Knowledge Management in Practice

esson learned performance sharing improvement

Knowledge innovation

Management competitive advantage improvement

Anthony J. Rhem



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Foreword

People and civilizations desire and cherish wisdom—inspired wisdom or the kind from experience that leads to deep expertise. In knowledge professions, the pathway to wisdom is data → information → knowledge. As the penultimate step, knowledge involves notions of the nature of an expert versus a novice, heuristics based on experience, and depth versus narrow intelligence. The pathway starts with the imperative for clean, relevant, error-free data in a form suitable for analytics and scientific analysis. Information should be relevant to the needs of the users, in an appropriate format for interpreting and archiving, and should be presented for convenient visualization.

People in small communities and large organizations collaborate and share their experiences, so capturing and reusing their knowledge are important for increasing group effectiveness and efficiency as well as for fostering innovation. For organizations, a key challenge is to identify needs for collaboration and to share collective knowledge. This means understanding who holds knowledge and what knowledge they have. Tools, techniques, and processes are thus needed to capture, store, and reuse the many types and instances of knowledge in an organization.

KM includes practices and procedures, as well as the people and systems, that support societies' information and knowledge needs. This includes ways to encourage organizations and individuals to add value and share knowledge. Managers and knowledge professionals then implement KM methods and techniques, differentiating them for specific industries and subject areas. In practice, KM must address the varying requirements in specific industries such as healthcare, human resources, military, and finance. The different environments and cultures require consistent procedures that identify and analyze relevant content, organize knowledge, create effective access, and promote a knowledge-sharing culture through education and training.

Organizations need detailed information on applying KM practices to solve real-world problems. They need to establish organizational policies that lead to successful KM adoption and to understand reasons why KM projects fail. Organizations need to apply known lessons and tips to ensure successful implementation of KM practices and to elevate the value of adopting KM policies.

Dr. Anthony Rhem's Knowledge Management in Practice is unique in the

degree to which his extensive experience informs his insights and writing. At a time of such great attention to Big Data and data analytics, this book reminds us that knowledge is after all the ultimate goal of careful work with data and the creation of accurate information. Identifying, capturing, and managing knowledge as a critically important asset are formidable tasks in our large corporate and governmental organizations. This evidence-based book provides the framework and guidelines that professionals need for working with the contemporary explosion of data that is creating opportunities and challenges to all phases of our society and commerce. To our benefit, this book captures the considerable wisdom Dr. Rhem has acquired over his career as a KM professional.

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Preface

Knowledge is recognized as a valuable asset in organizations across many industries. How knowledge is shared, leveraged, obtained, and managed will be the difference in how successful and sustainable an organization will become. This book is a culmination of my years of experience in the knowledge management (KM) discipline. Since 1998, I have been involved in various KM activities such as researching, developing processes for capturing and codifying knowledge, developing KM systems, developing and operationalizing KM strategies across several industries, writing articles and books, developing and teaching KM curriculum, and speaking at numerous KM conferences.

Why I Wrote This Book

The use of KM principles, practices, and procedures has expanded enormously since 2010. This expansion has also brought about the proliferation of KM systems in its many forms such as contact center knowledge repositories, expertise locators, content management, document management, knowledge repositories/libraries, social media applications, and decision support systems. The inclusion of KM from a strategic point of view to streamline revenue, increase revenue, improve performance, attract/retain customers, and manage human capital has enabled organizations to maintain and/or improve their competitive edge. To compete in a local, national, and/or global market, organizations, including educational, government, and military, are looking for that differentiator, and KM has proved to be just that. I wrote this book to capture and make available my experience in implementing and practicing KM across many organizations to scholars and practitioners of KM. This book is a resource that presents how KM is being implemented along with specific KM methods, tips, techniques, and best practices to get the most out of a KM investment.

What This Book Is About

This book covers how knowledge management is leveraged in several industries. The various uses of KM practices, policies, procedures, and methods, including tips and techniques, to create a competitive advantage are examined. Industries such as first responders, military, healthcare, insurance, financial services, legal, human resources, merger and acquisition (M&A) firms, and research institutions

are covered in this book.

Essential KM concepts are also explored not only from a foundational perspective but also from a practical application. These KM concepts include capturing and codifying tacit and explicit knowledge, KM methods, information architecture, search, KM and social media, KM and Big Data, adoption of KM, and why KM initiatives fail.

The following are the subjects that are covered, and what you can expect from the various chapters:

- Chapter 2: The Case for Implementing Knowledge Management

 This chapter details the factors you must consider before implementing KM in your organization and details the various practices and policies of KM. Moreover, the needs for your organization to launch a KM initiative/project and/or establish a KM program are addressed.
- Chapter 3: Being Social: Knowledge Management and Social Media

 This chapter examines how social media tools and techniques are becoming
 facilitators of knowledge for the organization. Specific guidance and
 insights are given to develop your organization's social media strategy and
 to determine the social media tools, techniques, and platforms that can be
 used to take advantage of what social media can bring to KM.
- Chapter 4: Dude, "Where's My Car?": Utilizing Search in Knowledge Management
 - This chapter details the importance of search in KM, in particular a KM system. Several aspects of implementing search are examined, including the importance of having user-centric information architecture.
- Chapter 5: The Age of Discovery: Knowledge Management in Research Institutions
 - Research institutions play a key role in product innovation. KM is a catalyst for stimulating and sustaining a high level of innovation. This chapter examines how KM is used, focusing on various KM methods that can and in some cases are being incorporated at research institutions.
- Chapter 6: "Where Have All My Experts Gone?": Knowledge Management in Human Resources and Talent Management
 - When it comes to talent management, KM can play a critical role in ensuring that the knowledge assets are captured and made available to the enterprise. KM in talent management when applied holistically involves capturing and sharing employee knowledge from onboarding to exit interview.
- Chapter 7: "Sound the Alarm!": Knowledge Management in Emergency and Disaster Preparedness

Emergency and disaster preparedness is enhanced through the incorporation

of KM. Putting the right knowledge in the right context at the right time in the hands of first responders could be the difference in saving lives and preventing casualties. It is important to begin with a comprehensive KM strategy to establishing a plan to deliver the knowledge in a timely manner.

■ Chapter 8: Happily Ever After: Knowledge Management in Mergers and Acquisitions

When organizations merge or are acquired, there is a level of uncertainty both from a macro (organization) level and from a micro (employee) level. Applying KM to M&A will enable the organization to know what knowledge is important to retain, who those knowledge holders are, what are the knowledge gaps, and how to quantify the knowledge of the organization. From an employee standpoint, having the organization share knowledge about the pending transaction as well as incentify employees to share what they know and to assist employees in transitioning (within the new organization or to a new organization) will go a long way to ensure a smooth M&A transaction.

■ Chapter 9: "Is There a Doctor in the House?": Knowledge Management in Healthcare

The healthcare industry has become individual centric. As the healthcare community moves to electronic record keeping and capturing patient information at the point of initial interaction, having accurate knowledge about that patient as well as having the patient knowledgeable about his or her own health is essential to the success of caring for that patient. KM is an essential ingredient for healthcare success, especially in the areas of drug interaction analysis, sharing of patient diagnosis between hospitals and doctors, and furthering the development of healthcare informatics.

■ Chapter 10: "Show Me the Money!": Knowledge Management in Financial Services

KM in the financial services sector centers on being able to attract, serve, and retain customers. Delivering the tools to customers that provide knowledge to make sound financial decisions is at the heart of what KM will provide. To bring innovative financial services and products to the marketplace and to have an understanding of their potential benefits to customers, imparting training to customer service representatives on specific knowledge will also be a critical component of KM.

■ Chapter 11: "Are You in Good Hands?": Knowledge Management in Insurance

In this chapter, you will learn how KM is used in the insurance industry to communicate knowledge to customers, agents, and customer contact centers while providing mechanisms for employees to share, capture, and

- catalog knowledge. KM in the insurance industry will provide the knowledge to (among other things) complete applications, bind insurance, and service a claim.
- Chapter 12: "Sign Right Here!": Knowledge Management in the Legal Profession
 - In this chapter, use of KM to enhance the management of a law firm and to execute client engagements will be presented. KM in law firms is primarily executed through the building and fostering communities of practice around practice specialties. This enables legal representatives to respond to a situation with the right expertise, equipped with the right knowledge to resolve a legal matter.
- Chapter 13: "A Mind Is a Terrible Thing to Waste!": Knowledge Management Education
 - This chapter examines the state of KM education. This examination includes KM certification programs, KM curriculum at institutions of higher learning, as well as KM education policies, procedures, and future direction of KM education. In addition, specific criteria to be considered while selecting a KM education option are presented.
- Chapter 14: "Big Knowledge!": Knowledge Management and Big Data
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 to enable decisions to be made on a multitude and a variety of data is the
 essence of this examination. Along with specific analysis of the various
 types of data and KM methods for examining this data, a detailed
 understanding of KM's impact on Big Data can be realized.
- Chapter 15: "What Have You Done for the War Fighter Today?": Knowledge Management in the Military
 - KM in military has a rich history. Use of KM in the military, with special attention to events such as Base Realignment and Closure (BRAC), will be examined. In addition, a look at the various branches of the military (army, air force, and navy) and their KM strategies, KM systems, and KM methods are presented.
- Chapter 16: Drinking the Knowledge Management Kool-Aid: Knowledge Management Adoption
 - Adoption of KM programs, policies, methods, and systems is a challenge for all organizations. This chapter is all about adoption! If your organization does not adopt its KM principles, practices, processes, procedures, or systems, it may be recognized as a failure. Specific guidance on improving KM adoption and positioning your KM initiatives for success is also presented.
- Chapter 17: Failure Is Not an Option: Why Do Knowledge Management

Programs and Projects Fail?

With lofty promises come unrealized results. KM gained widespread popularity in the 1990s; however, many KM initiatives failed and this popularity has tapered quite a bit. Since the mid-2000s, KM started to experience a renaissance; some disparate KM achievements were witnessed (call centers, research, human resources, and military), and KM is now considered as a discipline to gain a competitive advantage over competitors. Although KM is being used with some level of success in this new knowledge economy, many KM initiatives still fail. This chapter details the factors that contribute to the failure of KM initiatives as well as measures to adhere to in order to achieve successful KM.

An in-depth synopsis of each chapter and an overall introduction to the book are included in Chapter 1. The concluding chapter (Chapter 18) provides a summary of the book and an insight into what's next for KM.

