Book review

The Review of "Successes and Failures of Knowledge Management" edited by Jay Liebowitz, Elsevier, Cambridge, MA 2016, pp. 221

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The "Successes and Failures of Knowledge Management" recently edited by Jay Leibowitz gives readers a collection of contributions from prominent Knowledge Management (KM) scholars, including top KM ranked journal editors, suggesting what we can expect from future developments of KM. There is often great power in looking back when anticipating how to move forward. That is why Jay Leibowitz gathered interesting examples of KM adventures and brings them to us in this book. Let's look at the future: what can we see? Jay Leibowitz envisions some paths for KM to continue to support organizational success and he provides us with a roadmap:

- 1. Integration Lane: KM should continue to be an integrative mechanism across the different functional areas in the organization.
- 2. Human Capital Square: KM should noticeably contribute and be recognized as a part of human capital strategic options of the organization.
- 3. Technology Avenue: KM should benefit from increasing technological solutions bonding structured and unstructured data emerging from digital communities.
- 4. Sustainability Metropolis: KM should remain to be the support of organizational sustainability by providing tools to fight the effectiveness and the competitiveness challenges.

I believe Jay Leibowitz continuously travels these roads guiding his students and helping professionals implementing his valuable KM recommendations. A close overview of the contents of Successes and Failures of Knowledge Management gives us a large number of examples of KM over the last decade. Apart from the diversity of firms and cases reported, the book inspires us for the present and upcoming challenges in KM. Lessons learned, achievements and disappointments are part of KM development, which is why this is a book worth reading to prepare the future. Let us take a look at each and every chapter:

Holsapple, Hsiao and Oh describe on Chapter 1 a collection of nine generic activities, each one serving as a parameter for a conditioned function that indicates the

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degree of organization effectiveness: Knowledge acquisition; Knowledge assimilation; Knowledge selection; Knowledge generation; Knowledge emission; Knowledge measurement; Knowledge control; Knowledge coordination; Knowledge leadership. The parameters provide a mental framework for thinking about the relationrelationship between success and the conduct of KM. The nine parameters form a checklist for auditing how KM is being done in an organization, for systematically formulating new KM initiatives, for studying how to improve an organization's practice of KM, and for avoiding blind spots in a search for avenues to KM success.

On Chapter 2 Ribière and Calabrese identify some of the main reasons why organizations are still struggling to implement KM. Seven main categories of reasons emerge from their study: culture, measurement/benefits, strategy, organizational structure, governance and leadership, IT-related issues, and lack of KM understanding/standards. Among their findings, the concept of time was revealed to be a key factor. Organizations often do not have or take the time to wait for a new KM practice to show its value. Benefits are expected to appear quickly because the focus is often on the quarterly basis and rarely on the long term. Organizations seldom take the time to reflect on their KM activities and lessons learned, and these attributes provide KM programs enough time to show their strong value.

Hoffman, Boyle and Rogers on Chapter 3 report how NASA took advantage of opportunities for greater coordination and collaboration across the organization through KM. For NASA, the federated approach allowed an effective balance of autonomy and responsibility. With this approach, the knowledge community generated common definitions and purposes and developed reinforcing products and services that addressed both local and agency knowledge considerations. NASA included new knowledge policy, an agency knowledge map, chairmanships of the federal knowledge community, and the development of the NASA REAL knowledge model. The model allowed the agency to formulate KM activities that address the strategic knowledge imperatives, achieve buy-in across diverse communities, and accelerate learning to reduce complexity and ensure risks based on knowledge were identified and mitigated or eliminated.

