

# Knowledge Management & Records Management

## *Establishing Relationships for Common Development*

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Abstract: This paper argues that there are logical relationships between the fields of Knowledge Management and Records Management, and the recognition of such relationships will benefit the development of both fields. It bases these arguments on the nature of records and Records Management as well as the findings of the InterPARES project.

## 1 INTRODUCTION

Knowledge Management (KM) is a field based on multidisciplinary input and contribution. However, the Records Management (RM) field appears never being discussed or researched in connection with KM. This observation emerged from the findings of the InterPARES project, which, for thirteen years, had collected extensive data on RM worldwide ([www.interpares.org](http://www.interpares.org)). Although KM as a program exists in many organizations, the collected data revealed no existing RM-KM relationship. This was confirmed by a literature search on both KM and RM, covering all possible types of sources (i.e., monograph, journal article, Internet resource) that the authors had accessed.

This paper argues that there are logical relationships between the fields of KM and RM, and the recognition of such relationships will benefit the development of both fields.

## 2 KNOWLEDGE & RECORD

The term knowledge is not consensually defined in the KM field (Dalkir, 2009), yet the KM literature demonstrates continuous efforts of describing and analyzing the unique characteristics of knowledge. For the purpose of this paper, the definition of knowledge was chosen to be “[t]he fact or condition of having acquired a practical understanding or command of, or competence or skill in, a particular subject, language, etc., esp. through instruction,

study, or practice” (Oxford English Dictionary, 2012). The terms tacit and explicit are chosen to group the characteristics of knowledge as discussed in KM literature which also reflect the chosen definition. The term tacit subsumes the characteristics of being invisible, experiential, subjective, in association with a knower, hard or impossible to be articulated or codified, etc., and the term explicit counts for the characteristics of being able to be documented/codified and mobilized in the form of tangible artefacts. In this paper, Wigg’s *knowledge asset* is chosen to represent explicit knowledge (1993).

A record is defined as “a document made or received in the course of a practical activity as an instrument or a by-product of such activity, and set aside for action or reference” (InterPARES). This implies that records are first documents, i.e., information affixed to a medium, and second that they are a special kind of document, the residue of action, purposely kept as evidence on which to base subsequent activities.

## 3 KM & RM

Among the numerous KM definitions, the one by Dr. Dalkir was chosen for its emphases on the purposefulness of KM and on the concept of organization as a whole. According to Dr. Dalkir (2005, p.3), KM is “a deliberate and systematic coordination of an organization’s people, technology, processes, and organizational structure in order to add value through reuse and innovation”.

By this definition, KM is driven or directed by determined intention and has a nature that is multifaceted. As its multifaceted nature comes from its multidisciplinary origin, KM work exhibits different foci, including those on the design of information technologies, management, organizational learning, to name a few. In this paper, the phrase *knowledge process* by Wiig (1993) is chosen to represent the variety of KM endeavors required to achieve KM goals.

RM refers to the systematic design, implementation, and administrative control of a framework that ensures efficiency and economy in the creation, use, handling, maintenance and disposition (i.e., destruction or transfer to long-term preservation repository) of organizational records (InterPARES). In the InterPARES Chain of Preservation (COP) model, RM encompasses two conceptually distinct systems dedicated to records-making and records-keeping respectively.

## 4 KM-RM RELATIONSHIPS

To illustrate the KM-RM relationship, the Nonaka and Takeuchi (1995) knowledge Socialization, Externalization, Combination, Internalization (SECI) model is chosen for being the first KM model and for the influence it had for disseminating the concepts of tacit and explicit knowledge (Dalkir, 2011). Essentially, the SECI model contains four processes that can be repeated whenever the need arises: Process 1, from tacit to tacit (i.e., socialization, such as peer-to-peer coaching/networking), Process 2, from tacit to explicit (i.e., externalization, such as capturing and sharing), Process 3, from explicit to explicit (i.e., combination, such as organizing and classifying), and Process 4, from explicit to tacit (i.e., internalization, such as understanding and learning).

### 4.1 Transformative

Among the four processes, Process 2 and Process 3 produce tangible knowledge assets, which are *potential* records according to RM. They are only recorded information when generated but will become records when they participate in future business processes as means for carrying them out, because that is the assumption under which they were generated (i.e., externalization and combination). These knowledge assets may be first managed in a system designed specifically for KM purposes, but their relationship with RM will be

established when they participate in and become an integral part of a business activity of the organization, regardless of where or how. The function of RM is to document the entire business process in the form of records, and this certainly includes capturing the participation of the knowledge asset. In the context of performing a business activity, a deliberately captured knowledge asset is by such action *transformed* into a record, as the capture occurs by classifying it in an organization-wide, business activity-directed records classification system, and managing it in a recordkeeping system. In the process, the knowledge asset will acquire an archival bond with the records of the business process and of the organization as a whole. This does not necessarily mean that the knowledge asset has to be physically moved into the recordkeeping system, as the archival bond arises from the attribution of metadata to the asset that put it into relation with the organization's records. KM and RM thus intersect with each other at the time when an organization applies externalized knowledge and fulfills its duty of keeping operational evidence.

