional Praise for The Complete Guide to Knowledge Management

"Whether an expert or neophyte in KM, you will benefit from the trusted insights of Pasher and Ronen. Few have as much practical perspective into the art and science of this new functional discipline. Each chapter is a gem—complete with the Magnificent 7 insights which fuse the tactical and strategic, the theory and the practice, from idea to action. They have captured the kaleidoscopic landscape of intangible value and intellectual wealth into a strategy leading to innovation progress—the true competence of the decade."

—Debra M. Amidon, Founder of ENTOVATION International Ltd; author of *The Innovation Superhighway*

"As a member of the community of practice in the field of knowledge management and dissemination, I am pleased to take the tools offered in this book to my colleagues in higher education. The combination of theory and practice presented in the book serves for us as a springboard to real-life leadership positions."

—Professor Nava Ben-Zvi, PhD, President of Hadassah College, Jerusalem

"This is a deeply innovative and practical book. Pasher and Ronen merge the core competencies of knowledge creation with those of management to deliver competitive advantage for the twenty-first century."

—Glenda Eoyang, founding Executive Director of the Human Systems Dynamics Institute

"Through learning landscapes, case-tellers, 'Magnificent 7' summaries, and the like, Edna and Tuvya's *Complete Guide to Knowledge Management* leads you to a richly contextualized universe of knowledge-creation possibilities. Indeed, this book will challenge you personally to step into an assertive, resilient, and empowered knowledge-based lifestyle!"

—Blanca Garcia, Most Admired Knowledge City Awards; Chair of The World Capital Institute

"This book excels by helping managers to understand and practice the social, cultural, and also the dynamic nature of knowledge in enterprises, and of their customers. This approach really defines the mechanisms of a knowledge society!"

—Dr. Otthein Herzog, Professor and CEO of InnovationsKontor Nordwest GmbH "What I really enjoyed when reading this book were the great many examples that reminded me of situations I have experienced during my occupational career. But it also brought forward new ideas to me for my business. This book should be all-in-one a must read for those at the beginning of their careers."

—Dr. Michael Lawo, Professor and Managing Director of Mobile-Solution Group GmbH, Bremen, Germany

"Bravo! At last, a practical and down-to-earth approach to KM, rich both in concrete examples and in challenging insights (like the 'Magnificent 7' at the end of each chapter)."

—Dr. Charles M. Savage, author of Fifth Generation Management

"I found the book very unique and useful. The fusion of the different perspectives of the authors—a manager and a management consultant—and the fusion of theory with practice make it interesting to read and easy to use. As an Israeli manager, I am of course made very happy and proud by a book full of Israeli examples—especially those from RAFAEL, a leading R&D organization."

—Major General (Ret.) Amiaz Sagis, Former Head of the Technology and Logistics Division in the Israel Defense Forces (IDF); CEO and Chairman of the Board of large Israeli corporations

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A Strategic Plan to Leverage Your Company's Intellectual Capital

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To Margalit, whose love, patience, and wisdom accompanied me in this journey for Knowledge Management as in all our travels on the roads of life.

—Tuvya

To Yossi Pasher, who has been supporting me to grow our intellectual capital and make my dreams come true, with love.

—Edna

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-Edna

I would like to thank the people of Rafael, my mentors, colleagues, and personal friends during my professional career. Their friendship, dedication, and knowledge were the inspiration for this book. I began this knowledge management journey to bring us some of the lessons learned in the outside world, to find that we have much of our own to contribute to others.

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—Tuvya

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-Edna and Tuvya

Getting Started on Your Knowledge Management Journey

Welcome to the beginning of your knowledge management (KM) journey. On this journey, you will travel with us, Tuvya and Edna, two KM experts searching for successful solutions to various KM issues in all types of markets and situations. This book takes the intangible and abstract topic of KM and makes it concrete and applicable.

Most managers already know something about KM and are curious to learn more, but their initial backgrounds may differ considerably: Many have only heard *knowledge management* used as a buzzword; some may hold the common misconception that it is only about systematically recording existing knowledge; and still others have already realized its strategic value. All of them, however, share a common goal that renders them prospective experts: to fully understand KM, to know their role in implementing it, and to acquire the necessary skills and tools for doing it successfully.

A Book for Managers

This book is intended to prepare managers to be the leaders of KM in their organizations. The continuous growth of knowledge, the most important core competence of the modern organization, ensures the long-term growth and profit of an organization. Managers at all levels of the organization must be the leaders and catalysts of KM. It is the manager who must comprehend and exploit the strategic significance of knowledge by instilling the processes of knowledge creating and knowledge sharing in an organization's culture and, in particular, continually fostering innovation.

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While managers must learn to be KM leaders, most books on the subject do not address their special needs. This book aims to fill that gap. It addresses all manners of KM topics and takes managers on an intellectual journey into knowledge management.

We begin our journey by establishing the business case to justify KM as a tool to increase the *intangible* asset of intellectual capital, which in turn ensures the *tangible* assets of future financial success. We then link strategy and knowledge management, and describe how to establish an appropriate KM culture geared toward constantly creating new knowledge.

