Towards Negociated Governance of Digital Records: Individual and Collective Information Practices in Organizations

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Summary

The diversity of information practices significantly impacts on the control, access and strategic use of professional information in organizations. Digital information governance represents a major challenge. It must take into account both individual and collective information practices. In this paper, information practices are discussed in relation with documentary trajectories and governance of records generated through business processes. Findings on the information practices of middle managers in a Canadian municipality are presented. It seems that the daily governance of information is a "negotiated governance", that there is direct confrontation between employees and the bodies in charge of recordkeeping, or that confrontation and negotiation are avoided.

Introduction

Records produced in the performance of business processes are a critical management resource as they bear witness to an organization's decisions, actions and gained expertise (Bergeron et al., 2010). Not being able to retrieve or use them at the right time may have a serious financial impact. Digital information governance represents a major challenge: organizations need to focus on information management rather than technology, and many do not have a formal information governance program (Kooper et al., 2011; Gartner, 2006).

In organizations, information management is shared by different administrative units (records management, knowledge management, information technology, etc.) that have their own standards, procedures, tools and systems. In addition, employees actively participate in creating documentary solutions to manage their records. Thus, several information practices coexist: formal and informal, collective and individual (Maurel & Bouchard, 2010). Records

therefore go through different trajectories according to the information practices preferred by employees. The diversity of information practices significantly impacts on the location, control, access and strategic use of professional information. Tension points appear when the actors (employees or units) in charge of recordkeeping within an organization are called to compare their practices and negotiate their upkeep.

To our knowledge, few empirical studies in Information and Archival Science have examined the governance that establishes itself on a day-to-day basis in the management of digital records generated through business processes. First, this paper delimits the theoretical framework of our study. It then presents the results of our research project on the information practices of middle managers in a Canadian municipality and the articulation of individual and collective information practices. These results are discussed from the perspective of negotiated governance of information in organizations.

Literature Review

The theoretical framework of our study is based on fundamentals specific to Information and Archival Science, as well as Sociology, namely the interactionist theory of action.

Information Practices and Information Governance

Organizational recordkeeping practices refer to interrelated functions aimed at managing records efficiently throughout their lifecycle. These functions usually include creating or capturing, organizing, indexing, retrieving, and assessing the values of records, maintaining, disposing of and preserving records, and controlling their access (Shepherd & Yeo, 2003). Recordkeeping practices must meet the requirements of an organization with regard to managing authentic informational traces (McKemmish et al., 2005). Employees, for their part, organize their records sometimes without complying with institutional procedures, which somehow invalidates the efforts of an organization in terms of information governance.

Employees' information practices are related to the working methods they acquired from prior experiences. Several information systems are also used by employees in their activities and are used to store and organize their digital records. Personal information systems (personal accounting database on Excel or Access, for example) are often beyond the control of records managers. Organizational information systems (enterprise resource planning systems (ERP), for example) include features that impose their own logic to the organizing (nomenclature or

classification) and storage (format and lifecycle) of organizational information. Finally, working groups and administrative units often develop specific information practices (Mas & Hudon, 2007; Maurel & Bergeron, 2006). Employees' working methods and information practices rely on cognitive, affective and contextual dimensions that influence the way they address problems and their solution (Choo, 2006). These dimensions must be considered to understand the relations between individuals and their working methods, their information practices and their perception of the value of corporate information. Researches conducted on personal information management examine the information management habits of individuals (Jones & Teevan, 2007). Examining the different levels of information practices, however, allows observing the documentary trajectories that characterize records, and the tension points that appear among the various actors.

Documentary Trajectory, Negociated Order, and Information Governance
The concept of trajectory, in accordance with the interactionist theory of action, refers to the evolution of a phenomenon in time and space, and the interactions that contribute to this evolution (Timmermans, 1998; Strauss, 1993). The trajectories of organizational records are shaped by the structures and contingencies of the organizational environment, as well as by the interactions of individuals. Applied to recordkeeping in organizations, the concept of documentary trajectory allows analyzing an aspect of records managers' practice that has so far been little studied, namely that employees are actively involved in formulating documentary solutions for the information they create and use. Close examination of the trajectories of a single document draws attention on the various levels of information practices of employees. It also helps to delineate the negotiated order that is established among employees for the control of their records.

The negotiated order is the result of collective actions and interactions of individuals as part of a phenomenon. Types of orders include, for instance, work order and information order. For Strauss (1993), all forms of social (or organizational) order are negotiated. The negotiated order that stood at some point in space and time is subject to being renegotiated on a periodic basis, if not daily. This would characterize organizations where the interrelations among organizational actors are changing, reflecting the evolution of an organization's structure.

An information governance program is an accountability framework specifying standards for the creation, assessment, use, preservation, access and security of information to enable

organizations to achieve their objectives (McManus, 2004). This accountability framework must be part of a legal and regulatory framework and must also take into account existing standards (eg, ISO standards in information and documentation). In terms of recordkeeping, organizations must ensure that they retain informational traces that bear witness to actions and decisions. Governance must preserve their integrity and authenticity, guaranteeing the accuracy, reliability and comprehensiveness of the information that records contain (McKemmish et al., 2005).

