Introduction
Knowledge management is difficult to define because it covers a broad range of different areas and disciplines. Many authors don’t give a comprehensive definition because they emphasize “only one aspect of the complexity of the concept” (Wick 515). The following short annotated bibliography tries to put knowledge management in the context of technical communication, information architecture, and the workplace. This bibliography offers those who are novices in the field of knowledge management a starting point (hopefully) to learn more about it.

The first part of this annotated bibliography discusses the topic knowledge management and the key findings I draw from my readings. I also focus on the implications for organizations and the role of technical communicators. The next section discusses knowledge management in relation to information architecture. The first part concludes with a short discussion about the items of my bibliography. In the second part, you read the short annotations of my selected texts that I find helpful to learn more about knowledge management.

Topic overview
Knowledge management comprises a broad and complex concept. The following section summarizes the key findings from my readings and discusses:

- Differences between data, information, knowledge
- Knowledge management and organizations
- Different perspectives of knowledge management
- Knowledge management and technical communicators

Data, information, knowledge
Almost every text about knowledge management discusses the differences between data, information and knowledge. Generally, data is described as simply quantified observations of raw facts that is easily structured and captured. Information is data provided with meaning, relevance and purpose. Information is a message, usually communicated through a form of a printed document or an audible or visible media. Because knowledge is valuable information and strictly personal including experience, judgment, values and beliefs, and intuition, the human factor draws the borderline between information and knowledge.

Knowledge management and organizations
Knowledge management has become a thriving business strategy in the nineties because businesses realized that they save a huge amount of money when they capitalize on the knowledge that already exists within the organization and their employees. Companies have recognized knowledge as a corporate asset and estimate its value with financial calculations such as Return On Investment (ROI). Organizations have started to shift their focus from product and service towards knowledge creation, conservation, and use, and they encourage as well as reward their employees to share their knowledge. Knowledge organizations promote knowledge sharing through knowledge communities, and investment in latest technology and computer networks. However, knowledge management is people centered and assigns technology only a supportive role.
Different perspective of knowledge management
Because knowledge management is still developing, very popular with consultants and academics, and therefore very complex, you can look at it from different perspectives. Corey Wick offers four interesting perspectives of knowledge management that increase in their complexity: document-centered, technological, socio-organizational, and knowledge organization.

The document-centered perspective emphasizes documents as codified knowledge and connects people to documents. The technological perspective emphasizes technology and connects people to technological systems and applications. The socio-organizational perspective emphasizes interaction between people and connects people with other knowledgeable people. The last perspective is the most complex perspective and builds on the first three. Knowledge organizations emphasize knowledge as a core source of competitive advantage and approach knowledge management as a mission-critical issue affecting all areas of the organization. All the different perspectives overlap and build upon one another.

Implications for technical communicators
Knowledge management provides many opportunities for technical communicators because it shifts the product-centered role of technical communication towards competence-based roles. Knowledge management encourages technical communicators to assume higher-level management roles because they bring the core competencies required for the conceptual development and implementation of knowledge management in an organization. According to Wick technical communicators have a thorough understanding of the complex nature of knowledge, language, and communication. They are exceptionally talented in working across functions, departments, and disciplines and are communication experts.

Knowledge management and information architecture
Both information and knowledge management describe a management approach that includes people (human factor), organizations (environment or context), and technology such as computers and networks (tools). However, the difference lies in the fact that only people (human interaction) transform information into knowledge. According to Davenport and Prusak (“Working Knowledge” 6), knowledge-creating transformation occurs through:

- Comparing new information with other situations you already know.
- Determining the consequences the information has for decisions and actions.
- Connecting pieces of knowledge with other knowledge.
- Conversing with other people about this new information.

All these knowledge-creating activities can only take place between humans. Therefore, knowledge management more strongly emphasizes people than information management and promotes the development of a knowledge-empowering organizational environment. Knowledge empowering elements include experience, ground truth (knowing what works and what doesn’t), complexity (knowledge incorporates complexity and does not exclude it), judgment, rules of thumb and intuition, and values and beliefs (Davenport and Prusak, “Working Knowledge” 6-12).

However, information management, and the important element of information architecture, build the structure (or basis) for effective knowledge management in an organization. Information
management provides a context and brings people and technology together to share their knowledge.

Still, the distinctions are sometimes difficult to assess. I understand knowledge management more as a business strategy and management concept, whereas information management tends to refer more to hands-on applications of knowledge display through different media. Information management further includes content management and the development of a complicating system that guarantees and maintains information, and subsequently knowledge flow, within an organization.

**Items of my bibliography**

**Books**
I picked Davenport’s books because he is regarded as a pioneer in the field of knowledge and information management. His work I am using here shows how information management develops into knowledge management when you want to deal with this issue in an organization. Davenport introduces the concepts first in the chapter, offers a step-by-step approach of what you should consider, and provides interesting examples from his consulting experience in the corporate world.

The essential reader is a collection of articles the Open University Business School in England uses for its managing knowledge course. The readings cover the four areas: creating knowledge, resources and capabilities, communicating and sharing knowledge, and knowledge, innovation and human resources. This book might be interesting for instructors of upper level college courses about knowledge management.

Wayne Applehans et al’s book is less academic and more practice oriented in discussing how to implement knowledge management in an organization. I find the authors’ approach to use a “tactical” definition of knowledge management interesting, because they define knowledge as “the ability to turn information and data into effective action” (18). They see knowledge management as the ability to find and translate experience, instinct, and values into knowledge that is documented and delivered throughout the organization, which becomes then the basis for action. This approach leads to the key elements of knowledge management: people, content, and technology. Applehans et al stress that technology is only an “enabler” providing the technical infrastructure, whereas only people create knowledge.

