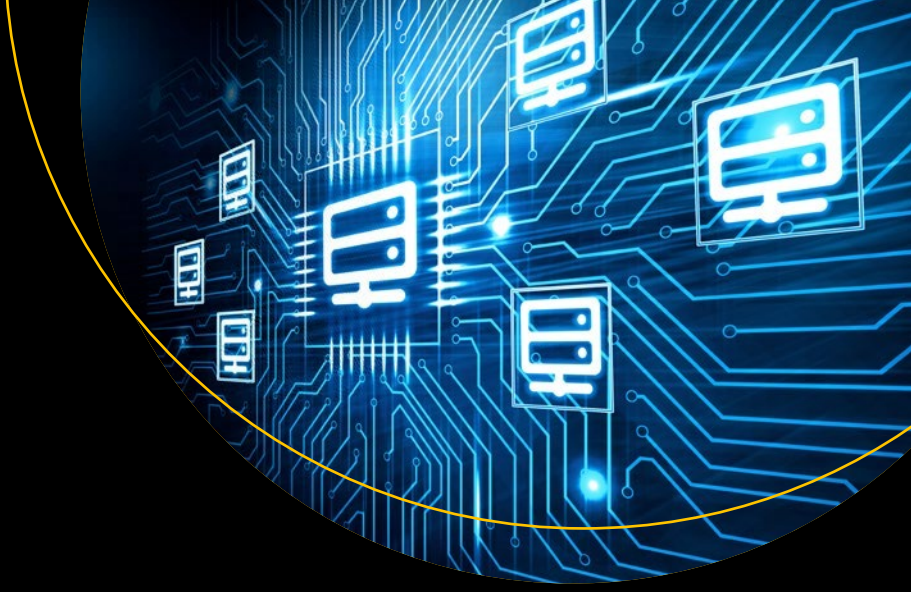

Mastering Knowledge Management Using Microsoft Technologies

Secrets to Leveraging Microsoft 365 and Becoming a Knowledge Management Guru

—

Tori Reddy Dodla

Foreword by Pradeep Ananth

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About the Author

Tori Reddy Dodla, **Ph.D.**, a distinguished professional with the title of Knowledge Collaborative Engineer Principal, brings a wealth of expertise and academic rigor to knowledge management. Holding a Ph.D. in Technology, Dr. Dodla has dedicated her career to unraveling the complexities of knowledge management systems. Her research, centered on navigating the risks, rewards, and implementation challenges of knowledge management systems, including Microsoft products, has not only advanced the theoretical underpinnings of the field but has also contributed practical insights that have guided organizations toward more effective knowledge strategies.

About the Technical Reviewer

Kapil Bansal is a Ph.D. Scholar and Lead DevOps engineer at S&P Global Market Intelligence, India. He has more than 15 years of experience in the IT industry, having worked on Azure cloud computing (PaaS, IaaS, and SaaS), Azure Stack, DevSecOps, Kubernetes, Terraform, Office 365, SharePoint, release management, application lifecycle management (ALM), Information Technology Infrastructure Library (ITIL), and Six Sigma. He completed certification programs in Advanced Program in Strategy for Leaders from IIM Lucknow and Cyber Security and Cyber Defense from IIT Kanpur. He has worked with companies such as IBM India Pvt. Ltd., HCL Technologies, NIIT Technologies, Encore Capital Group, and Xavient Software Solutions, Noida, and has served multiple clients based in the United States, the UK, and Africa, such as T-Mobile, World Bank Group, H&M, WBMI, Encore Capital, and Bharti Airtel (India and Africa). Kapil has reviewed *Hands-On Kubernetes on Azure: Run your applications securely and at scale on the most widely adopted orchestration platform* and *Azure Networking: Practical recipes to manage network traffic in Azure, optimize performance, and secure Azure resources* published by Packt and many more. He has also reviewed *Practical Microsoft Azure IaaS: Migrating and Building Scalable and Secure Cloud Solutions* and *Beginning SharePoint Communication Sites* published by Apress and many more.

About the Foreword Author

Pradeep Ananth is a certified Microsoft professional currently working with CIBC, Canada. With over 14 years of experience as a Knowledge Manager and PowerApps Developer in various sectors, he has consistently showcased his aptitude for fostering value through teamwork and deploying innovative solutions that streamline processes and enhance collaboration and productivity.