### 4.2 Inclusive

To RM, Processes 2 and 3 are business activities of the KM function, same as the business activities of any other organizational functions, such as financial management, human resource management, R&D, or marketing. The RM field characterizes the operation of an organization as fulfilling the various functions derived from its mandate, each of which consists of activities, sub-activities, and transactions (LAC, 2006). Records are generated at the point where a business objective necessitates documentation in order to produce consequences or evidence of its fulfillment. Regardless of how the structural relationships between the concepts of process, activity, and transaction are determined, to achieve a business objective of KM, e.g., to capture the expertise of an expert, to build a community of practice, or to construct knowledge taxonomies, a series of documents is typically generated besides the intended knowledge assets. When implementing a KM system, defined as a particular class of information systems supporting organisations specifically in their attempt to create, codify, collect, store, integrate, share, and apply knowledge (Alavi and Leidner, 2001), documents such as meeting minutes, messages, research reports, lists of system functional requirements, system metadata schemas, contracts with vendor and consultants, etc., are

needed for the implementation to take place. All these documents are records because they are the by-products or instruments of the implementation process. They aggregate naturally as a result of the implementation process, and the archival bond arising among them will logically document the implementation process in context and as a whole. These records are *part* of the organization's fonds (i.e., its entire records holding) that constitutes its written/documentary memory. The more successful (or difficult) a KM process is, the more valuable the records it generates will be. Because of this interplay, every KM undertaking is *part* of the RM organizational business activity schema (NSW State Records, 2001) and each KM system is *part* of the technological context in which digital records are created. In the eyes of RM, a KM system is not different from any other business information system such as a digital assets management system used by a marketing unit or a web content management system used by a communication unit.

### 4.3 Reciprocal

KM is *instructive* to RM in at least two ways: first, for the assistance given by knowledge assets to the development of RM rules, and second, for the application of KM techniques to making tacit RM expertise explicit. To effectively manage digital records through time, the first and most important step is to exercise RM control over the creation of records. To do so, a clear understanding of the business activities (i.e., records-creating activities in RM) in terms of their objectives, processes, and the technologies employed is indispensable. The acquisition of such understanding traditionally relies on written business policies, procedures, performance reports, etc., which are unable to communicate the tacit or implicit dimension of the working place. RM policies, procedures, and tools constructed on an incomplete understanding are inevitably unable to be effective. The knowledge assets codified for a certain unit, workplace, or task would undoubtedly help the development of RM mechanisms.

RM is also one of the functions of every organization and is associated with dedicated professionals and expertise. As with other business activities, the RM work relies partially on experience and the RM expertise faces grave loss when experts leave the organization. To understand KM would help RM to capture experiences, codify best practices and lessons learned, and retain expertise.

On the other hand, RM can be *supportive* of KM's theoretical development and is *essential* for its practical operation. According Spender (2003), KM and KM system research need a core theory that is able to distinguish KM from other fields and at the same time to allow non-KM people to recognize its essence. Without such a core theory, KM may remain unclear in stating its objectives, key activities, and associated competencies. However, according to Stenmark (2011), there is still a lack of clear foundations for KM and not much work is currently to be found that answers the call to develop core theories. The RM field, which is at the core of a broader discipline called Archival Science, has researched the nature of records and of the activities producing them for millennia (Duranti, 1999) and, in responding to the challenges of digital records, has established a coherent theoretical framework. As one major product that the InterPARES project has produced, its terminology database contains a network of concepts, among which are those of data and information, the two concepts that also KM needs to address (Becerra-Fernandez and Leidner 2008).

RM is *essential* for KM's practical implementation because it warrants the quality and usability of records generated by the KM function. KM records, like any other organizational records, are subject to RM rules and practices, as, for example, they need to be appraised for establishing retention schedules and disposed of for operational efficiency and legal compliance. Effective RM ensures the authenticity of KM records in digital formats and provides contextual information for knowledge assets to be meaningfully interpreted and applied. Although both fields have the goal of keeping and making accessible informational content appraised as valuable for organizational continuation and improvement, RM has a much longer history of research and practice in these areas. Its effort of articulating functional requirements for electronic records management system (ERMS) started in the early 1990s (e.g., UBC-MAS Project, 1994-1997) and yielded widely accepted standards governing the design of the ERMS with functionalities of classification, retrieval, access control, information sharing, and disposition. This rich body of accumulated knowledge should be able to aid KM in addressing similar system requirements. As pointed out by Wiig (as cited in Dalkir, 2009), the KM system development touches on almost all facets of an organization, and also for this reason, the RM facet is one that KM should not ignore.

