Foreword

ON KNOWLEDGE MANAGEMENT

As Robert Cole in his California Management Review article claims, “Knowledge, particularly as manifested in the creation of new products and services, has become the primary source of wealth creation and sustainable competitive advantage.” Knowledge represents a key to companies’ ability to succeed at innovation because it is through knowledge that companies learn from mistakes, improve product development performance, augment marketing prowess, and achieve eventual success. This highlights the important relationship between innovation and knowledge management – the topic of the present book.

A basic understanding of knowledge management begins with distinguishing the elements called data, information, and knowledge. Data are defined as a collection of facts such as raw numbers corresponding to sales, invoices, returns. When unanalyzed, even if downloaded from the company computer system, sales numbers residing in a spreadsheet are just data. Information exists when data are organized, summarized, analyzed and evaluated to create an understanding of a focal question or phenomenon. Graphing the sales data in a spreadsheet to conduct a trend analysis would provide information about company performance. Knowledge is the combination of information with experience, context, and reflections to derive implications, tactics, and strategies on which to base decisions. Building on the trend analysis example, knowledge is created when inferences and implications are drawn from the results of the trend analysis helping to form an action plan based on intuition and experience. In sum, data can be systematically summarized and analyzed to become information; information can be evaluated, synthesized, and laden with intuition and experiences to bring about knowledge for guiding future endeavors.

Simply recognizing the distinction between data, information, and knowledge does not mean that a company has a knowledge management process in place. Nor does collecting data imply that information is generated in a real-time fashion or that the presence of information denotes knowledge as being generated. It also cannot be assumed that data leads to information, and that information leads to knowledge in every circumstance. In other words, recognizing and generating data, information, and knowledge does not complete the knowledge management process. The exchange of data, information, and/or knowledge between individuals and departments is crucial, which evidences the need for tools and methods to manifest knowledge management. This book’s focus on tools and methods is therefore on target, with the presentation of case studies enlightening the contexts for knowledge management application.

Construing facts, insights, experiences, and lessons learned from previous innovation activities all comprise the knowledge management process, which corresponds to organizational learning and the company’s ability to develop new products and services. Unfortunately, literature tends to equate data,
information, and knowledge, with studies predominantly using meetings and documented information exchange as a metric of the knowledge process. Simply exchanging information by way of meetings and documented information exchange does not lead to better knowledge or resulting actions. And too much data and/or information can diminish the effectiveness of a company’s ability to respond. The existence of data and information thus does not ensure that an organization is increasing its knowledge. Data and information are necessary but not sufficient condition for enhanced innovation performance or customer responsiveness.

Another critical consideration is to distinguish between methods of delivering data, information and/or knowledge, which provide the infrastructure for knowledge management during product development. These are called “exchange networks” and serve the purpose to exchange data, information, and/or knowledge. “Networks” mean different things to different organizations and in different streams of research. To some, networks are networks of people or social networks, where the exchanging of knowledge occurs through relationships developed among the participants. To others, networks are networks of computers, storing information and knowledge and making it broadly available to everyone in the firm on-line. This distinction has repercussions for how fast and how broadly intelligence is disseminated; for what kinds of intelligence are disseminated, and for how they are used. The explosion of computing capabilities allows for instant access to a wealth of data, information, and knowledge and has improved the ability for everyone within a firm to access all that has been documented. Consequently, there is a major effort going on in and among firms to improve the on-line collection, dissemination, and use of the firm’s data, information, and knowledge. The potential, if not reality in many cases, is for this vehicle to largely replace face-to-face communication. Both relationship-based networks (social media) and computer-based networks are important, and must be managed to optimize the firm’s knowledge. The present book addresses the issues of networks by discussing social networks, change management, and case examples reflecting these aspects.

Knowledge is indeed intellectual capital for the company. As stated by a Hewlett-Packard executive, “If HP knew what HP knows, then we would be three times as profitable”. The last section of the book focuses on this issue, linking knowledge and value. Together the chapters of this book lead the reader from organizational readiness to understanding the nature of knowledge management to creating innovations through knowledge management, and evaluating the intellectual capital manifested by knowledge management. Product and marketing innovation remains a top priority for all companies and because of the strong link between knowledge management and innovation, this book is contemporary and timely.

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ENDNOTES


Kenneth B. Kahn, PhD is a Professor of Marketing and Director of the daVinci Center for Innovation at Virginia Commonwealth University in Richmond, Virginia. His teaching and research interests address product development, product management, and demand forecasting of current and new products. He has published in a variety of journals, including the Journal of Product Innovation Management, Journal of Business Research, Journal of Forecasting, Journal of Business Forecasting, Marketing Management, and R&D Management. He also has authored the books Product Planning Essentials (Sage Publications, 2000; 2nd Edition by ME Sharpe, 2011) and New Product Forecasting: An Applied Approach (M.E. Sharpe, 2006), and served as editor of the PDMA Handbook on New Product Development, 2nd Edition (Wiley & Sons, 2004). Prior to joining the faculty of VCU, Dr. Kahn was a professor in the College of Technology and the Avrum and Joyce Gray Director of the Burton D. Morgan Center for Entrepreneurship at Purdue University in West Lafayette, Indiana. His university experience also includes co-founding Director of the University of Tennessee’s Sales Forecasting Management Forum, Director of Georgia Tech’s Marketing Analysis Laboratory, and co-founder of Georgia Tech’s Collaborative Product Development Laboratory – each of these initiatives keenly emphasized company collaborations to augment the education and research experience for students and faculty. Dr. Kahn’s industrial experience includes serving as an industrial engineer and project engineer for the Weyerhaeuser Company and a manufacturing engineer for Respironics, Inc. He has consulted and conducted training sessions with numerous companies, including Accenture, Acco Brands, Coca-Cola, ConAgra, Enfásis, Harley-Davidson, Honeywell, John Deere, Lego, McNeil Nutritionals, Procter & Gamble, and the SAS Institute.