Who Should Read This Book

This book will provide KM educators, practitioners, and those who are new to KM an insight into how KM is being implemented by providing tips and techniques that will enable the reader to be more productive in their application of KM and those who are being educated in KM an understanding of how KM is used in a variety of industries to solve pertinent issues. In summary, *Knowledge Management in Practice* will be a definitive KM reference for anyone entering into the field and/or currently practicing KM.

What You Will Learn

This book is intended to provide comprehensive guidance on how KM is implemented in several industries. The following points identify what the reader will learn:

- Key learnings identified based on the specific industry
- Tips and techniques for the KM practitioner and novice to be productive
- Major concepts and solutions to problems addressed by KM
- A KM reference for practitioners to aid in solving actual problems
- Practical approach to presenting KM concepts and their application
- Identifying the benefits of implementing a KM solution
- Specific guidance on delivering and executing KM strategies
- Guidance on selecting the "right" educational option for KM education
- Foundational and practical application of KM methods
- Real-world application of KM

How to Leverage This Book

There are several ways to leverage this book. An immediate way is to read the book cover to cover and understand how KM is being used in several industries, as well as understand the various concepts that are being presented. However, a more pragmatic approach would be to focus on a specific industry presented in the book and refer to the related chapters that delve deep into the KM methods, procedures, and best practices that were indicated in the industry-specific chapter. Either way, you are sure to gain the insights you need to make KM successful and to increase your KM acumen.

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I thank the many people who have influenced my career in KM, particularly Dr. Larry Medsker and Dr. Jay Liebowitz. I have had the pleasure of knowing both these distinguished men for nearly 20 years. They have been my mentors, friends, colleagues, and advisors.

I also thank the many corporations and brilliant people I have had the pleasure to work with since 1998, implementing KM strategies, programs, projects and systems, and without this valuable experience, this book would not be possible. Special thanks go to Sydney Torain who served as my research assistant throughout the completion of this book.

Author

Dr. Anthony J. Rhem serves as the president and principal consultant of A.J. Rhem & Associates, Inc., a privately held knowledge management (KM) consulting, training, and research firm located in Chicago, Illinois. Dr. Rhem is an information systems professional, with over 30 years of experience, a published author, and an educator. He has presented papers on the application and theory of software engineering methodologies, knowledge management, and artificial intelligence.

As a KM consultant, Dr. Rhem consistently serves as a KM advisor, KM strategist, information architect, and KM governance strategist. He has played an integral role in the successful implementation of KM systems, KM methods, and KM strategies in several industries, including financial services, insurance, retail, telecommunications, and military.

Dr. Rhem has conducted research in the knowledge engineering domain since 2004. His research experience includes conducting webinars through the Principal Investigators Association addressing various research problems and issues; Dr. Rhem received an Small Business Innovation Research (SBIR) phase I grant award for his work on a process to capture and codify tacit knowledge in which he holds a patent. He has also participated in several research projects, playing an integral role in successfully commercializing software methodologies and software products.

In his advisory work, as a member of the Gerson Lehrman Group Technology Council of Advisors, Dr. Rhem consults with venture capitalists and investment firms specifically as they pertain to technology innovations, best practices, and trends. Dr. Rhem's current advisory work also includes Board of Trustees at the Knowledge Systems Institute, Industry Advisory Board—International Conference on Software Engineering and Knowledge Engineering (SEKE), International Bar Association (IBA) Law Firm Management Sub-Committee on Knowledge Management and IT, Advisory Board for American University Professional Science Master's Degree Program, Member of the National Science Foundation Research Review Panel, and Corporate Advisory Board of the ASCII Group Inc.

Introduction

Have you ever wondered about all the fuss concerning knowledge management (KM)? What is KM anyway? At its core, KM is about sharing and collaborating what you know, capturing what you know, and reusing that knowledge so as to not reinvent the wheel and/or to combine with other ideas to foster innovation. A KM meeting that I attended, conducted by the American Productivity and Quality Center (APQC) (APQC's January 2011 KM Community Call), included representatives from Conoco Phillips, Fluor, IBM, GE, and Schlumberger; I returned from this meeting understanding that it is necessary to have KM part of an organization's culture. I believe that this is important because we do not want KM to be "another task to complete on the checklist," but the way we conduct business. This includes the business between the various individuals and entities within our corporations as well as with our customers. Talking, listening, capturing, and applying what we learn from each other is a constant, never ending, and always evolving process.

Knowledge Management in Practice provides KM professionals and those undergoing training in KM a practical examination on how KM is being applied. Specifically, this book leverages the experience gained while practicing KM to solve some of the more pressing KM problems faced in organizations today. This book addresses challenges such as search engine optimization, content categorization and searching, building taxonomies and ontologies, capturing and managing tacit and explicit knowledge, KM adoption, and failure of KM projects. In addition, this book examines how KM is being applied to specific industries, including insurance, healthcare, legal, human resources and talent management, military, research institutions, and finance.

Overview

This book will provide detailed information on applying KM practices, procedures, and techniques to solve real-world problems. The applications of KM that will be examined include social media; content management; search engine optimization; capturing and codifying tacit and explicit knowledge; KM in disaster preparedness, action, and reaction; KM adoption process in an organization; the reason for failure of KM projects, and specific industry KM

applications. This book will contribute to the advancement in application of KM principles, practices, and procedures, as well as the systems that support KM.

Each chapter will include key learnings as well as tips and techniques for those who are currently instituting KM in projects and/or programs. The following sections contain a synopsis of each chapter in this book:

The Case for Implementing Knowledge Management (Chapter 2)

This chapter examines why your organization may need a KM program. What factors determine that it is time to consider implementing policies, procedures, practices, and processes that will not only be the catalyst for specific KM initiatives, but also the development of a KM program, including KM Center of Excellence? This chapter will answer this question as well as examine the need to collaborate and share knowledge; understand who the key knowledge holders are and what knowledge they know; and the need to respond to internal employees and/or customers by identifying, capturing, storing, reusing, and learning from the myriad of explicit knowledge in your organization. All of this and more will be examined, because it contributes to your organization's need for KM.

Implementation of KM must consider the necessary resources to address the problem(s) being identified that call for KM. In our case for KM, we must communicate a payoff (Rhem, 2005). Why should our organization invest in KM without knowing the payoff and when it will occur? Another aspect of our case for KM is actually selling KM as an organizational effort and benefit and not just limited to a department or business unit.

The case for KM represents a well-argued and logically structured document that puts forward the business rationale for investing in a KM initiative. The case for KM as with any business case must clearly establish the following:

- The driving forces for the initiative
- The costs and risks of doing nothing
- A description of the proposed action(s)
- Comparison of the proposed action to other alternatives
- Accommodation of the proposed actions with the current and future goals of the organization
- The cost–benefit, risk, and financial assessments of the proposed action(s)
- A tentative, high-level strategy and a project plan outlining the key initiatives
- A statement on how the proposed action(s), if implemented, would improve the organization

This chapter will include a template for presenting your organization's business case for KM as well as some proven tips and techniques to enable your business

Being Social: Knowledge Management and Social Media (Chapter 3)

KM at its core is people centric. Social media is driven by people and the interactions they have with each other. Many employees and customers of organizations are now engaged in social media. It is now engrained in our society, and new generations of current and future workers are shaping the way it is used and the impact it is been having. Through the implementation of KM, organizations are aligning social media principles, practices and tools to among other things expedite the sharing and the dissemination of knowledge and information real time. KM that utilizes social media will facilitate in building an environment that will facilitate how people interact outside the organization to within the organization. However, this must be accomplished by implementing much more stringent policies and guidelines concerning social media and related technologies. In this chapter, a look at constructing a social media strategy will bring to light how these capabilities must be managed by the organization.

Organizations have also committed resources to contribute to the social media voice. By employing social media specialist (among other titles), organizations tweet about their latest company products, news, specials, and so on, while also responding to others in the "twitter space." You will often find organizations with a Facebook presence, knowing that a great percentage of their customers are also on Facebook. Organizations are benefiting from social media, knowing that the virtual world is filled with knowledge, and they monitor that knowledge within the various social channels.

Social tools and mediums such as blogs, wikis, Twitter, Facebook, and LinkedIn represent the mechanisms to enable people to engage and share openly. These social tools put knowledge-sharing power in the hands of the users themselves, and this power has business and government taking notice. In this chapter, social media as it pertains to the key principles of KM will be examined. These key principles include knowledge sharing, knowledge capture, and knowledge reuse. As it pertains to social media, Twitter, Facebook, and LinkedIn will be the mechanisms that are included in this analysis. This chapter will also include input from my own experience, and the experiences that have been documented by others as contributors to the analysis will be conveyed in this chapter. In addition, this chapter will include a template for developing your organization's social media strategy as well as some proven tips and techniques to successfully execute this strategy.

Dude, "Where's My Car?": Utilizing Search in Knowledge Management (Chapter 4)

This chapter is all about search and "findability" of knowledge within the enterprise and/or customer-facing websites. In this chapter, concepts such as search engine optimization, ontology, taxonomy, information architecture, and information modeling are covered. To increase the chances, content and knowledge are properly located within the knowledge repository; having properly categorized content and knowledge is essential. Knowledge base concepts such as "tagging," metadata, keywords, and synonyms will also be covered. When we understand these concepts along with our specific requirements, we will be better equipped to select the right tool to satisfy our searching needs.

When it comes to selecting a software tool to facilitate the management of our knowledge, whether it's replacing a current tool or if it's the first time implementing a KM tool, we must have a plan on how we are going to get the content on to the knowledge repository. Having a clear, concise, and workable plan for content migration is a critical ingredient in our ability to later find all content and especially those "knowledge nuggets" that will help us in performing our tasks. This chapter will cover the steps that should be considered when developing your content migration strategy. These steps and concepts include the following:

- Content identification
- Content analysis
- Stakeholder/management engagement
- Knowledge repository design
- Taxonomy, content types, and metadata mapping
- Training
- Content migration

Finally, to conclude this chapter, a discussion on where search is heading toward and the tools enabling findability of knowledge will be examined. This chapter will include the examination of Web 2.x through Web 4.x paradigms. Search paradigms such as PIK-Map, Syntactic/Semantic Frames, intelligence/rules-based content retrieval, Natural Language parsers, and Spiders will all be included. A distention between the search needs of the enterprise and the search needs of the customer facing websites will be examined. The discussion on software tools could not be complete without examining some of the most widely used tools and the criteria established to use when selecting an enterprise search solution.

The Age of Discovery: Knowledge Management in Research Institutions (Chapter 5)

Research institutions are critical to innovation and new product creation. The speed to market for new products are essential to stay ahead of your competitors.