Edwards addresses the KM process aspects on Chapter 4. People, processes, and technology interacting at the business and knowledge levels are the core elements to a KM initiative. New technologies offer new possibilities for both business processes and the supporting knowledge processes, but as the inexorable advance of smart phones and social media has shown, these present as many challenges as opportunities. The blurring of boundaries between the formal and informal that personal devices enable makes it especially important to think very carefully about all the business processes in an organization, not just their formal aspects. As for knowledge processes, big data and analytics offer the prospect of better knowledge process support, especially for identifying knowledge and creating knowledge. On Chapter 5 Wensley provides us with some personal reflections on significant challenges to the development and implementation of KM initiatives. A failure to adequately grasp the nature of knowledge reverberates through subsequent challenges in developing and implementing KM processes. Rarely knowledge processes are designed from the ground up; some are redesigned and others left in place. This is likely a recipe for failure. There is a need to design and implement knowledge processes to ensure that they are integrated with existing organizational processes. Many knowledge-based disciplines have developed knowledge representation tools. Wensley invites us to explore fuzzy set approaches, considering the representation of causal relations has developed with the application of qualitative comparative analysis. We can then address what we know and do not know, and recapture knowledge.

Tsui dedicates Chapter 6 to report the Knowledge Management and Innovation Research Centre (KMIRC) of The Hong Kong Polytechnic University activity regarding KM and intellectual capital (IC) consultancy and training services on 200 company-based senior undergraduate, research, and consultancy IC-related projects. Tsui shares with us lessons learned from the cases and the gaps he identified between KM in the books and in practice. Speaking overall, he found that compared to KM, it is more difficult to convince managers to adopt IC projects, possibly because IC is very new (since many organizations are only just starting to use the balanced scorecard for reporting and tracking performance) and the benefits of IC are not immediately realizable. There are, however, a few major organizations leveraging IC for value creation, reporting, and business planning.

Levallet and Chan present on Chapter 7 the paradoxical role of IT when considering knowledge loss and knowledge retention. Previous literature suggested that knowledge retention was facilitated and knowledge loss was mitigated when knowledge acquisition and knowledge retrieval were done using information systems, like KM systems (KMS). However, recently applied settheoretic configurational approaches such as qualitative comparative analysis identify groups of factors that interact to produce an outcome of interest. Configurational methods are especially useful to understand how specific aspects of knowledge retention might interact to increase both reuse and loss. Levallet and Chan found that, knowledge loss cannot always be equated with the opposite of knowledge retention. Rather, in some cases, paradoxically a KMS can facilitate both knowledge retention and loss.

Erickson and Rothberg offer on Chapter 8 a view on knowledge-related assets designed for optimal application and impact. A full range of knowledge--related assets exists, not only tacit and explicit knowledge but also data, information, and intuition/insight. Rather than focusing solely on the capture, cataloguing, and exchange of knowledge-related assets, they reveal opportunities to subject such inputs to more careful analysis, looking for deeper insights. The findings of such analysis can be used to improve operational processes and go beyond. However, using highly personal (and rare) tacit knowledge, or uncanny intuition, to find new strategies, tactics, and approaches (that will be hard for competitors to duplicate) is much harder than to spread easily captured and shared explicit knowledge applications.

On Chapter 9 Larson brings us two opposite experiences of KM: a failure and a success. The former happened because managers and partners didn't like to share their research with one another. Additionally, there were some unanticipated language challenges; translating documents into English and developing the English metadata for ease of indexing and searching was not able to be accomplished. Finally, the cultural challenges proved the most difficult than expected, since conformity and not standing out in the crowd are valued characteristics in the organizational culture, which is not suitable for KM. The latter example reports the implementing of a new customer service and KMS. The firm is retaining customers in a volatile market, competitor's customers are starting to switch to the firm's services and products, and employees feel more able to research and resolve issues more quickly, thus strengthening the customers' loyalty.

Russell, La Londe and Walters suggest on Chapter 10 a close look to Social Knowledge by recognizing new organizational currencies in the social knowledge economy. The emergence of social networking from converging technologies, capabilities, human behaviors, and expectations are changing the landscape and how we interact with our customers, our partners, and especially our business colleagues and peers. Capturing and transforming institutional knowledge occurs by changing the way people think about social knowledge and collaboration. It is all about the dynamic and collective nature of social collaboration coupled with KM. It creates value of producing, retaining, iterating, and reusing our intellectual capital in innovative ways. Russell, La Londe and Walters believe we must push the limits and nature of collaboration to promote knowledge sharing and the use Social KM.