Foreword

In this book, Dr. Tori Reddy Dodla, a seasoned expert in the field, adeptly unravels the transformative power of Microsoft 365 in evolving knowledge management practices. Her unique perspective, extensive knowledge, and actionable insights propel readers to exploit Microsoft's suite of tools, cultivating a knowledge-driven culture, streamlining resource management, and refining decision-making. Beyond serving as a technical reference for Microsoft technologies—extending beyond SharePoint—this book is a strategic guide for embedding knowledge management into the operational backbone of businesses. It tackles prevalent industry challenges, presenting practical and pragmatic solutions and enabling organizations to enhance their knowledge resources independently of high-cost external services. Dr. Dodla's book is crucial for those intent on leveraging Microsoft technologies to develop an informed, nimble, and innovative enterprise.

—Pradeep Ananth

CHAPTER 1

Introduction to Knowledge Management

Chapter Goal: Introduce readers to Microsoft's capabilities of supporting knowledge management and lay the foundation for exploration.

1.1 Introduction

In a recent poll (see Figure 1-1), participants were asked to express their views on whether SharePoint qualifies as a knowledge management (KM) tool. The question garnered a total of 247 votes, with 73% of respondents indicating that they considered SharePoint to be a suitable tool for KM, responding with "Yes, of course." Conversely, 27% of participants voted "Absolutely not."

The original version of this chapter was revised. A correction to this chapter is available at https://doi.org/10.1007/979-8-8688-0372-7_10

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Figure 1-1. *LinkedIn Poll: "Do you consider SharePoint to be a KM tool?"*

Among those who voted against SharePoint being categorized as a KM tool, several common arguments emerged. A prevalent perspective was that SharePoint primarily functions as a content or document management system. Some respondents viewed it as an information management system. Critics of SharePoint's KM capabilities cited its perceived limitations, notably its lack of robust taxonomy and metadata management. Others pointed to the requirement for extensive integrations, asserting that this complexity hindered its suitability for KM purposes.

It is worth noting that the poll question presented a nuanced challenge, as many organizations do not employ SharePoint in isolation but as part of a broader technology landscape. Additionally, some participants might not have been fully aware of Microsoft's comprehensive suite of offerings.

1.1.1 People, Process, Technology

In the field of knowledge management, there exists a misconception and recurring ideology that KM is solely dependent on technology as a solution, neglecting the roles of processes and people. However, it is essential to emphasize that an effective KM strategy encompasses all three pillars: technology, processes, and people.

The widely adopted People, Process, Technology (PPT) framework (see Figure 1-2) has been utilized by business leaders across various domains to facilitate organizational change, and the field of knowledge management is no exception. This framework, which has its origins in the early 1960s, suggests that successful organizations must effectively balance and integrate three key elements: People, Process, Technology.

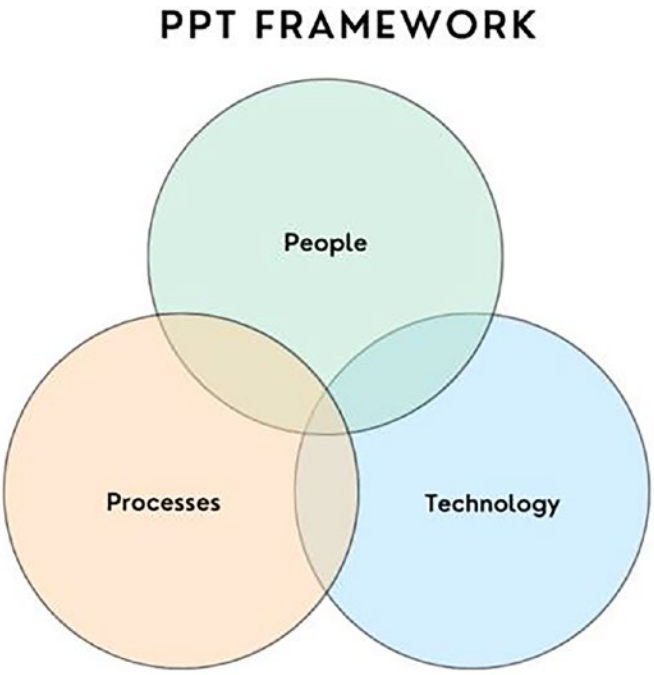

Figure 1-2. *PPT Framework*

In the context of knowledge management, the **people** element places its focus on individuals and their respective roles in fostering knowledge sharing and collaboration. The **process** component centers on the development of methodologies to efficiently capture, store, and disseminate knowledge throughout the organization. Meanwhile, the **technology** component encompasses digital solutions, including tools and software, that support knowledge management activities.