KM plays a central role in innovation through the use of collaboration and knowledge sharing.

At its core, the nature of research is to nurture open access to extensive amounts of tacit knowledge (knowledge within the minds of people) and explicit knowledge (knowledge that is written down) by applying a model that reflects the natural of flow of knowledge. The model of Connect \rightarrow Collect \rightarrow Reuse and Learn depicts a knowledge flow model that supports KM within research institutions and R&D functions within organizations. For KM to work within a research environment (as with other environments) a culture and structure that supports, rewards, and proves the value KM will encourage the continued use and adoption of the KM practice.

In addition, the choice of IT tools (which is of secondary importance) should be brought into the organization to automate the knowledge flow and its associated process. The KM tool(s) must support KM goals/strategies, and provide a means to connect, collect, catalog, access, and reuse tacit and explicit knowledge. In addition, the KM tool(s) must capture new learning to share across the organization and provide search and retrieval mechanisms to bring pertinent knowledge to the user. Research institutions and departments utilizing KM effectively will have an advantage over their competitors who are not utilizing KM by getting better products to market quicker, increasing the level of innovation at their organizations, and establishing an environment of empowerment for research professionals.

This chapter will cover the KM strategy (including a strategy template), techniques, best practices, and application of KM necessary for research institutions to innovate more effectively and shorten the time to bring new products to market. Topics such as knowledge sharing techniques (communities of practice [CoP], collaborative workspaces, and after action reviews); techniques for innovation (knowledge café, root cause analysis, and problem finding); tools to facilitate KM within the research organization; ways to quickly institute the KM procedures, practices, and principles into the organization; and the key benefits of KM will also be covered.

"Where Have All My Experts Gone?": Knowledge Management in Human Resources and Talent Management (Chapter 6)

Talent management is often referred to as human capital management. Many organizations are faced with the problem of retaining talent as well as capturing the knowledge of the talent as it moves in and out of the organization. KM plays an important role in converting individual knowledge into corporate knowledge, thereby making it available to be cataloged and shared throughout the organization.

As part of a comprehensive KM strategy applied to human capital management, it is vital to establish a program that is executed when your staff enters the organization and continues until the time that staff member leaves the organization. How is this accomplished? Initially, through employee orientation; establishing a mentor–protégé relationship; mapping their roles, responsibilities, and their work products to the specific duties that are being performed; and executing a comprehensive exit interview. All these are aspects of a KM strategy aimed at moving your human capital to corporate capital.

This strategy does not begin and end here! As staff members evolve in their roles, the sharing and cataloging of knowledge continues through the use of CoP, the creation of knowledge repositories, capturing lesson learned, and instituting a culture that values lifelong learning and sharing of knowledge. Getting started with a KM strategy entails a collective vision as to how sharing of knowledge can enhance organizational performance, and that the knowledge of the organization is a valuable commodity that must be collected, cataloged and reused.

In this chapter, the following concepts and topics will be examined:

- Human capital management critical success factors
- Human capital challenges facing organizations
- Capturing employee tacit and explicit knowledge
- Knowledge mapping for identifying key knowledge holders and what they know
- High impact talent management framework

"Sound the Alarm!": Knowledge Management in Emergency and Disaster Preparedness (Chapter 7)

First responders (i.e., police, fire, and emergency medical teams) many times are not able to respond quickly and effectively, causing the increase probability of seriously injured people not receiving care in a timely fashion. This has led to loss of life in situations where one's life could have been saved. Nationally (as seen by the response to Hurricanes Katrina and Rita, and 9/11 attacks), there is a problem in effectively and efficiently enabling first responders in their effort to prepare, respond, and provide recovery during an emergency and/or crisis situation.

KM applied to the preparedness, response, and recovery mission of first responders will enable them to arrive at the scene in a timely manner, be equipped with the right knowledge of the situation, and have the right tools and technology to execute their job, resulting in saving lives. In many urban areas of the United States, when a first responder team is dispatched, they often do not arrive in a timely manner, are not fully aware of the situation, and are not fully equipped to handle the situation. Applying KM to disaster preparedness,

response, and recovery will save lives not only in the communities' first responder serve but also within the first responder teams themselves, resulting in a safer, fully knowledgeable team responding to a crises event.

This indicates a need to apply a comprehensive KM strategy that will incorporate the necessary KM policies, principles, practices, and technology to enable knowledge sharing, knowledge harvesting, and knowledge delivery, including alerts to the right people, at the right time, in the right manner.

In this chapter, a KM strategy focused on emergency preparedness and response by first responders will be examined as well as aspects of that plan will be presented. A details analysis of a comprehensive emergency alert system will be presented. This chapter will examine the following areas of a comprehensive emergency alert system: emergency alert interaction (two-way interaction), geographical information system-based real-time alert delivery, leveraging a cloud-based architecture, scalability, and interoperability.

Happily Ever After: Knowledge Management in Mergers and Acquisitions (Chapter 8)

Mergers and acquisitions are a way of life in corporate America and around the world. The results in most cases are mixed. The basic premise is that the acquiring company and/or the merging companies are looking for synergies, increase market share, and overall a stronger and a more viable entity.

Synergy allows for enhanced cost efficiencies of the new business entity. When companies decide to go through a merger/acquisition, the organizations involved anticipate benefiting from the following:

- *Staff reductions*: More often than not, it means job losses. Cost savings are realized from reducing the number of staff members from departments across the organization(s).
- Economies of scale: As we all know size matters, it is no surprise that a larger company placing the orders can save more on costs. Mergers often translate into improved purchasing power to buy equipment or office supplies. When placing larger orders, larger companies (i.e., Wal-Mart, Microsoft, and Boeing) have a greater ability to negotiate prices with their suppliers.
- Acquiring new technology: To stay competitive, companies need to stay on top of technological developments and their business applications. By buying a smaller company with unique technologies, a large company can maintain or develop a competitive edge.
- Improved market reach and industry visibility: Companies buy companies to reach new markets and grow revenues and earnings. A merge may expand

two companies' marketing and distribution, giving them new sales opportunities. A merger can also improve a company's standing in the investment community: bigger firms often have an easier time raising capital than smaller ones.

More often than not, understanding the synergies or the lack thereof when it comes to personnel is absent. Understanding the personnel challenges of a merger/acquisition will be the key to the success of the transaction and the ongoing operation of the new entity.

This understanding will be enhanced by applying the KM principles leveraged within human capital management (see Chapter 6). In this chapter, the specifics of mergers and acquisitions and the application of KM (more precisely human capital management) to improve the process and outcomes as it pertains to retaining staff, conducting staff reductions, identifying key knowledge holders, and understanding knowledge gaps are examined.

"Is There a Doctor in the House?": Knowledge Management in Healthcare (Chapter 9)

With the advent of healthcare reform and the move to digitize health records, streamline medical costs, and to enable better medical decisions, many organizations in the healthcare industry are turning to KM. A prime method in utilizing KM in healthcare is through healthcare informatics. Healthcare informatics incorporates information technology and healthcare to support clinical workflow, collect, organize, and secure health related data, information, and knowledge. It also supports the growing knowledge base of physicians in order for them to make better decisions, reduce the costs of treatments, eliminate (severely cut) mistakes, and improve overall patient care.

Healthcare informatics combines the fields of information technology and health to develop the systems required to administer the expansion of information, advance clinical work flow, and improve the security of the healthcare system. It involves the integration of information science, computer technology, and medicines to collect, organize, and secure information systems and health-related data. As a result, the extraordinary explosion of medical knowledge, technologies, and ground-breaking drugs may vastly improve healthcare delivery to consumers, and keeping the information and knowledge related to these advancements organized and accessible is the key.

Some of the keys to patient care are the ability to evaluate large amounts of data and information, which includes the use of medical informatics. These are the keys to deliver medical knowledge to the right people, at the right time, in the right context. Electronic health records, data warehouses, laptops, and other mobile devices now provide access to information at the point of care. This

access facilitates a continuous learning environment in which lessons learned can provide updates to clinical, administrative, and financial processes. Given these advancements, it is imperative that data, information, and knowledge are managed for effective healthcare. Applying principles of KM has become the catalyst for quality healthcare delivery and management.

This chapter provides a detailed understanding of the practice of KM within the healthcare industry. The content includes critical aspects of healthcare operations, knowledge strategies for healthcare operations, knowledge essential elements for healthcare, knowledge mapping and medical informatics, knowledge creation and discovery in medical informatics, applying KM to healthcare, and knowledge tools and techniques for healthcare.

"Show Me the Money!": Knowledge Management for Financial Services (Chapter 10)

The financial services industry is a highly dynamic and competitive marketplace. As the fight for customers intensifies, it is increasingly important to attend to customer needs while ensuring customer information is shared with the right people at the right time across the institution. To this end, the technology supporting the institution is vital to facilitating the movement of information and knowledge to the customer. KM systems will have an increased importance as trends in personal investing move toward broader services and integrated product offerings.

By utilizing a KM system, all employees interacting with a customer will have up-to-date knowledge of that customer's breadth of relationship and experience with the institution. This helps the institution with cross selling, up selling, and reporting on the effectiveness of any new customer initiatives.

Today, organizations are integrating KM into their business philosophies, making it more common practice and therefore less differentiating factor of success, thus creating the need for KM practice to become more and more superior. This is especially true in the light that more and more knowledge is becoming available, while at the same time also being becoming more sophisticated, making KM more complex. This results in the fact that businesses that manage knowledge better within their organization and outside of it addressing the evolving customer needs will improve their overall performance and become the leaders within the industry.

It is well recognized that the financial services business environment is ever changing and is doing so at an ever-increasing rate. The stock market (DOW, NASDAQ, and S&P) swings on the earnings of large corporations, the ever-evolving political climate, the volatility of European and Asian markets, and the price of oil, just to name a few. This presents financial organizations with the

challenge of acting and reacting to this volatility and communicating an appropriate value proposition to the market. In addition, having an increasingly sophisticated consumer who is armed with the latest trading technology has added further stress to these companies to deliver the right knowledge, at the right time, in the right way to their customers.

This chapter focuses on the use of KM within the financial industry. Specific attention will be on how KM is being leveraged in the commodity (futures and options) and the stock market, including the mutual funds sector within the United States. Online trading financial companies, the electronic trading applications in the commodities and stock market, and the sophisticated trading tools leveraged by today's financial consumer are the catalyst for the implementation of KM practices, policies, procedures, and applications, all aimed at creating a differential between companies that deliver financial services and the people who are working to build financial stability with them.