Ha-Vikström and Takala explore on Chapter 11 the contribution of transformational leadership to KM and propose the sand cone model to analyze the transformational leadership profile. This new approach and recommended transformational leadership indexes are expected to increase the use of the model improving the self-awareness from each leader. Self-awareness is the first step of successful KM contributing to the company because transformational leadership capability and KM have reciprocal effects. Such results may take the company to generate new insights and develop training programs to support leaders in improving their transformational leadership behaviors as well as to develop their own profession. In addition, the simple evaluation concept can also be utilized further for recruitment, selection, and promotion purposes. Filipczyk, Gołuchowski, Paliszkiewicz and Janas share on Chapter 12 the success and failure in the improvement of knowledge delivery to customers using chatbots (conversational systems, virtual assistants, virtual agents, dialog systems, chatterbots or artificial conversation entities). Chatbots enable enterprises to manage their collection of knowledge and communicate interactively with customers and in this manner to share knowledge. Chatbot's knowledge base is undoubtedly a valuable approach to collecting knowledge for customers and its delivery to them in an attractive way, thus facilitating KM. Chatbots face problems, such as difficulty of relevant searches, the complexity of available information, and bandwidth limitations. But the main arguments in favor of developing the tools are the preference for real-time events, since people like real-time information flow, they really prefer dialogs instead of monologs (emails).

Earley uses Chapter 13 to remind us not to neglect the foundations, by telling us that organizations can build their knowledge architecture and processes for long-term sustainability. Not having the correct architecture slows the ability to get to the correct information. Information governance should balance the knowledge and expertise that resides in the business units throughout the enterprise with a centralized authority for maintaining standards and control. Managers continually synthesize information to answer questions, solve problems, and creatively differentiate their products and services in the marketplace. Knowledge architecture supported by metrics-driven governance processes ensure longterm viability and effectiveness of KM programs and form the basis for an adaptable, agile enterprise information ecosystem, required in today's constantly connected, fast-changing, hyper-competitive digital environment.

On Chapter 14 Sugumaran introduces semantic technologies for enhancing KMS. Organizations invest heavily in creating centralized knowledge repositories to improve business processes, promote knowledge sharing, and retain expertise even after employees leave the organization. A semantic web provides a common framework to: (1) represent data on the Web or a database in a manner understandable by machines; and (2) allow data to be shared and reused across application, enterprise, and enterprise boundaries. A computer that understands the semantics of a document doesn't just interpret the series of characters that make up that document, it understands the document's meaning. Semantic technologies therefore help separate meanings from data, document content, or application code, using technologies based on open standards.

After reading Successes and Failures of Knowledge Management one is inspired to prepare the future based on knowledge in a most solid and sustainable way. We become aware of the importance of using parameters to indicate the degree of organizational effectiveness and pay attention to coordination and collaboration across organizations through KM. The contributions of fundamental infrastructures like organizational culture, organizational structure, governance and leadership are most significate for the advance and useful application of KM in order to fully support organizational improvement. On the other hand, operational issues like measurement and standards, knowledge strategy and architecture, as well as IT-related topics and applications are relevant for the development and implementation of KM initiatives to be successful. Alongside putting KM into practice, organizations are starting to recognize intellectual capital as a basis for value creation, reporting, and business planning.

The use of knowledge-related assets and social knowledge management are key aspects of organizational sustainability since people demand real-time information flow and communication. Given the continuous technological advances, in the future managers will use meaning instead of data to support their decision making. For now, we should explore qualitative fuzzy set approaches, considering the representation of causal configurations leading to the outcomes of interest related to KM. Such an approach provides us with alternative pathways to KM (and associated dimensions) which is an advantage compared to quantitative traditional statistical methods that only provide us with a single estimated solution to the dependent variable at stake.

Learn from lessons in this great book and make the most out of KM in your organizations!

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