Historically, the knowledge management community placed a stronger emphasis on the people and process aspects, primarily due to the limited availability of specialized KM technologies. The value creation process was heavily reliant on the efforts of individuals, and KM technologies were often integrated with minimal consideration, given their perceived ease and speed of implementation. It has been a common mantra within the KM community to prioritize technology as the last step in the decision-making process. However, a disconnect often exists between knowledge management decision-makers and individuals in leadership positions such as chief information officers (CIOs), chief technology officers (CTOs), and directors, resulting in the technology component being overlooked.

In contemporary times, many knowledge management systems (KMS) are available. Yet, historical mindsets have led to the neglect of the technology facet within the People, Process, Technology framework. Consequently, many knowledge management professionals remain unaware of the expansive KM ecosystem that can be developed using tools such as SharePoint Online, PowerPlatform, or Dynamics 365. This oversight has also contributed to instances of overlapping knowledge management platforms within organizations. For instance, it is not uncommon for organizations to invest in both Microsoft SharePoint and ServiceNow, inadvertently creating redundancy in their KM efforts.

1.1.2 Overlapping of Knowledge Management Technologies

In the realm of knowledge management, excessive overlap between technology platforms can pose significant challenges for organizations. While a certain degree of redundancy can offer advantages such as data backup, when taken to extremes, it can lead to a range of problems. Firstly,

duplicated information across multiple systems can become inconsistent and outdated over time, creating confusion among users about which source of information is authoritative. Consequently, employees may spend valuable time searching for information across various systems or grappling with the decision of which system to use, thereby impeding productivity and efficiency. Finally, different platforms may store similar information in slightly different formats, leading to inconsistencies in data, which can result in errors and confusion when employees rely on conflicting information. Consequently, incorrect information becomes misunderstood facts or knowledge. There are so many examples of overlap, but Figure 1-3 shows an illustration between Microsoft SharePoint and ServiceNow.

Furthermore, the maintenance and licensing of multiple overlapping systems can incur substantial costs for organizations. This includes expenses related to software licenses, hardware infrastructure, and ongoing system maintenance. Managing multiple systems can also be complex, especially when it comes to integration, employee training, and ensuring data security and compliance across all platforms.

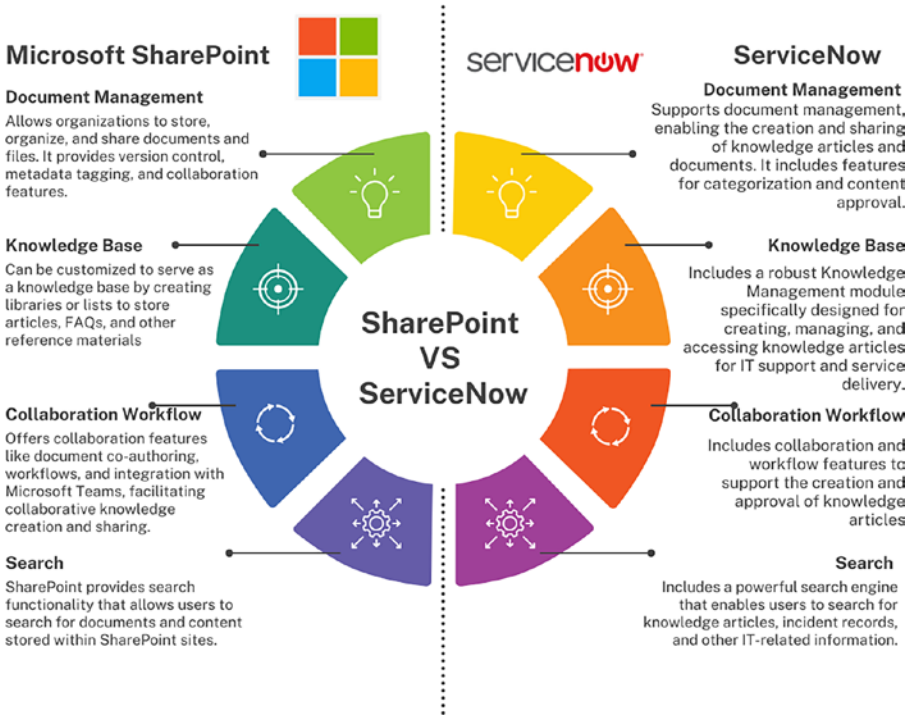

Figure 1-3. *SharePoint and ServiceNow Comparison Chart*

Illustratively, this diagram depicts how Microsoft SharePoint and ServiceNow could potentially overlap in certain areas of knowledge management. While both SharePoint and ServiceNow are versatile software platforms used by organizations for various purposes, the extent of their overlap depends on their specific implementations and customizations within an organization.