"Are You in Good Hands?": Knowledge Management in Insurance (Chapter 11)

In the insurance industry, trade secrets, confidential information, and valuable ideas are part of the workforce knowledge. Recruiting, selecting, training, and managing contact center employees, agents, and other corporate and field office employees present a real challenge for insurance companies. In addition, government and industry laws and regulations as well as ethics present their own unique challenges of understanding, application, and enforcement. These challenges are being addressed through the implementation and execution of KM policies, practices, procedures, and software applications.

In the insurance industry, there are an ample number of factors as stated above to be considered for KM to facilitate decisions within a problem situation. These factors include the sharing and transfer of experiences (tacit knowledge) as well as the sharing and transfer of practices, how-tos, and lessons learned (explicit knowledge). This knowledge can be transferred through sharing, and in some instances, it can be codified (Rhem, 2005). It is very difficult to retain the intellectual capital when a person leaves an organization; moreover, it is difficult to value these intangible assets and is essential to retain them inside the organization in order to take competitive advantage of these assets (Rhem, 2005).

Applying KM will facilitate the insurers' ability to meet these challenges and achieve efficiencies by leveraging the combined knowledge of its workforce and effectively turning it into a competitive advantage. Insurance companies (as well as others) are focusing on providing for their customers and in doing so generating profitable growth. In the face of a demanding economic environment, tight margins, regulations, availability, and quality of people, as well as data,

information, and knowledge, all insurance organizations are facing challenges on several fronts. These include talent management (see Chapter 6), organizational responsiveness to the customer, cost control, and compliance.

KM in the insurance industry centers on meeting the customer needs, balancing growth with profit, protecting financial strength, and creating high-performing teams. In this chapter, the focus will be on how insurance companies are leveraging KM to address the needs of the customer through examining customer call centers, agents, decisions supporting underwriting and claims, and use of knowledge of the internal employees.

"Sign Right Here!": Knowledge Management in the Legal Profession (Chapter 12)

KM in law firms has taken off in recent years. Here it's not only a requirement to have KM experience, a KM certification (or formal degree), but most law firms are requiring that future employees also have a *Juris Doctor* (JD). The requirement for a JD may not be as stringent at corporations that are looking for KM resources within their legal departments; they usually look for candidates with KM and/or a library sciences background. All of this is fueled by the fact that KM enables legal organizations to respond quickly, efficiently, and effectively when it comes to servicing its employees and at the end of the day, their clients as well.

KM in law firms is often executed through the following elements: building and fostering CoP around practice specialties and/or areas of responsibility; development and use/reuse of knowledge assets; enabling collaboration beyond the CoP and into extended communities; capturing and validating knowledge produced as a result of collaboration; systematically hosting tacit knowledge; arranging and efficiently presenting knowledge assets to users; and creating/nurturing a culture of knowledge sharing, collaboration, and lifelong learning.

According to Ted Tjaden,

In a law firm setting, *explicit knowledge* tends to be precedent agreements, checklists, research memos, opinion letters, and "how to" guides. Equally—if not more important—is the *tacit knowledge*, being what lawyers know, their experience and their professional judgment. Capturing and organizing explicit legal knowledge can be relatively straightforward and involves a combination of technologies (internal document management systems, search and tagging technology, and intranets). Capturing and organizing tacit legal knowledge can be more challenging. In most firms, tacit knowledge is transferred through mentoring, training and allowing a knowledge-sharing culture to

In this chapter, the focus will be on how law firms manage their vast array of explicit and tacit knowledge. In addition this chapter presents an understanding of how explicit and tacit knowledge when used together can provide the law firm with a distinct advantage over its competition. This chapter will specifically examine how law firms are leveraging precedent development, legal research, competitive intelligence, training lawyers (talent management), intranet deployment, project management, and client support, all in relation to instituting KM within their legal institutions.

"A Mind is a Terrible Thing to Waste!": Knowledge Management Education (Chapter 13)

The increased focus on the knowledge economy has heightened interest in KM as a profession, an occupation, and its essential competencies. Many believe that it is time to acknowledge KM as a professional area of practice and it is necessary to begin a formal discussion of the educational foundation needed to support this area of professional practice. Although there is a wealth of published and informal literature, thoughts derived from practice, and dialogs on these topics, a consensus on what constitutes the core elements of KM competencies and KM education is lacking.

A consensus is needed among those who are currently providing KM training, teaching KM via traditional course work, and supporting KM programs and departments within organizations. This consensus needs to be informed and supported by knowledge professionals who are currently working in knowledge roles today. In addition, as with all professional domains, the KM domain needs to be continuously reviewed and refreshed by professional educators and working professionals.

KM education must connect education and strategic learning competencies with skill and ability in knowledge strategy development, implementation, collaboration, and leadership and management skills, in addition to technical competencies. KM continues to be a growing discipline in which organizations are seeking qualified individuals. This is reflected in many institutions of higher education offering an MSc degree in KM. This degree offers students an opportunity to enter the knowledge economy and become an important asset to organizations working to get the right knowledge, to the right people, at the right time.

This chapter will focus on KM education delivery and options within universities and colleges as well as in KM certification organizations. This chapter will cover topics such as strategic roles and responsibilities of KM professionals in organizations today and the educational needs of these

professionals, standard KM competencies, KM curriculum development and delivery, and teaching methodologies.

"Big Knowledge!": Knowledge Management and Big Data (Chapter 14)

The proliferation of data, information, and knowledge has created a phenomenon called "Big Data." KM when applied to Big Data will enable the type of analysis that will uncover the complete picture of the organization and be a catalyst for driving decisions. The connection between Big Data and KM brings together the entirety of your organization's structured and unstructured data sources that are spread across a wide variety of repositories, databases, data warehouses, and content sources, in order for your organization to tap into its vast know-how to make better decisions on a multitude of issues and directions on an ongoing basis.

Currently, the ability for an organization to tap into its Big Data sources to gain a competitive edge places a heavy reliance on analytics. Organizations are investigating ways to efficiently and effectively collect and manage the data, information, and knowledge they are exposed to via various internal and external sources (which are typically networked together). KM will bring opportunities organizational—when both technical and working with Data. Organizationally, KM delivers strategy, governance, process-centric approaches, and inter-organizational aspects of decision support as well as technical considerations when incorporating new data sources and new frameworks for Big Data analytics, including KM.

This chapter takes a look into where KM and Big Data are heading toward within the organization. The advancement of search technologies (which play a key role in delivering knowledge within a KM system) impact our ability to access Big Data will be examined here. In addition to search technologies, several other KM technologies are addressing Big Data. These technologies include solutions that mine unstructured data and manage and use/reuse the knowledge found in Big Data. This chapter will examine knowledge classifications, social network analysis, Big Data sources, and information architecture, all aimed at providing details on how KM is and will work with Big Data.

"What Have You Done for the War Fighter Today?": Knowledge Management in the Military (Chapter 15)

KM in the US military has been implemented using a top-down approach that is resonated through each branch, command, directorate, division, group, battalion, and so on. The US military has established a culture of KM that leverages its personnel, processes, and systems to facilitate a consistent flow of knowledge and the mechanisms to execute and make decisions from this knowledge.

It is widely acknowledged that KM strategy is a desired precursor to

developing specific KM initiatives. The US military has established KM strategies from the top down in every branch. As this strategy is propagated and aligned through the organization, it is often a difficult process due to a variety of influences and constraints. These KM influences and constraints include understanding, conflicts with IT organizations, funding, technology usage and configuration, and outsourcing.

Any discussion of KM in the military should include a discussion of the Army Knowledge Management (AKM) principles, which were signed out by the army chief of staff (General Casey) and the secretary of the army in 2008. The AKM principles still are in effect and have served as a basis for KM efforts in the army and the federal KM arena at large.

Each US military branch works to overcome barriers in KM adoption. To this effort, an establishment of processes and tools, which involves providing approaches and solutions for knowledge sharing, has influenced a change in people's habits. This change will drive values to move US military organization culture to father overall KM adoption. In support of the US military in its knowledge sharing efforts, CoP have become an integral method of sharing and distributing knowledge across all branches of the military. In addition, enterprise web search capabilities have been implemented to increase "findability" of key content, which is the leverage for decision making at all levels of command.

In my examination of KM in the military, I will take a holistic approach. This approach will not only begin with an examination of the AKM but also look at what each branch is doing from strategy through tactical implementation of KM programs, systems, and initiatives down to the command level. I will look at the synergies between the branches and identify tips, techniques, and best practices. In addition, I will leverage my own experiences as well as the experiences of others whom I have interviewed in the process of understanding the practice and execution of KM within the various military branches.

Drinking the Knowledge Management Kool-Aid: Knowledge Management Adoption (Chapter 16)

Many organizations have begun to understand the value and promise KM can bring to their workforce. Delivering innovation through collaboration and sharing remain the cornerstones of KM. However, once your organization has established its KM strategy and/or rolled out its initial KM offering (i.e., KM system, KM process, and tools) what happens next? What happens next is the adoption process. Whether it's a new process, procedure, or system, getting your workforce to leverage and use it in the course of executing activities and delivering on their task will be essential to your KM program's success. In order to achieve this, there must be processes and vehicles in place to allow, encourage,

and reward staff members as they work within this new paradigm. It will not be easy. As with anything new, it will take some time for the adoption to occur. To move this along, there must be KM supporters, mentors, and/or evangelists at all levels of the corporate infrastructure to encourage the workforce to "drink the KM Kool-Aid." In other words, buy in and practice KM in all aspects of performing tasks and activities.

Developing an organizational culture of knowledge sharing, collaboration, and lifelong learning should be the goals of any KM program. Organizations such as the Fluor Corporation, Irving, Texas, have been successful in infusing KM within its culture. From human resource activities to leveraging knowledge for strategic purposes, to engaging with clients, Fluor sets an example of how KM can be leveraged effectively in an organization. Drinking the "KM Kool-Aid" is a slow and deliberate activity grounded in a basic KM process of Connect \rightarrow Collect \rightarrow Catalog \rightarrow Reuse \rightarrow Learn and Innovate. When practiced effectively, this process will be a cornerstone to enabling the adoption of KM throughout your organization.

Failure Is Not an Option: Why Do Knowledge Management Programs and Projects Fail? (Chapter 17)

Although the lack of or absence of adoption will set your KM efforts on a path for failure, there are many other contributing factors that will also lead you down this road.

The fact is that few KM initiatives are successful. But, why is this the result? What is the cause and effect? Is it because there is a lack of qualified professional? Or is there more to it than these? What about a magic "silver bullet"? Is it a cultural issue?