We then take the manager along through a variety of focuses that represent the different topics of knowledge management, from the human aspects of managing knowledge workers, promoting interactions for knowledge creating and sharing, to knowledge-capturing processes, exploiting customer knowledge, and measuring the performance of increasing intellectual capital.

The peak of our journey involves knowledge renewal and the role of the manager in fostering innovation (the new use of existing knowledge and the creation of new knowledge).

Introducing the Authors

As authors, our background is particularly suited to understanding and fulfilling the unique needs of managers engaging in knowledge management. Dr. Tuvya Ronen is a vice president at Rafael, a leading aerospace company in Israel, where he gained extensive experience in managing research and development teams in projects and in professional departments. Dr. Edna Pasher is a strategic management consultant, an international pioneer in the intellectual capital community, and a leader in implementing knowledge management in Israeli organizations. We both have extensive experience in practicing knowledge management in organizations and have gained a deep familiarity with cutting-edge developments on the subject. While we have teamed together in writing this book, we represent different but complementing experience and perspectives.

Moreover, throughout the book, we also contribute our unique experience as authors, managers, and consultants living and working in the country of Israel, a small country always struggling to compensate for its lack of physical resources by utilizing successful KM strategies. In recent years Israel has established itself as a knowledge country, with economic success. The land of "the People of the Book" is now commonly referred to as "the Second Silicon Valley" or "the Start-Up Nation." Israel was one of the first countries to emerge from the 2008–2009 world financial crisis.

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There is a growing interest in its story of successful KM on a national level, and Edna is often invited to tell this story at international KM conferences. We therefore have many examples to share from the Israeli history of excellence in creating intellectual capital (IC) out of KM.

In particular, Tuvya's experience at Rafael has proven striking in providing examples for this book. Rafael has intuitively created a legacy of KM practices that began during a time when the term had not even been invented. The stories we present here from Rafael and Israel, combined with the other extensive global examples, create a comprehensive assembly of numerous nonstandard cases that managers can analyze and utilize. These cases include both large and small companies and are likely to be relevant and refreshing for readers (even those who already have some experience in KM).

Each of us experienced, in his own field, the major consequences of the two most recent economic bubbles: the first in early 2000 and the last beginning in 2008. We make a point of discussing KM examples as influenced by these bubbles.

How This Book Is Organized

We have structured this book to help you understand and implement a systematic and comprehensive knowledge management process. The chapters guide you in this journey, and—except when indicated otherwise—are helpful to read in order of appearance.

The KM journey follows a spiral path, as shown in Figure P.1. It does not terminate at the peak, since effective knowledge management is a continuous and never-ending process; rather, the end is a new beginning in a continuous journey, leading an organization to ever-higher peaks. Figure P.1 depicts the four phases of this journey, which we describe as follows.

Phase 1: Hitting the Road

This book begins with Chapter 1, "The Motivation toward Knowledge Management: Combining the Tactical with the Strategic," which presents the basic managerial catalysts for the journey into knowledge management: the questions, issues, and solutions involved. Most managers acquire their interest in KM while discovering tactical KM problems of knowledge capturing and knowledge sharing. They later realize the strategic importance of knowledge as the basic asset of the modern organization. In this chapter, we discuss both the tactical and strategic aspects of KM by providing easy-to-follow examples.

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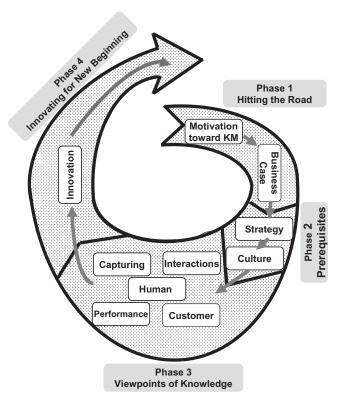


FIGURE P.1 The Knowledge Management Journey

Chapter 2, "Making the Business Case for Managing Intellectual Capital," explains how a manager can solidify the business rationale for investing time and money in knowledge management. Knowledge management aims to increase the tangible assets of an organization by increasing its intangible assets (the intellectual capital).

Phase 2: Prerequisites

Prior to starting the journey to successful knowledge management, managers and organizations must consider two essential prerequisites. First, managers must establish a comprehensive business strategy (composed of a vision, a mission, and a strategy to implement it) and knowledge management must serve that strategy. Chapter 3, "The Importance of Strategy in Knowledge Management," emphasizes the tight coupling between knowledge management and strategy.

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Second, knowledge management hinges on developing a system of shared values and a management style that seeks and develops an employee's knowledge. This management style is based on a culture of trust, innovation, and respect for the knowledge of the workers. Chapter 4, "The Role of Culture in a Successful Knowledge-Creating and Knowledge-Sharing Organization," explains and advocates these cultural requirements.