## 5 CONCLUSIONS

*KM and RM need to be distinguished from each other.* These two fields are disciplinarily and professionally independent, with their ultimate goals focusing on different outcomes of an organization's operation: KM focuses on innovation and RM on trustworthiness. Being distinct from each other is necessary first to justify their co-existence in the same organization and second to begin the process of building a foundation for collaboration. According to Nonaka and Peltokorpi, KM scholars "have largely unified perspectives of data and information in comparison to knowledge" (2006, p.76). Yet, knowledge needs to be distinguished also from records.

*KM and RM need to understand each other.* To gain mutual-understanding is a step further than maintaining distinctiveness because it requires familiarity and appreciation of the respective core concepts, key activities, and representative methodologies. By its nature, RM needs to understand all functions of an organization to satisfactorily fulfil its purpose, and the more comprehensively it does so, the more effective the systems it will develop will be. As well, with a sufficient level of understanding of RM, KM should be able to analyze the type, portion, and format of organizational knowledge embedded in records, and based on the analyses, to develop mechanisms to distill knowledge from "raw information" in records to manage knowledge at an enterprise scale.

*To distinguish and to understand each other should lead to collaborating with each other.* KM and RM already interact with each other in the context of organizations' operations and advancement. As they both need to work with each and every part of the organization, their working paths inevitably cross each other. They both are rapidly evolving in the digital environment, facing many similar opportunities and challenges, such as business process alignment (Stenmark, 2006); (NARA, 2005), change management (IAEA, 2006); (Adam, 2008), and organizational culture (Ribiere and Sitar, 2010); (InterPARES 3, 2007-2012). To fail to recognize or even ignore these facts will only result in harm for both fields and for the organizations that they seek to help as they would follow divergent paths and build isolated islands of strengths. Without a clearly, logically articulated collaboration framework, there might be repeated efforts and wasted time and resources, thus creating difficulties for both fields in obtaining support from senior management or managing changes

successfully. Thus, we would like to issue a call for the two fields to start collaboration in both research and practice by becoming familiar with each other.

*This call for collaboration is intended for both fields.* Only by working together can the ultimate goals of KM and RM be achieved, making their sponsoring organizations both *Innovative* and *Trustworthy*.

## REFERENCES

- Alavi, A., Leidner, D., (2001). Review: Knowledge Management and Knowledge Management Systems; Conceptual foundations and research issues. *MIS Q.*, 25 (1), 107-136.
- Becerra-Fernandez, I. and Leidner, D., (2008). *Knowledge Management: An Evolutionary View*. M. E. Sharpe. Inc., N.Y.
- Dalkir, K., (2009). Knowledge Management. In *Encyclopedia of Library and Information Sciences* (3d ed), Taylor and Francis: New York, 3129-3138.
- Dalkir, K., (2005). *Knowledge Management Theory and Practice*. Butterworth-Heinemann: Boston, MA.
- Dalkir, K., (2011). Knowledge Management Models. In *Encyclopedia of Library and Information Sciences* (3<sup>rd</sup> ed), Taylor and Francis: New York, 3139-3146.
- Duranti, L., (1999). Archival Science. In *Encyclopedia of Library and Information Science*, Allen Kent, A. (ed.), 59, 1-19.
- Duranti, L., Eastwood, T. and MacNeil, H., *The Preservation of the Integrity of Electronic Records*. Retrieved April 2, 2012, from [www.interpares.org/UBCProject/index.htm](http://www.interpares.org/UBCProject/index.htm).
- LAC (Library and Archives Canada). *Business Activity Structure Classification System (BASCS) Guidance*.
- Nonaka, I. and Takeuchi, H., (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press: New York.
- Spender, J. C., (2003). Exploring Uncertainty and Emotion in the Knowledge-based Theory of the Firm. *Inform. Technol. People*, 16(3), 266-288.
- State Records Authority of New South Wales. *The DIRKS Methodology and Manual*.
- Stenmark, D.: Knowledge Management Systems. In *Encyclopedia of Library and Information Sciences* (3<sup>rd</sup> ed). Taylor and Francis: New York, 3147-3154.
- Wiig, K., (1993). *Knowledge Management Foundations*. Schema Press: Arlington, TX.