I believe the reason why KM initiatives fail are varied and can be attributable to many factors. Moreover, I believe one of the main reasons why KM initiatives fail is based on how the organization views KM. KM is viewed just as a function of the call center. It is more than a function of a call center and its benefits are farreaching as any Lean process or any other initiatives that a corporation may put into practice. KM is mainly viewed by most corporations that have a KM effort as a cost of doing business. This is an error in philosophy. KM is a method of reducing expenses, improving productivity, and enhancing value.

KM will improve efficiencies that will increase a corporation's profitability, and enhance the quality of work, performance, and overall value of the corporation. KM allows tacit knowledge to be leveraged, transferred to increase the quality of work performed across the corporation. This tacit knowledge allows KM to eliminate the "reinvent the wheel" syndrome. This transfer of knowledge is the essence of KM.

Outside of a corporation's philosophy error, there are several reasons for the failure of KM initiatives. Some of those reasons are as follows:

- Expecting KM technologies to replace KM processes or create processes where none exists
- Lack of participation from all levels of a corporation
- Forcing inadequate processes into new technology
- Lack of maintenance and resources after initial standup
- Lack of education and understanding of what KM means to the individual
- KM does not become ingrained into the corporation's work culture
- Lack of involvement in creating and evolving KM content
- Lack of metrics to measure the impact of KM on the corporation or insufficient/incorrect metrics being captured
- Lack of monitoring and controls in place to ensure the knowledge is relevant, and is current and accurate

KM initiatives are essential to a corporation's growth and are more than just the cost of doing business. Successful KM initiatives once completed and funded correctly will increase a corporation's profitability, and enhance the quality of work and overall value of the corporation.

Summary (Chapter 18)

In this book, I have presented details about KM in various industries, where I have had the opportunity to help clients implement KM solutions as well as specific KM topics that are critical in today's KM landscape. These solutions and topics ranged from KM strategies, knowledge transfer planning/execution, implementing KM systems, Big Data search, KM adoption, deploying methods to capture knowledge, and planning and executing on KM governance.

Each chapter includes key learnings as well as tips and techniques for those currently instituting KM in that particular industry and/or topic. Each chapter examines and analyzes the subject matter, and the keys for successfully applying the subject matter in "real-world" situation(s).

Knowledge Management in Practice is intended as a reference for KM practitioners, organizations implementing KM, and those who are studying KM at the various academic and KM certification institutions. This chapter presents a synopsis of what was presented in each chapter, the intended key takeaways, and a peek into the future of individuals and organizations practicing KM.

Outline of the Book

This book will give detailed information on applying KM practices, procedures,

and techniques to solve real-world problems. The applications of KM that will be examined include social media; knowledge and content management; search engine optimization; capturing and codifying tacit and explicit knowledge; KM in disaster preparedness, action, and reaction; KM adoption process in an organization; failure of KM projects; and specific industry applications of knowledge management. This publication will contribute to the advancement in application of KM principles, practices, and procedures, as well as the systems that support KM.

Each chapter will include key learnings as well as tips and techniques for those who are currently instituting KM. The following section outlines the structure each chapter.

Structure of Each Chapter

Each chapter will examine and analyze the relevant subject matter, key learnings for successfully applying the subject matter, and tips and techniques for applying the subject matter in "real-world" situation(s).

Lessons learned from each chapter will refer to the knowledge gained through the experience of working within a specific domain(s), which can be negative or positive and can have a significant impact on the organization. Identifying and applying the lessons learned helps eliminate the occurrence of the similar problems in future and/or replicate successes that will establish best practices in future KM initiatives.

Tips and techniques listed in each chapter will refer to points to consider when implementing KM within a particular subject examined in that chapter. It will often take into consideration how to apply a significant lesson learned to improve successful implementation of a particular KM concept(s).

Now we will begin our "real-world" examination of the practice of KM.

The Case for Implementing Knowledge Management

If your organization is losing valuable knowledge due to staff retirement, staff moving to other departments, or staff dismissed for a variety of reasons, then your organization has a strong case for the implementation of a knowledge management (KM) strategy. Specifically, if your organization is experiencing any of the following scenarios then it has a strong case to implement a KM program or at the very least initiate a KM project to address these needs.

Scenario 1: Customer service representatives respond to customers and/or potential customer inquiries with inconsistent and oftentimes incorrect answers.

- For interacting with your customers, the information in your organization can be transformed into useful and actionable knowledge to address customer inquiries and provide them with what they need to know at the right time and the right context.
- Customer-facing activities include
 - · Providing knowledge to customer support representatives in response to customer inquiries.
 - Providing FAQs to customers related to the products, services, and other aspects about the organization via self-help options/functionality.
 - Knowledge is also provided through help modules accessed by the customer usually through the organization's
 website, and/or through web-based chat or click-to-call capabilities.

Scenario 2: Your organization has a need to address employee/associate knowledge needs:

- Knowledge provided here reflects the need for employees to access key knowledge holders in the organization to answer questions, collaborate on problems/issues, and/or provide content.
- The knowledge in this space often resides in the minds of individual workers (tacit knowledge). In addition, there exist a myriad of artifacts, which include but are not limited to, lesson learned, standard operating procedures, guidelines, templates, tips and techniques, spreadsheets, presentation files, videos, and graphics (explicit knowledge) that must be captured to address the individual worker's knowledge needs.

Scenario 3: Your organization has a need to address corporate operations knowledge needs:

- The corporate operations/technical support activities of the firm provide technical solutions to inquiries not only to customers but also to internal knowledge workers (employees) as it pertains to any hardware and/or software being provided by the organization.
- The knowledge in this area is reflected by documenting software "bug" solutions, known errors, software patches, issue resolutions, and other specific data concerning the hardware and software configurations in the organization.

Scenario 4: Your organization has a need to bring new product innovations to the marketplace:

The need for KM in this area addresses situations where duplication of effort occurs, not having the right team in place to perform the research to bring the product innovation to market successfully and in a timely manner, always reinventing or starting from "square one," difficulty locating current and/or historical corporate information/knowledge on a specific topic(s), and expertise leaving the organization creating a knowledge gap (see Chapter 5).

The business case for KM represents a well-argued and logically structured document that puts forward the business rationale for investing in a KM initiative. The case for implementing KM as with any business case must clearly establish the following:

- The problem or business opportunity addressed by the KM initiative
- Applying/leveraging KM to address the problem
- $\hfill\blacksquare$ Detail the options available to implement the KM solution
- Analyze the risk of doing nothing
- Analyze the cost-benefit, risk, and financial assessments (return on investment [ROI]) of the proposed KM solution

KM Business Case Structure

In order to construct a KM business case, understanding its structure is the first step. The KM business case structure (see Appendix A) consists of the following:

Problem statement

The problem statement is the identification of the problem or business opportunity being addressed by the KM initiative. A problem statement is clear, concise, and to the point and is often the compass to keep the team focused on delivering an outcome that solves the intended issue(s)/opportunity being addressed.

Understanding the five "Ws"

The five W's consist of Who, What, Where, When, and Why. Remembering the five Ws will enable you to construct the

problem statement in a way that will present pertinent details that are being addressed. The following details the five Ws.

Who: Who does the problem affect? This pertains to specific stakeholders (groups, departments, customers, etc.).

What: What are the boundaries of the problem, for example, organizational, work flow, geographic, customer, and segments —What is the issue?—What is the issue?—What is the issue?—What will happen when it is fixed?—What would happen if we didn't solve the problem?

When: When does the issue occur?—When does it need to be resolved?

Where: Where is the issue occurring? Only in certain locations, processes, products, and so on.

Why: Why is it important that we fix the problem?—What impact does it have on the business, employees, or customers?—What impact does it have on all stakeholders, for example, employees, suppliers, customers, and shareholders? Each of the answers will help to zero in on the specific issue(s) and properly articulate the problem statement. Remember that your problem statement should be solvable (a solution should be able to be deployed to resolve the issues presented by the problem statement) (Figure 2.1).

KM Solution Analysis

The KM solution analysis involves analyzing how KM will be leveraged to address the problem or business opportunity.

Needs Analysis

In the needs analysis (also called "requirements definition") phase, one begins documenting the business opportunity (or problem). Any issue can be looked upon as a problem or an opportunity. In writing business cases, I have found that you get a much warmer reception if you frame things in a positive light, that is, as opportunities, rather than as problems. In defining the opportunity, one needs to first be clear in identifying the objectives. Objectives are the measurable outcomes that one wants to achieve upon the completion of the proposed KM initiatives. Identifying the objectives and being clear on why they make business sense is very important. Objectives should be tied to outcomes from the strategic assessment phase, for example, the current and/or desired states of the business and the current business needs. Objectives are normally classified as first-order (critical), second-order (important), and third-order (nice to have).

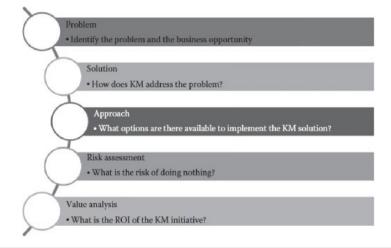


Figure 2.1 KM business case structure.

KM Solution Implementation Approach

The KM solution implementation approach explores the options that are available to implement the KM solution determined in the solution analysis. The implementation has two possible components: (1) A program level component providing the business case calls for implementing a KM program (2) and/or a KM initiative approach.

The KM program must optimize the organization, exchange, currency, and accessibility of knowledge, so that employees and other stakeholders spend less time looking for what they need in order to make critical decisions and complete specific tasks and activities. Effective workers do not just need to recognize their own knowledge and skills, but they must also recognize and strategically use those of others.

Program management is a method to manage related groups of KM initiatives.

Project Management Institute defines it as

A group of related KM initiatives managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside scope of the discrete KM initiatives in the program. (PMBOK p. 368)

In summary, a program is a collection of initiatives and KM initiatives that are designed to accomplish a strategic business objective. As stated above in defining the problem statement, it is important to know the business drivers (five Ws) concerned with the work being done. Because of the potential high cost and complexity of some programs and/or KM initiatives, it is essential to sell the benefits and gain support for program and/or KM initiative. To explain the aspects of a program further, a program can include a single product or deliverable, many deliverables, can be a combination of ongoing support activity in addition to deliverables, and usually focuses on business objectives and delivering value. Some characteristics of programs include deliverables with a strategic intent; may initiate a business change; can be a significant change to the organization; success criteria may include growth, productivity gains, and improvement in the market; there could be significant risks; are longer in duration than KM initiatives; and benefits are achieved throughout the duration of program. KM program initiatives include KM strategy, KM governance, KM taxonomy and information architecture development, change management, and KM communications planning and execution.

