

# Bringing together Functional Classification and Business Process Analysis: Growing Trends in Records Management

**Abstract:** Drawing on our experience in developing business classifications, this communication identifies and discusses the challenges related to function-based approaches while proposing a methodology that reconciles the organizational perspective (i.e. the function model) with the end-user perspective (i.e. the day-to-day tasks within a process).

**Résumé :** Étayée par notre expérience dans le développement de systèmes de classification fonctionnelle, cette communication expose les défis inhérents à cette approche et propose une méthodologie qui réconcilie le point de vue organisationnel (c'est-à-dire le modèle fonctionnel) avec le point de vue de l'utilisateur final (c'est-à-dire les tâches quotidiennes qui appartiennent à un processus d'affaires).

## 1. Problem Statement

Although classifying records based on their subject remains a common practice, current best practices put forward by recordkeeping experts suggest that there are benefits to be gained by basing classification on a rigorous analysis of business functions and activities- i.e. their business context- rather than on their content (Library and Archives Canada, 2006). Recent approaches such as DIRKS (National Archives of Australia, 2007), BASC (Library and Archives Canada, 2006) and the Quebec government's activities & processes thesaurus (Gouvernement du Québec, 2005) reflect this growing trend in records management. The goal of such business classification is to provide a structure that accurately represents the core functions of an organization in a form that is stable over time. This in turn provides a framework for linking information resources produced in an organization with the context in which they were created.

The main benefits of this approach are a reduction in the change management of the classification, a consistent way to comply with RM-based legislation and also the provision of a reporting tool that can be used for auditing and accountability purposes. However, even if the value of functional classification is undeniable from these points of view, record managers as well as end-users encounter several difficulties when creating and dealing with such classification systems in practice. This communication will consider possible causes for these difficulties and propose that the benefits of functional classification can be maximized and the challenges minimized through an improved theoretical understanding of the conceptual underpinnings and relationships between function, activity and process. We will also discuss how this theoretical basis may be translated into a concrete solution for end-user focused records management through the use of a faceted classification system.

## **2. Research objectives and link with the conference theme (Synergy through diversity)**

Drawing on our experience in developing business classifications, this communication identifies and discusses the challenges related to function-based approaches while proposing a methodology that reconciles the organizational perspective (i.e. the function model) with the end-user perspective (i.e. the day-to-day tasks within a process). This communication is also an opportunity to enrich the domain of information science with concepts and approaches borrowed from the field of business process modeling, which is experiencing similar challenges (Indulska et al., 2009).

In this sense, this communication brings together two complementary areas of expertise- functional classification and business process modelling- which are rarely used together. Enrichment of different approaches borrowed both from Records Management and Business Process Modeling offers great promise for a better definition of core concepts, which in turn will support the identification of functions and processes at the right level of abstraction.

## **3. Practical and theoretical limitations of functional classification**

In the first part of the communication, practical and theoretical limitations of functional classification will be discussed. From a practical standpoint, our findings support Foscarini's claims (2009) that classifications that accurately reflect organizations from a functional perspective nonetheless fail to reflect the way that end-users of such a classification system carry out their work on a day to day basis. In reality, it appears that information workers have difficulty relating their work with the functional model leading to poor user adoption and low quality. As well, since the majority of documents now exist in digital form, the value of a classification system for end-users should take into account their needs for sharing information across different organizational functions. However, functional systems tend to create information silos in an organization by making it more difficult to produce horizontal views of information.

We believe these practical limitations are in part due to a lack of theory available for people creating and working with functional classifications. It is true that, generally, functional classification takes pains to distinguish between functions and processes, emphasizing that functions are not sequential and that processes are sequential. As well, functions are also characterized as being high level and constant over time, while processes are low level and may change over time. However, as noted by Yeo (2007), records managers frequently have difficulty both in determining what constitutes a record in a particular context and also how records are connected to the activities that produce them. Consistent with this observation, in our experience the above distinction between functions and processes is largely artificial and difficult to apply in practice. In information science, those who develop these systems lack a consistent theoretical background and methodology, resulting in the design of functional classification system that are relatively arbitrary in that different analysts can come up with very different functional representations. This suggests that more effort must be made to clarify these concepts and relationships.