To address these challenges and prevent unnecessary overlaps, a collaborative approach is essential. The Chief Information Officer (CIO), Chief Technology Officer (CTO), and Chief Knowledge Officer (CKO) must work together to develop joint strategies and a comprehensive information and knowledge management strategy that aligns with the organization's overarching goals and objectives. This strategy should

encompass technology, data governance, and fostering a knowledge-sharing culture. It is vital to ensure that the technology infrastructure and systems recommended or chosen by the CTO align seamlessly with the organization's knowledge management goals and effectively support the CKO's initiatives.

Additionally, leaders should collaborate to identify areas where integration of existing systems is needed to reduce overlaps, prioritizing integration efforts based on their potential impact on data consistency and accessibility. The CTO's involvement in the selection of knowledge management tools and systems is crucial to guarantee alignment with the broader technology stack and seamless integration possibilities. Furthermore, leaders should work together to define and monitor key performance indicators (KPIs) that measure the success of knowledge management initiatives, sharing relevant reports and insights to inform decision-making.

Fostering a culture of knowledge sharing and collaboration across the organization is another critical aspect of effective knowledge management. Highlighting the importance of knowledge management in achieving strategic goals, conducting regular audits and reviews of knowledge management practices, systems, and data, and ensuring alignment with the organization's business objectives are all essential components of a successful, collaborative approach to knowledge management.

1.1.3 Importance of This Book

For organizations that leverage Microsoft technologies, this book aims to provide comprehensive insights into harnessing these tools for effective knowledge management. It endeavors to illuminate these technologies' full spectrum of capabilities, ensuring a profound understanding of their potential applications. Whether your objective is to optimize knowledge management processes or align these tools with your organization's business processes, this book is designed to serve as a valuable

resource, offering practical guidance and strategies to empower your endeavors. By the end of this book, readers will be equipped with the knowledge and skills necessary to make informed decisions regarding the utilization of Microsoft technologies for knowledge management and organizational design.

1.2 What Is Knowledge Management?

1.2.1 Introducing Knowledge Management

Knowledge management (KM) is an interdisciplinary field that encompasses a wide array of domains, including organizational science, cognitive science, and information technologies. The overarching goal of knowledge management is to capture, create, store, and disseminate organizational knowledge. Knowledge management is similar to information management, but they are quite different. Knowledge management is concerned with leveraging an individual's collective knowledge and expertise, while information management focuses on the structured management of data and information assets. They differ in six areas.

1.2.2 Focus and Scope

Knowledge management focuses on capturing, organizing, sharing, and applying tacit knowledge and expertise held by individuals within an organization. It focuses on turning individual knowledge into a valuable collective asset. Knowledge management also handles explicit knowledge. Information management only focuses on structured management of information assets, including data, documents, records, and content. It focuses on ensuring the efficient storage, retrieval, and governance of information.

1. **Nature of Content:**

   Knowledge management deals with unstructured, experiential, and often context-dependent information. It includes insights, experiences, best practices, and expertise that may not be documented. Information management deals with structured, formalized data and information, such as databases, documents, reports, and records. It focuses on maintaining data integrity and ensuring its accessibility.

2. **Objective:**

   The main goal of knowledge management is to foster a culture of knowledge sharing, innovation, and learning within an organization. It aims to leverage collective knowledge to improve decision-making and problem-solving. The primary objective of information management is to efficiently capture, store, organize, and retrieve information assets, ensuring they are accurate, secure, and compliant with regulations.

3. **Processes and Activities:**

   Knowledge management involves processes like knowledge capture, creation, codification, sharing, transfer, and application. Activities may include communities of practice, lessons learned, and mentoring. Information management encompasses activities like data capture, indexing, storage, retrieval, archiving, and disposal. It focuses on data governance, compliance, and data lifecycle management.

4. **Technology and Tools:**

   Knowledge management often relies on collaboration tools, expertise directories, social platforms, and communities to facilitate knowledge sharing. Information management only involves content management systems, document repositories, database management systems, and information governance tools.

5. **Tacit vs. Explicit:**

   Knowledge management deals with both tacit knowledge (knowledge held in people's minds) and explicit knowledge (knowledge that is documented). Information management primarily focuses on explicit information that is documented and can be structured.

Knowledge management includes information management as well as data management as seen in Figure 1-4.