Software Methodologies

When implementing a KM solution that is driven out by a specific KM initiative within the overall program (or as part of a standalone initiative), a standard software methodology (Iterative, Agile/Scrum, OpenUP, or Knowledge Acquisition Unified Framework [KAUF]) (Rhem, 2011) should be utilized. The following sections briefly describe these methodologies.

Iterative Software Development Methodology

The Iterative software development methodology moves forward in increments called "iterations." The goal of each iteration is to develop a portion of working software that can be demonstrated to all the stakeholders, and that the stakeholders will find meaningful. The software developed by iteration should cut through all or most of the major subsystems of the KM initiative. It should not be concentrated to a single subsystem. Each iteration represents an effort made by each member of the team to build a small part on their behalf of the KM initiative and integrate those parts together (see Figure 2.2). The length of iteration depends upon the kind of KM initiative we are working with. However, short iterations are to be desired over long ones. The shorter the iteration, the less time passes before the team gets feedback. Iteration lengths of 1 or 2 weeks are not too short for most KM initiatives (Wiley, 2012).

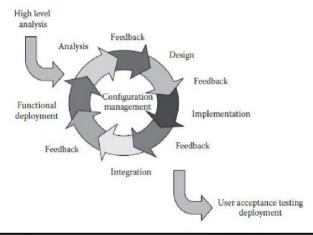


Figure 2.2 Iterative software development process: Project iteration flow (ncicb.nci.nih.gov).

Agile/Scrum

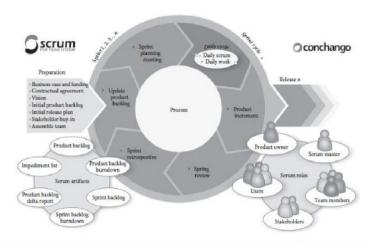
Agile/Scrum KM initiative management is an agile software development process. Scrum models allow KM initiatives to progress via a series of iterations called "agile sprints" (see Figure 2.3). Each sprint is typically 2–4 weeks, and sprint planning in the agile methodology and Scrum process are essential. Although the agile/Scrum methodology can be used for managing any KM initiative, the agile/Scrum process is ideally suited for KM initiatives with rapidly changing or highly emergent requirements such as software (Cohn, 2013).

The agile sprint itself is the main activity of Scrum KM initiative management. The agile methodology and Scrum process is iterative and incremental, so the KM initiative is split into a series of consecutive sprints. Each is timeboxed, usually to between 1 week and a calendar month. One survey found that the most common sprint length of a Scrum agile process is 2 weeks. During this time, the Scrum team does everything to take a small set of features from idea to coded and tested functionality (Cohn, 2013).

OpenUP Methodology

OpenUP is a lean Unified Process that applies iterative and incremental approaches within a structured life cycle (see Figure

2.4). OpenUP embraces a pragmatic, agile philosophy that focuses on the collaborative nature of software development. It is a tools-agnostic, low-ceremony process that can be extended to address a broad variety of KM initiative types.



 $\label{lem:figure} Figure & 2.3 & Scrum & model & overview \\ (http://consultingblogs.emc.com/Admin/ImageGallery/blogs.conchango.com/Colin.Bird/Scrum\%20Overview\%20Diagram.png).$

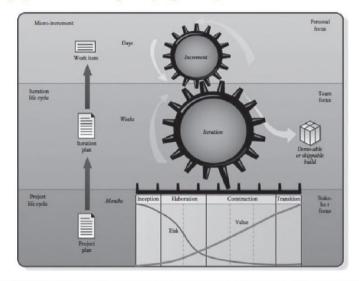


Figure 2.4 OpenUP (http://epf.eclipse.org/wikis/openup/).

OpenUP is based on four mutually supporting core principles:

- Balance competing priorities to maximize stakeholder value
 Promote practices that allow KM initiative participants and stakeholders to develop a solution that maximizes stakeholder
 benefits and is compliant with constraints placed on the KM initiative.
- Collaborate to align interests and share understanding Promote practices that foster a healthy team environment, enable collaboration, and develop a shared understanding of the KM initiative.
- Focus on the architecture early to minimize risks and organize developmentPromote practices that allow the team to focus on architecture to minimize risks and organize development.
- 4. Evolve to continuously obtain feedback and improve Promote practices that allow the team to get early and continuous feedback from stakeholders, and demonstrate incremental value to them.

Knowledge Acquisition Unified Framework

When the KM initiative calls for capturing tacit and explicit knowledge of the organization, the KAUF provides a repeatable process for identifying understanding and cataloging knowledge. The following briefly describes the seven steps that outline this

Step 1—Define domain knowledge:

The first step in the KAUF is to identify what domain (business unit/division/department, etc.) will be the focus of your knowledge elicitation and what knowledge is pertinent to be captured in this domain. In order to determine the knowledge to be captured, key knowledge holders and subject matter experts (SMEs) in the specified domain must be identified. This is typically done through a knowledge mapping exercise. Once this occurs, the KM analyst must ascertain what knowledge is essential to be captured. This can be accomplished through a series of interviews/surveys and analysis working closely with the key knowledge holders and SMEs.

Step 2—Decompose the domain knowledge:

When attempting to solve any large-scale problem, we would typically break the activity into a number of smaller tasks; to help a domain experts (SMEs, content managers, contributors, etc.) populate the knowledge repository, we should similarly break the activity of knowledge acquisition into a number of smaller tasks. Structuring the task of populating the knowledge repository into a number of distinct sub-steps (typically based on the taxonomy/ontology that has been established) will ease the process of populating the knowledge repository gradually.

Step 3—Determine interdependency:

Interdependency is when two or more pieces of knowledge/information depend on one another equally (one component depends on another). Finding the interdependency's between different pieces of knowledge (documents/artifacts, and/or expertise) will guide the knowledge analyst and domain expert(s) in completing the knowledge acquisition task. Determining the interdependence between aspects of knowledge/information will facilitate in identifying the missing pieces of knowledge, determining related pieces of knowledge, and determining any inconsistencies with the knowledge gathered for that domain.

Step 4—Recognize knowledge patterns:

When analyzing knowledge/information, the process of connect, collect, catalog, and reuse will uncover patterns of knowledge, and recognizing these patterns will contribute to increase efficiencies in the knowledge/information being captured.

Step 5-Determine judgments in knowledge:

If the knowledge being captured is determined to be judgmental (i.e., uncertain or "fuzzy"), then it must be analyzed to understand if conflicts exist. In addition, consulting with expert resources to come to a consensus as to what represents the "correct" knowledge may also be necessary.

Step 6-Perform conflict resolution:

There are situations in which sufficient expertise and/or documents are unavailable to solve conflicts within the knowledge being gathered. If the knowledge being captured has some uncertainty or is fuzzy, you must first specify preconditions in the context of one or more of the conflicting elements of the knowledge to prevent those conflicting elements from being considered.

Step 7—Capture/catalog the knowledge:

Tacit knowledge is now sufficiently ready to be cataloged and transformed into explicit knowledge to be prepared for inclusion into a KM solution (Figure 2.5).

Risk Assessment

The risk assessment analyzes the risk involved in implementing the agreed upon KM solution as well as the risk of doing nothing.

Value Analysis

The value analysis examines closely the value gained by the organization when implementing the KM solution. An analysis on the achievable ROI, including a timeline for when that would be realized, is also presented.

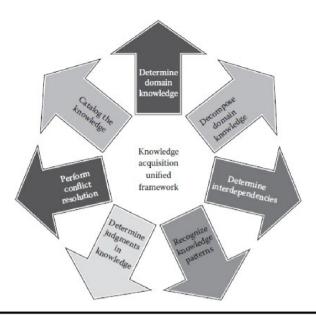


Figure 2.5 Knowledge acquisition unified framework (KAUF).

ROI for KM

From the outset, one must realize that making the case for a KM effort and calculating an ROI is not easy when compared to making the business case for a new piece of equipment, such as new computer color photocopier or office furniture, in a more traditional situation. Investing in a piece of equipment can be directly tied to increases in product quality and/or quantity through multiple metrics (e.g., lower defect rates and finished products per hour). However, calculating the ROI for investments in KM efforts is not that simple or direct.

It is my experience that ROI for KM is measured by how well it supports the mission and/or objectives of the organization. Taking this into account, at the end of the day, what matters is whether the KM initiative increased the performance of its users or how well did it support the strategic mission of the organization.

When we are looking at achieving a return on our KM initiatives historically, it can take a considerable amount of time to show results or visible ROI for an organization. However, there is an approach by Mark Clare to estimate the value of the intangible benefits of KM (Clare, 2002). This approach, the knowledge value equation (KVE), simply states that the value created from managing knowledge is a function of the costs, benefits, and risks of the KM initiative. It can be mathematically stated as follows: KM value = F (cost, benefit, and risk), which equals total discounted cash flow created over the life of the KM investment (Clare, 2002). This formula attempts to quantify the intangible impacts of KM relating it back to cash flow. This includes improved problem solving, enhanced creativity, and improved relationships with customers and other performance-related activities.

The following are the three common indicators of the viability of the KM initiative: net present value (NPV), internal rate of return (IRR), and the payback period. NPV helps us normalize future cash flows (both the cash we intend to spend and the cash we expect to receive) into their present value. As a general rule, if the NPV of a KM initiative is greater than zero, then you invest in the KM initiative. If the NPV is negative, you should not invest in the KM initiative. The reason for this is simple, the future cash flows, do not justify the present investment. The IRR is the discount rate (also called "investment yield rate") for the KM initiative. It is the rate at which the NPV for a KM initiative is equal to zero. When comparing two KM initiatives, the one with the higher IRR is preferred. Another option to the IRR is to present the ROI. This value represents, as the name implies, the savings (benefit) one will derive out of the KM initiative for the investment (cost) outlays.

The payback period helps one estimate how quickly the investment will be recouped. Put in another way, it is the time required for the savings to equal the cost. When comparing two nearly similar alternatives, a rational person will choose the KM initiative with the shorter payback period. The important thing to bear in mind is that no single financial metric will be adequate for evaluating a KM initiative's feasibility or its value proposition in comparison to other uses of the funds. Metrics are best used in conjunction with each other, as each one provides a slightly different value perspective.

