Jacquemin provides strong evidence that it can. The challenge for information retrieval research is to identify methods and algorithms that make use of work like Jacquemin's to improve the quality of information retrieval.

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Knowledge Management in the SocioTechnical World—The Graffiti Continues. Elayne Coakes, Dianne Willis and Steve Clark (eds.). New York: Springer Verlag, 2002; 288p. Price: $69.95 (ISBN: 1-85233-441-S).

Though often considered a business fad, knowledge management continues to be one of the most discussed and researched topics in business, information systems, and information science. Unlike many knowledge management books on the market which focus on either a practitioner or researcher perspective, Coakes, Willis, and Clark's *Knowledge Management in the SocioTechnical World—The Graffiti Continues* presents a readable collection of research-based articles that will appeal to both camps.

Knowledge management is variably defined. Is it a technology for document classification and retrieval across the enterprise? An organizational environment enabling knowledge sharing? Or perhaps the activities of the individual within a knowledge-centric organization? Viewing knowledge management from a purely technological perspective has not been fruitful. What has been missing, and what the research in *Knowledge Management in the SocioTechnical World—The Graffiti Continues* shows, is how acknowledging the individual, the individual's role, the organization's knowledge sharing needs, and the organizational culture, when added to technologies such as databases and web-based discussion boards, provides a more complete understanding of knowledge management.

Knowledge Management in the SocioTechnical World—The Graffiti Continues is divided into four parts—Know-Why, Know-What, Know-Who, and Know-How—each part addressing those particular aspects of knowledge management. Representative themes from each section are presented this review.

Know-Why offers an interesting look at what should be the perfect environment for knowledge management, the university. Though knowledge is their core business, it is posited that universities fail to take up the knowledge management challenge because of their inadequate use of information technology to create "knowledge repositories." (p. 45) Collaborative efforts notwithstanding, awards and recognition in the university are obtained through individual knowledge acquisition, not knowledge-sharing. In addition, creativity, so necessary to knowledge use and application in the business environment, often is frowned upon in the university. Get too creative, go too far from the established body of knowledge, and the result is not respect and acclaim from your peers. In many cases, bringing information from other contexts to inform and add to your discipline's knowledge base also is not appreciated. The authors warn against a too ready assumption that knowledge management operates in a vacuum and can be dropped in anywhere, without regard to the very human elements of personnel, policies, and politics that act as constraints against a successful knowledge management system implementation.

Know-What is a short section with two articles examining the individual. While proponents of knowledge management engage in vigorous discussion of sharing knowledge across the organization or knowledge sharing in teams, it is surprising how often the role of the individual is given short shrift. Yet it is the individual worker who has the knowledge that the organization or team needs. The reader is reminded of the individual's importance to solving the problems of "... the transition of tacit individual knowledge to measurable and usable organizational knowledge..." (pp. 77–78)

The examples of the socio-technical approach in business are interesting as evidence of the misunderstanding of the individual's role in knowledge exchange. One firm's discussion board is designed to "transfer tacit knowledge into a repository." A better understanding of tacit knowledge would prevent such misguided statements from being made as they show a lack of understanding of the nature of tacit knowledge. Other firms show a better understanding of the tacit knowledge problem by using coaching to facilitate the information exchange or providing time for employees to network and share stories about their work. It is indicative of the continuing problems in implementing knowledge management systems that even in organizations whose lifeblood is knowledge sharing, when personnel in these same organizations say they don't have time to engage in these activities.

Know-Who reveals how changes in one firm's physical space, coupled with supporting technology, dramatically improved the amount of cross function collaboration and communication amongst employees. The research points out the oft-overlooked fact that while knowledge management technology is certainly useful for dispersed employees, having a physical location that enables face-to-face communication also contributes to a successful implementation.

While a physical space and technology can aid in providing opportunities for knowledge sharing, it may be difficult to create sharing communities. A pilot study examining a community of practice (which appeared to be an artificial creation rather than a spontaneous gathering of like-minded members of the firm) showed how the lack of a project champion can hinder knowledge management projects. Also contributing to problems in this pilot was a lack of time for collaboration. Providing technical support for the community proved to be ineffective where there was no champion to encourage participation or time to actively engage in collaboration. Participants benefited from learning 'who knows what,' but the pilot

was less than successful. This limited success points to the need for a deeper understanding of the elements of a knowledge management project. Management that fails to endorse a champion, or provide time and space for collaboration, is unlikely to be rewarded with a useful system for the organization.

