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Editorial

My Two Cents on Knowledge Management Research

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We are knowledge managers! As scholars and academicians we are involved with the intricacies of knowledge management on a daily basis. Knowledge management to academicians involves imparting our knowledge to our students, furthering our disciplines through the conduct of scientific inquiries, engaging in dialogues with other knowledgeable experts, so on and so forth. As IS practitioners, we are also knowledge workers. We have to understand systems requirements, integrate disperse pockets of knowledge within our organizations, and transfer the tacit (know-how) into the explicit (system designs, systems, programs). One might argue that the readers of the *Journal of Information Science and Technology (JIST)* are high end knowledge workers. Knowledge is a critical ingredient and the governing dynamics of our work. Unless we are able to leverage knowledge in and around us, we risk failing in the conducting effective and efficient work practices and engaging in innovation.

A salient task of knowledge management is converting the *tacit* into the *explicit*. For researchers and practitioners this involves explicating our know-how into tangible outcomes like scientific papers. In this editorial, I would like to share my thoughts on knowledge management research. As associate editor of JIST, I am eager to see research and practitioner oriented work on knowledge

management be submitted for review and publication consideration. The goals of JIST as formally stated are:

"*JIST will publish original research and comments about the science of information and the application of technology for the successful management of organizations. Contributions are particularly welcome which analyze the results of interdisciplinary research and relate to the intersection of theory, method and empirical findings. Of interest will be manuscripts, which present the theoretical concepts of the acquisition, organization, and dissemination of information to support functional and cross-functional organizational operations, planning, and decision-making. Further, publications will include the results of investigations that advance practice and understanding of the application of technology to support efficient and effective business operations.*"

The goal of JIST I most admire is to be a premier journal that publishes practitioner relevant IS research. I feel that knowledge management is one of the salient field which merits investigation and attention. To this end, I would like to propose that research be directed towards the following themes:

Integrate the research on knowledge management with the extant work in other functional areas such as accounting, finance, marketing, innovation, research & development, and production and operations management. Currently, much of the work on knowledge management is conducted in isolation. This is unfortunate as it prevents us from gaining a thorough and pragmatic understanding of the phenomena. Knowledge management is not an isolated discipline; it is a core component of every area of an organization. Moreover, for knowledge management to be relevant to practitioners we must be able to show its soundness in application. To provide one example, the discipline of software engineering and system design is by far one of the most knowledge intensive, second may be to the field of healthcare. Knowledge needs to be managed in and around software engineering efforts for them to be successful. We must start to ask questions such as – How can we better leverage knowledge in software projects? How can we learn from past software failures so that we do not repeat them in the future? How can we better manage knowledge sharing and assimilation efforts between software teams and client teams? Variations of these questions can be posed to understand intricacies in other functional areas. Questions such as the above are not novel; they have been addressed in piece-meal fashion in various *specialized* journals, for example in the case of software engineering this may include papers in journals such as the *IEEE Software* and *IEEE Transactions on Software Engineering*. What is however lacking is an integrated treatment of the questions. If we are to understand the intricacies of managing software engineering knowledge we have to bridge the work conducted in areas like project management, knowledge management, systems theory, information systems, group dynamics, leadership, and economics. JIST, has as one of its goal to publish the results of interdisciplinary research, investigations into all facets of knowledge management will meet this criteria as it very difficult and futile to study knowledge management in isolation.

The current literature on knowledge management has examined the questions of how, why, when, and where to leverage knowledge assets. While this line of

thinking is apt for helping us gain an understanding of how to derive value out of knowledge assets by exploiting them to their full potential, it ignores a rather salient problem – how can we secure our existing knowledge assets? Value out of an asset is determined both by how it is used towards an economic ends and also based on its scarcity in the marketplace. In order to keep our knowledge scarce we must be able to secure it. Securing knowledge assets is even more important given the current economic, social, and political conditions, such as the surge in terrorist activities. The problem of managing knowledge security gets compounded when we have to work in a distributed and heterogeneous setting. For instance, consider the case of cyber-terrorism. Acts of cyber-terrorism can cripple an organization instantaneously by disrupting the flow of information and attacking the systems and processes of the organization. Unless an organization has effective procedures in place to prevent the unauthorized access to its information repositories and systems, chances are high they will be vulnerable to attacks of cyber terrorism. What makes cyber-terrorism difficult to control is the fact that attacks can come from any location on the globe at any time and from almost any information channel. Distributed concerns are not restricted to the geographical dimension. With the current rise in alliances between organizations the need for security of knowledge takes on increased prominence. Organizations have accepted the fact that they must hone in on their core competencies, and forge alliances for securing their non-core needs. Alliances call for sharing and relying on a business partner's knowledge. An organization must not only make sure that its internal controls and security protocols are able to secure knowledge within its bounds, but must also ensure that its business partners have adequate security protocols in place. As the old adage goes, you are only as good as your weakest link. An organization must ensure how its knowledge will be used by its business partner, where will it be stored, and who will have access to it. Regardless of where the knowledge leak occurs whether it be within the organization or at the business partner's location, the ramifications from the leak could be disastrous. With the recent surge of interest in offshore outsourcing efforts, it is even more salient to ensure the protection of intellectual assets. A final point on distributedness that deserves attention is - the sophistication, ubiquity, and pervasive nature of technology can be a factor that compromises the knowledge security of an organization. Most of us use multiple devices for knowledge communications and sharing, these can range from the office phone and e-mail, to use of personal digital assistants, laptop computers, personal computers, so on and so forth. We work and communicate in multiple environments; hence we use these devices in multiple settings. The use of heterogeneous devices over heterogeneous environments makes the act of securing knowledge exponentially difficult. With the increase in hacking, spamming, spyware, worms, viruses, and other nuisances that intercept, harm, sabotage, and destroy electronic networks, knowledge communications over electronic networks are increasingly at risk. However, it is not only communication over electronic networks is that at risk. Let's say two executives are conversing on a train about a vital aspect of the organizations' strategy (knowledge). Not being cognizant of their surroundings, could put the company in jeopardy, as an industrial espionage individual might eavesdrop on

their communications and elicit valuable company know-how. As researchers we have an opportunity to investigate the security dimensions of the knowledge management problem.