Unlike traditional (e.g., manufacturing) KM initiatives, financial analysis for a KM initiative has two more complications. First, much of the benefits derived from a KM initiative will be based on soft facts; that is, KM lead to changes in behaviors, approaches, and methods that, on their own, may not have direct bottom-line impacts. However, when these are mapped and traced to organizational processes, the impacts can be measured and articulated. Needless to say, this is often a more time-consuming and creative effort than simply measuring direct impacts, as in the case of outcomes from a new piece of manufacturing equipment. Equally important is that there is a lag time between when one invests in a KM effort and when one witnesses outcomes that result in payoffs. Accounting for this lag time is not easy, yet it is essential to building an adequate

business case.

Investing in KM is akin to a group as a whole investing in a common effort. Consider the case of investing in initiatives such as the prevention of global warming by reducing greenhouse gas emissions or the promotion of fair trade practices. Most people agree that preventing global warming or increasing the adoption of fair trade practices benefits society. The challenge arises when we ask who wants to take responsibility for investing in these efforts. If taxes were raised to support these efforts, would you be happy? Rational individuals often want others to bear the cost of these common efforts and gladly enjoy the benefits, yet hesitate to initiate responsibility. A similar predicament faces KM efforts. Departments within an organization want their peers' units to invest in a common effort. Each department might see KM as an effort someone else should put up resources for and hence defers spending its own resources. In some organizations, KM efforts might be viewed as a "tax" levied.

KM Metrics and Key Performance Indicators

KM strategy will link the best practices to initiatives to expected benefits (Best practice \rightarrow KM initiative \rightarrow Benefit). At every phase in KM tactical delivery of initiatives, metrics should provide a valuable means for focusing attention on desired behaviors and results. Each KM initiative and KM activity should have its own set of metrics.

KM performance measures have several objectives:

- Help make a business case for implementation or sustainment and expansion
- Provide targets or goals to drive desired behavior
- Guide and tune the implementation process by providing feedback
- Retrospectively measure the value of the initial investment decision and the lessons learned
- Develop benchmarks for future comparisons and for others to use
- Aid learning from the effort and developing lessons learned

Key performance indicators (KPIs) and metrics to track for the KM strategy include the following:

Customer satisfaction: Customer satisfaction can be improved, specifically in contact centers and agencies, where there is constant interaction with the customer. Customer satisfaction is best measured using standard market research techniques:

- · Surveys
- · Follow-up telephone calls
- · Focus groups

Search engine usage: Search engine logs can be analyzed to produce a range of simple reports, showing usage and a breakdown of search terms.

Knowledge use: A more direct measure of many KM initiatives is whether the information is being "used in practice." As usage normally happens outside of the system, it must be reported by the staff. Provide simple mechanism for notifying when information is used, and implement a rewards mechanism to encourage timely reporting.

Number of users: Directly related to system usage is the total number of staff accessing the system. This should clearly grow as the system is rolled out across the organization. This can be tracked via security login in order to determine accurate staff numbers.

User rankings: This involves asking the readers themselves to rate the relevance and quality of the information being presented. SMEs or other reviewers can directly assess the quality of material in the content management system or KM platform.

Edits required: This can be done by utilizing workflow capability. Audit trails generated by this can be analyzed to determine how many edits or reviews are required for each piece of content. If the original material is of a high quality, it should require little editing.

Links created: A Popular page with useful information will be more frequently linked to from other parts of the system. By measuring the number of links, the effectiveness of individual pages can be determined.

Information Currency

This is a measure of how up to date the information stored within the system is. The importance of this measure will depend on the nature of the information being published, and how it is used. The best way to track this is using the metadata stored within the content management system, such as publishing and review dates. By using this, automated reports showing a number of specific measures can be generated:

- Average age of pages
- Number of pages older than a specific age
- Number of pages past their review date
- Lists of pages due to be reviewed
- Pages to be reviewed, broken down by content owner or business group

The KM system will allow variable review periods (or dates) to be specified, depending on the nature of the content. This metric is a tool for ongoing knowledge article (KA) and FAQ management.

User Feedback

A feedback mechanism will be established for the KM system. Use of such a feedback system is a clear indication that staff is using the knowledge in the knowledge base. Although few feedback messages may indicate the published KA/FAQ to be entirely accurate, it is more likely that the system is not being accessed, or that the feedback mechanism is not recognized as useful. Alternatively, although many feedback messages may indicate poor-quality information, it does indicate strong staff use. It also shows they have sufficient trust in the system to commit the time needed to send in feedback.

Distributed Authoring

The extent to which the business as a whole takes responsibility for keeping content up to date is a metric in itself. At the most basic level, the number of KM system authors can be tracked against a target. A more rigorous approach uses statistics from the workflow capabilities to determine the level of activity of each author.

Transaction Costs

A process analysis activity can also determine costs involved in completing tasks. This allows direct cost savings made by implementing and leveraging the KM system. Multiplied out by the number of times the activity is completed in a year, the whole-of-business savings can be determined. This could be substantial in a large organization such as state farm.

Strategic Look at the KM Business Case

A KM strategy entails a collective visioning as to how sharing knowledge can enhance organizational performance, and the reaching of a consensus among the senior management of the organization that the course of action involved in sharing knowledge will in fact be pursued. It is implied in such a process a set of decisions about the particular variety of KM activities that the organization intends to pursue, including the leverage of the organization's knowledge assets (human capital being the number one asset), and the execution of the process and tools that will enable sharing of knowledge and innovation to occur.

When developing a KM business case, it is important to identify, in terms of the strategic assessment, the critical initiatives that the organization is currently engaged in, and/or those it is planning to embark on. These initiatives need to be thoroughly examined from a KM perspective. What will be the role of KM in these efforts? KM efforts should support and facilitate ongoing strategic initiatives, and it is very important that a proposed KM effort be tied to these initiatives in as direct a manner as possible.

A KM effort that is disconnected from the strategic initiatives of the organization has limited, if any, chance of being well received by the organization. Normally, any strategic initiative will have a number of tactical and operational objectives. These are good elements into which the KM efforts should be tied.

As with any KM initiative, it is important to find an executive sponsor for the KM effort. It is vital to communicate the value proposition of the KM effort to the strategic initiative. You should present KM not for the sake of doing KM, but as a means to further the strategic objectives in which the executives are interested.

Examine your organization carefully and determine if any of the above scenarios is something you are dealing with. Take necessary steps to keep your organization viable by initially crafting a business case to present to the senior management, and once it is approved, develop a KM strategy that will define the roadmap for executing the various aspects of the KM business case.

The KM effort needs to be communicated from its strategic value proposition rather than its technical intricacies. Getting executives to believe and visualize the overall value of the KM perspective and expertise is the critical outcome of getting approval of the KM business case and to start your KM initiative.

Key Learnings

The following are some key lessons learned from this chapter:

- For any KM business case to be approved and successfully implemented, there must be strong executive sponsorship and leadership.
- KPIs and metrics to track the KM strategy must be measurable.

Tips and Techniques

The following are some of the tips and techniques deduced after reading this chapter:

- To provide a roadmap and to communicate the direction, vision, and mission of KM in your organization when completing a KM strategy as part of any KM program is necessary.
- When developing the KM business case, minimize the number of options available by conducting a detailed feasibility study beforehand.
- When the KM initiative calls for capturing tacit and explicit knowledge of the organization, follow the KAUF.

Being Social: Knowledge Management and Social Media

Social media brings the power of sharing and collaboration to the masses. Whether it's Facebook, Twitter, or YouTube and leveraging any of the myriad of mobile devices, knowledge sharing and collaboration have become a way of life. At the core of knowledge management (KM) is knowledge sharing and collaboration, and social media tools have business and government taking notice.

Social media offers organizations the opportunity of connecting with potential customers at virtually no cost. It is possible to set goals and get return on investments (ROI); however, you have to know where you're going and what you want to achieve. Once you have this information, you can allocate your resources wisely. Typically, a social media strategy will enable the organization to know where to start and what social sites to concentrate. When you know the lay of the land, it's much easier to plot a path to your destination. A social media strategy will be your organization's roadmap to plot this destination.

To reach your public successfully, you need to start telling your stories directly, and do it in a way that sparks conversations, interest, and action. The value proposition of social media is sustained conversations that shape perceptions and attract customers to purchase your products and services, and participate in the activities (blog, Twitter, forums, surveys, etc.).

The use of social media does not represent a onetime application, but a holistic environment to promote programs, events, communicate ideas, solicit thought, and to connect the institution to its customers (and potential customers) within the community. These customers represent our constituents and partners to engage in communication and feedback. Including a participatory communication cycle (see Figure 3.1) in your overall social media strategy will give you a clear direction and knowledge of your communication capacity, communication activities, which will be of most benefit, as well as the communities, which should be monitored and evaluated.

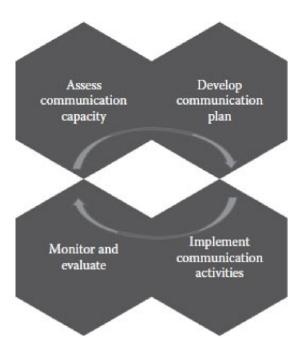


Figure 3.1 Participatory communication cycle.

Participatory Communication Cycle

The participatory communication cycle is leveraged to enhance the capacity of individuals and communities to sustain communication activities (Corbett 2010). The participatory communication cycle consists of assessing your communication capacity, developing a communication plan, implementing communication activities, and monitoring and evaluating the results.

Assessment of communication capacity as it pertains to implementing social media is to understand the potential constraints of the proposed medium being utilized (Twitter, LinkedIn, Facebook, etc.), and to ascertain the staff needed to produce, send, and respond to communication within the perspective channel(s). This assessment should include an analysis of your organization's legal and political constraints to social media, conventional sources, and types of messages, as well as communication style and scope (Corbett 2010).

The development of the communication plan can occur once the assessment is completed. This includes developing an overall strategy that provides a set of objectives and an action plan to execute these objectives (Corbett 2010). This communication plan will include the following components: key communication objectives, key stakeholders and audience, messages to be crafted, identification of activities and determination of timelines, identification of roles and responsibilities for the planning and execution, budget, and key performance indicators (KPIs) to monitor and evaluate the results (Corbett 2010).

Once the communication strategy and action plan have been identified,

implementation of communication activities can begin. When the communication activities are clearly conveyed, associated resources and funding are put in place and the objectives of the strategy and its associated action plan are carried out, Corbett (2010).

As the participatory communication cycle moves into the monitor and evaluation (M&E) stage, it is at this point when your organization can begin to analyze and assess the impact of its communication cycle, as it pertains to the use of social media. However, this is a continuing cycle and as the organization moves back into assessing communication capacity, M&E should not only occur toward the end of the project but also at the beginning, and should be directly linked to each of the communication activities identified in the action plan (Corbett 2010).