Informative case studies examining knowledge management in the smaller organization, problems in a user-centered design of knowledge management systems, and the use of technology to aid in the exchange of tacit knowledge are contained in the section on *Know-How*.

The research focusing on the smaller organization is a unique look at knowledge management in an environment that fails to garner much attention in knowledge management research. Practitioners, researchers, and students should understand that knowledge management does not need to be reserved for large enterprises and that good knowledge management principles can be applied in almost any knowledge-centric environment. While this particular research examines a subsystem of the military, the problems of rotating employees and the resultant drain on organizational memory and knowledge are similar to problems faced by small businesses and the findings should be applicable to practitioners in the small business environment as well.

The chapter on tacit knowledge and technology was troublesome in that the authors seem to think that having a database of organizational expertise (who knows what) or exchanging information via the Web is sharing tacit knowledge. They get closer to the point when discussing mentoring and the creation of a knowledge-enabled environment that encourages knowledge transfer between people as they work together. A Lotus Notes database of work documents does not provide for tacit knowledge transfer. These document repositories are certainly useful tools, but they furnish a space for sharing information, not knowledge.

Knowledge Management in the SocioTechnical World—The Graffiti Continues suffers from a number of shortcomings. First, a number of authors invariably begin their chapters with a standard introduction along the line of 'knowledge management is important in the modern business world' or 'competition requires that the businesses recognize knowledge as an asset.' All well and good, but repetitive. This occasionally made the book read like a compilation of articles that may have been edited individually, but without an eye to the book as a whole. While each article stands on its own, the repetitive nature of the introductions was distracting.

Second, several authors refer to the usefulness of examining work roles in the process of implementing knowledge management systems. It is surprising, then, that works on cognitive work analysis (Schraagen et al.'s *Cognitive Task Analysis*, Lawrence Erlbaum Associates, Inc. 2000 or Vicente's *Cognitive Work Analysis*, Lawrence Erlbaum Associates, Inc. 1999) are not cited. This is not a fatal flaw, but does detract a little from the exhaustive nature of the book.

Third, and more serious, however, is the lack of definitions. At a basic level, many articles did not specify the authors' definition of 'knowledge.' Considering that the various fields addressing knowledge management issues (information science, organizational theory, management science, and human computer interaction, to name a few) bring different working definitions of the term to their work, it is only fair to the reader that authors provide their definition of both knowledge and knowledge management up front. For example,

some researchers define knowledge as something amenable to codification and process, while others limit this definition to explicit knowledge.

In addition, several authors suggest that knowledge management will help firms use organizational knowledge as an asset, provide a competitive advantage, or help firms become learning organizations without ever defining these terms or elucidating why they are important. Considering the range of readers' backgrounds, definitions and justifications for these and similar terms would go a long way to improving the usefulness of this book. As an example, many people involved in the information systems design so critical to knowledge management are not trained in business and do not come to this book with a clear understanding of competitive advantage or strategy. If an author is going to base a valuation of knowledge management on its contribution to the firm's competitive advantage, it isn't too much to ask that the reader be told what this is.

Despite these weaknesses, the book is an excellent enlargement of knowledge management concepts to the practitioner community, providing the right amount of theory and practical application via case studies. It is generally well written and the eye-catching format of shaded text boxes and callouts quickly bring the reader's attention to important points. With supplemental readings, *Knowledge Management in the SocioTechnical World—The Graffiti Continues* offers the undergraduate an outstanding introduction. Graduate students and researchers will find that the book stands on its on as an excellent insight into the current state of knowledge management theory and practice.

For readers unfamiliar with the sociotechnical perspective, this book clearly shows that information technology and technology-based processes alone cannot make a viable knowledge management system if the social aspects of knowledge enabling, knowledge creation, knowledge use, and knowledge sharing are ignored. So far, only humans create knowledge. While researchers in the field are aware of the necessity of including the human, many students and practitioners, wowed by (or sold on) the promise of a technological cure for every ill, are not. Using the sociotechnical perspective is not a guarantor of success. However, the selected research and case studies make it clear that only with the sociotechnical perspective do knowledge management projects stand a chance. *Knowledge Management in the SocioTechnical World—The Graffiti Continues* is recommended reading for anyone looking for a broad exposure to problems in researching, implementing, and working with knowledge management systems.

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Looking for Information—A Survey of Research on Information Seeking, Needs, and Behavior. Donald O. Case. Lexington: Academic Press, 2002; 350p. Price: $89.95 (ISBN: 012150381X).

Looking for Information helps fill a major gap in the literature of the information and communication fields by bringing together and considering research related to information