Conduct research that links success in knowledge management to organizational outcomes. I just finished reading Nicholas Carr's book *Does IT Matter?* I must say that Carr has put forth a succinct argument that challenges us to find evidence to the contrary. While my focus here is on KM and not IT, I strongly feel that more effort needs to be explicated on linking knowledge management to organizational success and productivity constructs. Can we find a link between successful knowledge management practices and better organizational performance or increases in productivity? It may be difficult to show direct links between knowledge management and organizational outcomes directly, we may need to use mediating variables to get the job done. Knowledge management efforts if valuable, should contribute to the strategic potency of the organization. As pointed out by Carr, information systems have become common and easily available to all in the marketplace and have hence lost their ability to contribute to strategic advantages and differentiating in the marketplace. Can we envision a similar course for knowledge management? In my opinion, yes! If all organizations read *Working Knowledge* by Davenport and Prusak, and *Knowledge Creating Company* by Nonaka and Takeuchi, they have had access to *common* knowledge. Now, what differentiates a Dell versus a No-Name Computer Company? How is Dell able to leverage its knowledge more effectively and efficiently than its competitors? Is it the speed by which knowledge is applied or created? Or is it the viscosity of their knowledge repositories? These are difficult questions to answer as they call for in-depth case study analysis, however the effort is warranted and is a must. Knowledge management researchers and IS researchers, should expel energy seeking answers to the questions – Does knowledge management matter? In what contexts does knowledge management matter? Can knowledge management be used as a differentiating tool for competition? Unless we begin to explore these lines of thinking that seeks answers to the contribution of knowledge management towards organizational outcomes, we risk reading a book in the future – *Does Knowledge Management Matter?*

Practitioner based knowledge management novelties need to be documented and published. As academicians we learn from practice as much if not more than what practice learns from us. We are working in an applied field where we must engage in practitioner relevant research. I do not want to revisit the debate of rigor versus relevance here; the previous editorial has done an excellent job of elaborating on the debate. As practitioners, you are *knowledge practitioners.* Over the past four years, I have had the distinguished pleasure of studying and/or contributing to knowledge management efforts in over 30 organizations. These endeavors have involved collaborating with *knowledge practitioners,* on all continents (expect Antarctica!) ranging from your Fortune 100s to Small-to-Medium Sized Enterprises. During these efforts, I have always been amazed at the novel ways in which organizations seek to manage their knowledge. These novelties have ranged from transforming traditional human resource systems into knowledge systems, devising knowledge markets, enabling communities of

practices, varying architectures for distributed knowledge management, project knowledge management, customer knowledge management, managing knowledge in strategic alliances, so on and so forth. These novelties need to be documented and shared with the scientific community-at-large. The case study method is apt for capturing such intricacies in research papers. While I do not want to undermine the significance of case study research methods, I do feel that practitioners need to be provided with shortcuts to document the novelties without the rigor of associated with case study research. This can take the form of writing up a short summary of the new method or system. These summaries will add to our understanding of innovations in knowledge management and can also be used to create best practice cases. The summaries when shared can be used as a starting ground for viable industry-academic alliances for knowledge building. The academicians can gain from exposure to novelties and the practitioners can gain for the rigorous documentation that goes along with the case study method. The scientific community can gain from reading highly *relevant* and *rigorous* scientific works.

The future of competition is going to be knowledge based. Organizational knowledge is the key source of competitive advantages in the marketplace; we must seek better ways to manage the knowledge. While individuals bring knowledge to the organization, it is the work of the organization to integrate the disparate pockets of knowledge and use it towards goal attainments. The organization must capture knowledge and imbed it into routines, processes, and practices.

It is my hope that the above suggestions, my two cents, will help contribute to the lively discussions and debates in the field of knowledge management. As an associate editor for JIST, I welcome your papers on knowledge management and on any other topic of IS research and practitioner interest.

About the Editor

Kevin C. Desouza Kevin Desouza has authored *Managing Knowledge with Artificial Intelligence* (Quorum Books), and over 60 refereed articles either published or forthcoming in journals such as the *Communications of the ACM, Information & Management, Industrial Management, Technology Forecasting and Social Change, Journal of the American Society for Information Science and Technology, Journal of Business Strategy, Journal of Engineering and Technology Management, International Journal of Information Management, Government Information Quarterly, Journal of Contingencies and Crisis Management, Business Horizons, Competitive Intelligence Magazine, Across the Board, Emergence, Journal of Knowledge Management, Knowledge and Process Management, European Management Journal,* and the likes. His recent book *Managing Information in a Complex Organization: Semiotics and Signals, Complexity and Chaos* (M.E. Sharpe Inc.), co-authored with T. Hensgen will be published in October. He is currently serving as an associate editor of the *Journal of Information Science and Technology* and is completing his doctoral work at the University of Illinois at Chicago.