KM and the Participatory Communication Cycle

KM within the participatory communication cycle occurs as the organization assesses and learns from the impacts of communication within the various social media outlets as dictated by the action plan. Through interaction with customers, suppliers, and partners your organization will gain valuable knowledge regarding issues, opinions, and perception of your product and services as well as the company as a whole. In responding to the various comments within social media concerning your organization, with an attempt to answer/respond in the correct way, company representatives must have access to the right knowledge. This knowledge will facilitate representatives respond in a consistent manner and take control of your company's voice within social media.

Social Media, KM, and the Enterprise

Social media takes knowledge and makes it highly iterative. It creates content as a social object. That is, content is no longer a point in time, but something that is part of a social interaction, such as a discussion. It easily disassembles the pillars of structure as it evolves. For example, content in a microblogging service can shift meaning as a discussion unfolds; conversations in enterprise social networks that link people and customer data can defy categorization; and internal blogs and their comments don't lend themselves to obvious taxonomy.

Social media in the enterprise has gotten the attention of KM scholars and practitioners. It should mean that many of the benefits we experience in the consumer web space, which include effective searching, grouping of associated unstructured data sources, and ranking of relevance, will become basic features of enterprise solutions. In the enterprise, for example, when looking to staff a project with a certain skill set, the social capabilities that will be leveraged would include role, primary skill sets, secondary skill sets, number of years of

available

Facebook to be accessed, monitored, and leveraged will play a key role in executing your social media strategy.

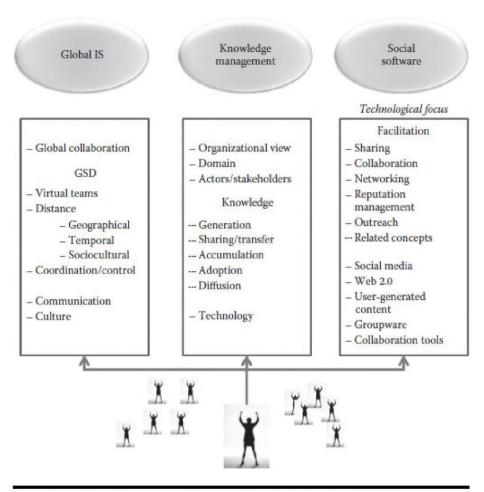


Figure 3.2 Focus points for global social knowledge management.

LinkedIn

LinkedIn is the premier business-oriented social networking site. The LinkedIn Group is the organization's environment where we can collaborate to exchange ideas and points of interest with our current students, faculty, alumni, employees, and other interested parties. LinkedIn has more than 75 million registered users in 200 countries and territories worldwide and provides an excellent platform to educate the business community about the value that the institution brings to the communities it serves. The following are the guidelines for posting and interacting in the LinkedIn Group.

- 1. Group members are personally responsible for the content they publish in the LinkedIn Group.
- 2. Be mindful that whatever you publish will be public for a long time—

protect your privacy and take care to understand the terms of service of a site.

- Identify yourself—your name and, when relevant, role at your organization
 —when you discuss your organization-related matters, such as products or
 services.
- 4. You must make it clear that you are speaking for yourself and not on behalf of your organization.
- 5. If you publish content online relevant to your organization in your personal capacity, use a disclaimer such as this: "The postings on this site are my own and don't necessarily represent the organization's positions, strategies or opinions."
- 6. Respect copyright, fair use, and financial disclosure laws. Don't provide your organization's or another's confidential or other proprietary information and never discuss business or other sensitive matters publicly.
- 7. Don't cite or reference clients, partners, or suppliers without their approval.
- 8. When you do make a reference, link back to the source.
- 9. Don't publish anything that might allow inferences to be drawn, which could embarrass or damage you or anyone.
- 10. Respect your audience. Don't use ethnic slurs, personal insults, obscenity, or engage in any conduct that would not be acceptable in any situation.
- 11. You should also show proper consideration for others' privacy and for topics that may be considered objectionable or inflammatory—such as politics and religion.
- 12. Be aware of your association with online social networks. If you identify yourself as a student, employee, or alumni, then ensure that your profile and related content is consistent with how you wish to present yourself with colleagues.
- 13. Don't pick fights, be the first to correct your own mistakes.
- 14. Try to add value. Provide worthwhile information and perspective. Your organization's brand is best represented by its people and what you publish may reflect on your organization's brand.
- 15. Don't use logos or trademarks unless you are approved to do so.

Twitter

Twitter is the premier microblogging service enabling its users to send and read other users' messages called "tweets." Tweets are text-based posts of up to 140 characters displayed on the user's profile page. Tweets are publicly visible by default; however, senders can restrict message delivery to their friends' list. Users may subscribe to other author tweets, this is known as "following," and such

subscribers are known as "followers." As of late 2009, users can follow lists of authors instead of just following individual authors. Twitter has gained popularity worldwide and currently has more than 100 million users.

Twitter has the ability to call into action a massive amount of people in a limited amount of time for any cause or purpose. It can also be harmful by propagating negative and erroneous information that is difficult to recover from. Information dissemination on this platform must be used wisely. This power to share must be handled with a sense of privilege and responsibility. From a negative perspective, we have seen more and more often that our tweets have caused loss of jobs, lawsuits, and some cases public outrage. However, the positive aspects such as increased awareness, promoting ideas, launching careers, entertaining, and bringing people together for a cause have outweighed the negative impacts of Twitter, and it has become a major part of many organizations social media strategy.

Twitter is and always shall be a means to listen to your customers, clients, colleagues, industry leaders, and anyone else who might comment on your product or business. It is about networking and knowledge sharing. The uses for Twitter are limitless. You just have to find your niche. You have to ask, "What are the benefits of being on Twitter?" Some will share knowledge, whereas others will just use Twitter as a way of being available to customers. Either way, as long as you are actually listening and staying engaged, you will benefit.

One of the best things Twitter can do for a company is simply to humanize it. Allowing a real person to put a voice to an otherwise impersonal entity can give a new dimension to your organization's relationships with clients, which is otherwise not possible. Some of the more successful brands on Twitter allow and encourage a multitude of voices from within the corporate walls to twitter, not only engaging clients but also each other.

Before you actively try to build an audience, post a few tweets to familiarize yourself with the process, and spend some time reading what others in your industry are talking about on Twitter. Use the "Find People" search function at the top of your Twitter page to look for people you know will want to follow you back: people within your company, current clients, and colleagues. Send a few @ replies out to people who are following you. Respond to things they are talking about. When they in turn respond to you with and @ reply, the people following them will take notice of you and may choose to follow as well.

It's also a good idea to look at whom the people you know are following. That can give you ideas about whom you want to search for. Use the Twitter search function to find subjects relative to your industry and see who's talking about them. Remember that conversation is very important. If all you do is post your thoughts and ideas without engaging anyone in conversation, you're just a broadcaster. Eventually, if you are a well-known brand, and if you do things right

on Twitter, new people will start following you every day.

Be personable: Too many companies represent themselves on Twitter by spewing automated and static information, or authorized quotes from the public relations department. These only serve to keep the brand parked neatly in a dry dock, gathering dust. Most people who twitter do it for the human connection.

Stay away from discussing politics and religion: Your mother told you this a long time ago, and it's still good advice, unless, of course, your business is politics or religion. In that case, go for it. Otherwise, you are just going to alienate half your followers, maybe more. People are passionate about their political and religious beliefs; if you are representing a brand, you will do it a great disservice by taking a position on either subject.

Be aware of your voice: Think of Twitter as a ship we are all traveling on. You have to play nice with others or you'll be shoved aside and ignored—or, worse, made to walk the plank. Besides, you never know when you might end up doing business with someone you now consider a competitor.

Don't be a complainer: No one wants to listen to someone who keeps whining or pointing out all the things that are going wrong in the industry or the world. If you want people to follow you and listen, look for the positive. Sure, there will be times when you have to talk about things that aren't encouraging or upbeat; some situations demand a solemn tone. But don't make this a theme. Don't make it what you are about. Remember, anyone can whine and complain, but a leader offers solutions.

Facebook

Facebook has become the world's leading social media site for individuals, groups, and families (businesses are beginning to see its value) to share their world with their friends and followers and to keep in touch with extended family members. Now, more than ever, organizations are creating a presence on Facebook to extend their reach to the growing number of potential (and younger) customers. Facebook users can share news stories, videos, and other files with friends. Personal notes can also be written and shared with friends. When sharing an item, users can attach the item to their Wall for all to see, or can tag individual people that they think would be most interested in seeing the item. When a user is tagged, they receive an e-mail notification.

These options for sharing and collaborating are what makes Facebook a powerful tool for your organization. Here are some numbers to support this: 1.15 billion users, 700 million daily users, average time per Facebook visit is 20 min and 8.3 h is the average amount of time each user spends per month, 70% of monthly active Facebook users in the United States are engaged and connected to

- Track mentions of your brand and generic keywords that describe what your organization does in social news sites such as Digg, Newsvine, Kirtsy, and StumbleUpon.
- Track content about your industry, courses, and/or activities in social network sites (i.e., Facebook and Twitter).

Identify Influencers What is influence? It can be defined as *implicit or explicit effect of one thing (or person) on another*. What influences people online has changed dramatically in the past few years. The idea that the person with the most followers or subscribers has the biggest influence is no longer valid. Today, influence is about accuracy and trust. If you want to reach the bloggers and social networkers who have influence, you will need to influence their perception and/or their behavior. They're the ones who send a flood of traffic to our website, because when they link to or recommend our courses and/or activities, their followers take action.

Some of the parameters we should use to determine which blogger and networkers to focus on are as follows:

- *Traffic*: Unique visitors, page views, and RSS subscribers
- Inbound links: Primarily contextual links from well-ranked sites and blogs
- Reader engagement: Time spent on site, comments
- Recommendations: Retweets, bookmarking, tagging, and sharing of content
- *Connections*: Number of followers/mutual connections across multiple social sites
- *Track record*: Age of domain, number of blog posts, and length of engagement
- Web traffic to your site or blog: Analytics tell which sites are sending users to your site
- Conversion rate of those visitors: What is the rate of conversion for each referring site?

Identify and Select Tools There's a wide array of social media tools to choose from and the task can be confusing. However, our content strategy will guide us in identifying where to start. If the majority of the conversation about our industry, courses, and/or activities is on Twitter, then we will need a custom-designed Twitter account.

Here's the list of social media tools:

- Search optimized press releases
- Social media news release format—with multimedia and social bookmarks
- Search optimized articles
- News feeds (RSS) to syndicate all your content

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