#### **4. Methodology for functional analysis**

The second part of the communication will address our methodology, which aims to provide a better theoretical approach for basic functional classification concepts. This in turn allows the resulting scheme to be more practical for those who develop functional schemes as well as for those who will use them. Based on our theory of “action types”, we provide a distinction between the concepts of *process* and *function*. To clarify the role of each type of action, we have developed definitions of function and process which clearly show the connection between these two types of action descriptions and explain how each type of action may be successfully used at any level of granularity. At the same time, we suggest that it is useful to use stand alone actions, or functional descriptions at higher levels of granularity and transition into sequences of actions, or process descriptions, when moving to lower levels of granularity.

Our methodology has been directly applied as part of an integrated semantic information services (ISIS) system that enables organizations to classify electronic documents using a faceted classification structure. In this system, multiple facets are used to represent the same organizational activities from multiple perspectives, including task, process and functional perspectives. The facet-based description of everyday user tasks anchors the functional model in reality by linking it with business processes. In this way, it provides horizontal views on organizational information resources by linking resources with the process model (as well as other metadata), while also maintaining a functional perspective in order to carry out recordkeeping tasks. This solution simplifies users’ adoption by allowing them to select from a list of day-to-day tasks and then using the established relationships between processes and functions to automatically determine the appropriate location and classification in the functional model.

#### **5. Contribution**

As the recent publication of the *Directive on Recordkeeping* sets new pressure on Canadian public administrations to effectively “manage and protect the integrity of resources of business value” (Treasury Board of Canada Secretariat, 2009), we believe there is a need to further address issues related to function-based classification. Function based classification may provide departments with a powerful tool for compliance with recordkeeping requirements, but will fail to be used if such classifications cannot be consistently created, justified and explained by records managers and if people cannot readily apply the classification scheme to their documents on a day-to-day basis. With this communication, we propose, first, a better distinction between basic concepts such as *process*, *function* & *action* and second, through this distinction, to reconcile the organizational perspective on records management with the end-user perspective on day-to-day information practices, allowing for a long term, consistent and usable classification system.

#### **6. References**

Foscarini, F. 2009. “Function-based Records Classification Systems: An Exploratory Study of Records Management Practices in Central Banks.” PhD diss., University of British Columbia.

Gouvernement du Québec, “Thésaurus de l’activité gouvernementale”, 2005-2007.  
<http://www.thesaurus.gouv.qc.ca/tag/accueil.do> (accessed on January 10, 2010).

Indulska, Marta, Jan Recker, Michael Rosemann, Peter Green. 2009. "Business Process Modeling: Current Issues and Future Challenges". *Advanced Information Systems Engineering - CAiSE 2009. Lecture Notes in Computer Science 5565*: 501-514, <http://www.elogroup.com.br/download/Process%20Modeling.pdf>.

Library and Archives Canada, "Business Activity Structure Classification System (BASCS) Guidance", 2006-2010. <http://www.collectionscanada.gc.ca/government/products-services/007002-2089-e.html> (accessed on January 10, 2010).

National Archives of Australia, "Designing and Implementing Recordkeeping Systems (DIRKS) Manual", 2007-2010. <http://www.naa.gov.au/records-management/publications/DIRKS-manual.aspx> (accessed on January 10, 2010).

Treasury Board of Canada Secretariat, "Directive on Recordkeeping", 2009. <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=16552> (accessed on January 10, 2010).

Yeo, Geoffrey. 2007. "Concepts of record (1): evidence, information and persistent representations", *American archivist*, 70, 2: 315-343.