**Journal and magazine**
I picked the journal and magazine from the Society of Technical Communication because they have an important impact on the education and development of the profession of technical communication. Both articles show the technical communicator’s viewpoint and challenges of knowledge management and give us valuable arguments as technical communicators in the workplace.

**Web sites**
I find the two Web sites important because they offer a casual but easy introduction to interesting aspects of knowledge management. I personally like Gill’s discussion about the communities of practice. Additionally, the Web is a good start to get familiar with the topic and provide a large pool of further references, links, and research resources.
Annotated Bibliography


Wayne Applehans et al provide a less academic and more practice-oriented approach to knowledge management and give a concise discussion of using Web-based technology to implement knowledge management in a mid- to large-sized organization. The book focuses on a Web-based approach, because the authors believe that the most efficient way to move data, information, and knowledge within a mid- to large-sized company is via an Intranet or/ and Extranet. The book bases on the authors’ experience with building a company wide knowledge architecture for J.D. Edwards in Denver, Colorado, and consists of four parts:
1. Getting started: describes the authors’ concepts and tools.
2. Organizing around knowledge: discusses how to combine content and people.


Davenport and Prusak provide a profound introduction of knowledge management and set the context for its application with human beings, organizations, businesses, and the overall economy. Davenport and Prusak offer both a profound theoretical basis of knowledge management and a detailed discussion of how to implement knowledge management in an organization. If you are less interested in the organizational application, you must at least read the first chapter where the authors define knowledge management, distinguish between data, information and knowledge, and discuss the complexity and challenges human beings and organizations face when dealing with and applying knowledge. At least the first chapter is a must-read for everybody interested in knowledge management.


Davenport and Prusak discuss information management in an organizational context and reject the prominent role technology has played in the application of information management. The authors emphasize the human approach to information and management and focus on the entire information environment of an organization, including values and beliefs (culture), peoples’ behavior and work processes, politics, and, but not only, technology. Even though Davenport and Prusak mainly emphasize and discuss information management, they provide an excellent distinction between data, information, and knowledge in the first chapter, show how these terms are interrelated, and discuss in the following chapters the concept and implications of the information ecology management model.

This article discusses the value of “communities of practice” as one way of knowledge management initiative to share value within an organization. Communities of practice are organized groups of experts and other individuals who exchange knowledge about a specific field of interest. Sometime these communities are also called “knowledge domain.” The author describes the steps how to establish and to manage such a community in an organization and discusses that informal communities already exist within most companies. To maintain continuity, communities must be supported by senior management and organized by “semiofficial functions,” time scheduling, and member motivation.

Communities of practice stress the significant role of human interaction in “capturing tacit or experiential knowledge while providing a forum for collaboration and for sharing best practices.” This article offers a good, concise introduction to this important aspect of knowledge management.


The Open University Business School in England uses this anthology of knowledge management articles for the “Managing Knowledge” course (B823). The readings cover in four parts the areas creating knowledge, resources and capabilities, communicating and sharing knowledge, and knowledge, innovation and human resources. The chapters in the first part discuss the different aspect of tacit knowledge and its interactions with knowledge-creating processes. The second part pays attention to the processes that surround knowledge and discusses the different aspects of resources and capabilities needed to apply knowledge management. In the third part, the chapters deal with communication issues and supporting structures needed to manage knowledge. The chapters in the last part focus on the “human factor” of knowledge management. Instructors of upper level college courses about knowledge management might find some of the chapters interesting to use in order to cover the interdisciplinary character of knowledge management.


Schultz discusses knowledge management from the organizational perspective, with an emphasis on the technological implications. He defines rather casually knowledge management as “the ability to get the right information to the right people at the right time” that depends on state-of-the-art technology such as next-generation databases, powerful browsers, advanced search engines and so forth. But the article also mentions the importance of knowledge sharing among people to apply effective knowledge management in an organization. Finally, the author distinguishes between information management and knowledge management by stating that knowledge management adds value to information that enables action and leverages skill and core competencies to improve or develop new products. This article implies that knowledge
management is a sophisticated management concept to make knowledge available within an organization to improve the economic performance of the organization.


Thurman discusses the implication of knowledge management for technical communicators arguing that they are specialized “in obtaining, organizing, presenting, and maintaining information” (19). To prove his statement the author shows different areas in his company D&T where technical communicators apply knowledge management work such as interface, database, Web site design, as well as usability testing, content cleansing/editing, content management, and marketing and communication. Thurman stresses the important role technical communicators play when companies produce knowledge by creating knowledge deliverables. However, the article neglects to discuss the role technical communicators can play in the conceptual development of knowledge management before implementing or refocusing knowledge management as a management strategy within an organization.


Corey Wick provides an excellent article about knowledge management and its implications for technical communicators. The author states that knowledge management has multiple definitions that are all part of a larger whole and discusses the complex concept of knowledge management from four different perspectives: document-centered, technological, socio-organizational, and knowledge organization. Wick shows that “knowledge management in practice ranges from a very tightly defined process to a broad, paradigmatic shift in what it means to do business and how business is done” (521).

In the second part, the author argues that knowledge management provides leadership opportunities for technical communicators because the increasing use of knowledge management in organizations will demand a shift of the technical communicators’ product-centered role towards competence-based roles. According to Wick technical communicators bring the core competencies required for knowledge management:

- Thorough understanding of the complex nature of knowledge, language, and communication.
- Exceptionally talented in working across functions, departments, and disciplines.
- Expert expertise of communication.