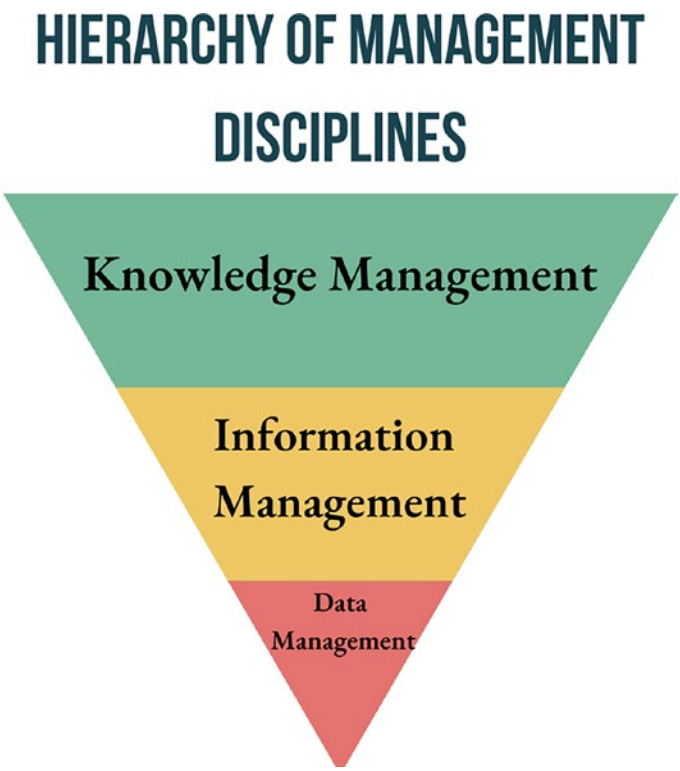

Figure 1-4. *Hierarchy of Management Disciplines*

In the hierarchy of management disciplines, data management is the foundational layer. Data management is collecting, storing, retrieving, and maintaining raw data. It focuses on ensuring data accuracy, consistency, and security. Information management builds upon data management by organizing, structuring, and categorizing data to transform it into meaningful information. It involves processes such as data integration, transformation, and presentation. Knowledge management is the highest level in the hierarchy. It encompasses capturing, organizing, sharing, and applying information and knowledge to support decision-making, problem-solving, and innovation. Knowledge management leverages both data and information to create valuable insights and expertise.

This can all be confusing. When asked about knowledge management versus data or information, I like to tell a short story:

Let's say you wanted to play the lottery.

You have four friends to help you out:

Friend #1 is Miss Data. She gives you the past jackpot amounts, lottery-winning locations, and the past numbers that have been played.

Data can guide you.

Friend #2 is Miss Information. She processes what Miss Data gave you and concludes that your odds of winning are 0.0004%, advising that if you play in a certain state, your chances might slightly increase.

Information can help you make a decision.

Friend #3 is Miss Knowledge. She looks at all the information and shares her experience of winning the lottery, offering to introduce you to a network of past winners who can give you tips on legal strategies to improve your chances up to 65%.

Knowledge can change the trajectory of your life.

Then you have Friend #4, Miss Wisdom. She listens to the conversation and cautions you: "Winning the lottery will put you in the spotlight and may disrupt your life. The state you live in won't let you claim your prize anonymously. Consider the impact on your children's routines and your peace of mind. It's important to weigh these consequences carefully."

Wisdom can fine-tune your path.

1.2.3 The Importance of Effective Knowledge Management in Organizations

Effective knowledge management can empower organizations to

- Make informed decisions
- Foster innovation
- Retain retention
- Become competitive
- Remain competitive

First and foremost, effective knowledge management facilitates informed decision-making. In an era where organizations are inundated with data and information, the ability to distill relevant knowledge from this sea of data is invaluable. By organizing, categorizing, and making knowledge readily accessible, organizations can empower their teams to make well-informed choices, whether in strategic planning, product development, or customer service. This, in turn, enhances the organization's agility and responsiveness to market changes.

Effective knowledge management also fosters a culture of learning and innovation. Employees with easy access to knowledge resources are more likely to engage in continuous learning, experiment with new ideas, and collaborate across teams. As a result, knowledge sharing becomes a norm, creating new best practices, problem-solving techniques, and innovative solutions. This culture of innovation can give organizations a competitive edge in rapidly evolving industries.

Effective knowledge management contributes to employee engagement and retention. Employees feel valued and empowered when they can contribute their expertise, share their knowledge, and access the organization's collective wisdom. This enhances job satisfaction and encourages employees to stay and grow within the organization, reducing turnover and preserving institutional knowledge.