Phase 3: Viewpoints of Knowledge

Phase 3 presents critical viewpoints on knowledge management that you should consider for your organization. Chapter 5, "The Human Focus: Understanding and Managing Knowledge Workers," discusses how the success of a knowledge company is based on the proper management of its knowledge workers. It shows how to make an organization attractive to knowledge workers so that they will be motivated to join the organization and stay with it. It describes tools for enlarging the workers' knowledge and encouraging them to contribute their knowledge to a management process. This chapter is distinguished from the abundance of literature on human resource management in that it focuses specifically on knowledge issues and knowledge workers. We analyze lessons learned from the two bubble economies on successfully managing, attracting, and retaining knowledge workers and their knowledge.

Chapter 6, "Managing Interactions for Knowledge Creation and Sharing," discusses how knowledge is created and shared largely by social interactions. This chapter provides readers with methods to promote positive interactions to foster knowledge-creating and knowledge-sharing communities in their organizations. It provides a detailed discussion of formal and informal techniques that provide the cultural and physical environment for these communities to prosper.

Chapter 7, "Capturing and Reusing Knowledge," presents methods for capturing and codifying existing knowledge in the organization and making it available to any number of potential users.

Chapter 8, "The Customer Focus: Harnessing Customer Knowledge through Meaningful Interactions," presents opportunities and methods for making customers partners in creating knowledge and in shaping an organization's future. As the chapter details, customers possess a lot of valuable knowledge and are often willing to share it if an organization has the will and resources to inquire, and to co-create knowledge with them.

Chapter 9, "Measuring and Managing the Performance of Proper Knowledge Work," provides readers with the appropriate measurement systems required for effective knowledge management of the intangible asset of intellectual capital. These are added to the classical accounting methods indispensable for effective management of tangible resources.

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Phase 4: Innovating for a New Beginning

In Chapter 10, "Innovating for a New Beginning," the journey has one mandatory stop before it can begin anew: knowledge creation through innovation. Constant innovation in all business activities is a must for the continuous survival of an organization. This chapter describes various techniques for fostering a culture that encourages and enables workers to innovate.

And finally, the last chapter, "Conclusion: Implementing Knowledge Management—A Step-by-Step Process," outlines practical steps for readers to begin to implement proper knowledge management, particularly identifying where and how to begin the process in one's own organization.

Notes on Style

Before concluding this preface, we would like to draw the readers' attention to some particular styles used throughout the book:

Referencing the Authors and Sources

Our policy in referring to us, the authors, represents our combined message as well as our different perspectives. We usually refer to ourselves in first person as "we." However, in many cases we refer to "Tuvya" or "Edna" in the third-person. This is done mainly to emphasize his or her particular experience or point of view, but sometimes even to present disagreements between us.

We have two different policies in referring to people mentioned in the various examples. In cases based on interviews with managers and KM experts, or on written sources, we make every effort to cite them accurately with their name and their title at the time of interview. In other cases based on our personal experience, where people are mentioned without being interviewed, we substitute first names to respect their privacy. In both cases, any interpretation is our responsibility.

Definition of Knowledge and Intellectual Capital

This book is about knowledge and intellectual capital, and we have used these terms freely without asserting exact definitions. While expecting the context and your experience to make them clear, we offer this simplified definition: *Knowledge* is the experience and expertise that, when combined with basic data and information (which are not discussed here), can solve problems and create value. This value is the *intellectual capital*.

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More thorough definitions of these basic terms (data, information, knowledge, intellectual capital, and wisdom) are quickly described in the Appendix at the back of this book. This appendix may also serve as an alternate approach for introducing the subject.

Conclusion

When you have read all the chapters of this book you will have a complete guide to knowledge management. Next, you are able to start implementing the different methods you learned in your organization (or department, or team—remember that KM can be used at any level!). Our hope is that this book will take you all the way from strategy to implementation and that you will see the very tangible results of success in a number of ways. To that end, each chapter finishes with a list of seven guidelines (which we call "The Magnificent 7") to help you remember the most important points of the chapter's subject.

Good luck!

The Motivation toward Knowledge Management

Combining the Tactical with the Strategic

In this chapter you will:

Review examples of typical tactical knowledge management problems.

Discover how knowledge management is actually a strategic tool aiming to increase the intellectual capital essential for long-term success of an organization.

Learn that the manager should lead knowledge management efforts in an organization because of its importance as a procedural tool with both tactical and strategic relevance to success.

Most managers, when they begin this journey into knowledge management (KM), do not even know what knowledge management entails. They are only familiar with some of its problems from their day-to-day experience with the flow of knowledge in their organization. These day-to-day experiences are considered *tactical*, meaning they interfere with an organization's efficiency and performance. An example of a tactical issue might be that a manager notices a worker or colleague is not open to sharing his position's knowledge, so the manager needs to reinvent processes that already exist.

Later, when managers become more involved in learning about successful knowledge management, they realize the tactical problems also have *strategic* implications and solutions that can further the intellectual capital of their organization overall. For instance, modern high-tech organizations use KM to align their research and development (R&D) efforts. Or traditional industries realize that KM helps them use their current core

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