The governance system of an organization can be defined as a "set of activities aimed at establishing a normative foundation to facilitate and stimulate sense making interactions" (Kooper et al., 2011:197) among organizational actors. Conversely, the latter can contribute to shaping and developping the governance system. Consistently with symbolic interactionism, employees act on their immediate environment and the common reference framework that circumscribes their actions. Governance is thus a useful concept for examining the dynamics at work for the control of information. In a traditional hierarchical structure, governance often imposes a reference framework to all employees, according to a top-down approach. This approach is not always successful and employees assert their individuality by persisting in their own practice. The reasons given relate to force of habit, resistance to change, lack of trust in centralized information management, etc. The tension points between individual and collective practices reflect the power dynamics that undermines the efforts of information governance (Maurel & Chebbi, 2012; Bergeron et al., 2010).

Methodology

Our research is based on a qualitative interpretative approach. The chosen object of study is a major Canadian municipality in the province of Quebec. The 21 respondents are middle managers in two districts of the municipality. The main data collection method is in-depth semi-structured interviews conducted in person and direct observation of these individuals. A qualitative data analysis based on grounded theory was conducted on collected data.

The respondents statements have not only revealed their information behaviours (information needs and information use), but also their information practices for managing the records they create and use in their management activities. The concepts of documentary trajectory and negotiated order have provided a conceptual and analytical framework for examining how

information governance is established on a day-to-day basis, and the consequences on the management and sharing of organizational memory.

Findings and Discussion[1]

Working methods and information practices of employees should be regarded as a coherent whole. They reflect how employees address the tasks and solutions to be adopted, their cognitive processing of information, work experience, etc.

Working Methods and Information Practices

The working methods of the employees include the creation of records, of which the structure and content meet, among other things, organizational, legal, accounting requirements. This structure evolves over time, according to the organizational requirements and the evolution of business processes. The middle managers we have met for the purpose of our study have produced different types of records: budget planning, employee evaluation reports, internal policies, action plans, citizen claims reports, newsletters for citizens, etc. Typically, the sequence of their actions is the following as part of a business process: complying to a request or providing an answer to a problem; documenting the problem or situation; collecting and processing information; sharing of information and knowledge; creating, editing and validating records; making a decision and taking action; filing the records in digital and/or paper format. This sequence of actions includes information practices.

To organize their digital records, the respondents use their own classification nomenclature on their computer. Some of the respondents drew up a list (in Word) of the folders found on their hard drive. They use this list as checklist and to easily retrieve folders and records by keyword search (title or file number, records type, year, topic, etc.). Most respondents were aware of the standard classification system of their municipality and acknowledge its value for organizing records consistently. They mostly apply this classification system to the hard copies of their records.

Employees also use their own naming convention to name their digital records (document type, subject, file number, year, version, etc.). Few of them fill the metadata tab provided by the software. They rarely use keywords to retrieve records stored on their computer because

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[1] The authors of this paper have translated from French the respondents' comments that are provided in the Findings section.

their classification nomenclature is simple and self-explanatory. They use it, however, in the case of organizational information systems of which the naming convention seems less intuitive.

With regard to the preservation of records created as part of their activities, middle managers know that the municipality has a records retention schedule that establishes records retention requirements for those documenting administrative and program functions. They are not always aware of the exact duration of these retention requirements. Some respondents said they sort out their files to only keep records significant for understanding the activity concerned. To do this, they rely primarily on the value they perceive (operational, evidence, etc.) based on their knowledge of the activity and work experience.

Preservation of information created on organizational information systems can also follow another logic then that of the retention schedule. The information system's functionalities impose a method for organizing and managing records produced in business processes. One respondent described the case of a system dedicated to processing claims of citizens in his district: "*Every information entered in the system can't be erased, it's impossible to erase it (A-6).*" This would imply that one of the most crucial systems developed by records managers to control the volume of documentation – namely, the records retention schedule – is no longer deemed necessary to determine the records lifecycle. In this case, storage capacities have led system designers to completely override this issue and favour an approach focused on the permanent preservation of digital informational traces. This example highlights a power relationship (which is perhaps not even recognized as such) between at least two units (Records Management and Information Technologies) in the development and implementation of information governance within the organization.

Individual information practices implemented by respondents are reassuring with respect to immediate accessibility, availability at all times and authenticity of the records used recurrently. Paradoxically, however, respondents rely on their organization to preserve the final, official, authentic, version of probative value. The respondents recognize the records management unit's competence to ensure sound records management for the organization's activities. Legal requirements underlying the collective organizational information practices lend credibility to these practices.

Documentary Trajectories and Negotiated Governance of Records

A record created as part of a business process is generally subject to more than one documentary trajectory: that imposed by the employee who created the record, and those imposed by other employees involved in the process. In the case of a citizen's claim, for instance, several organizational actors contribute to the documentary trajectory of several records, the most important one being the claim report: the director of the Public Works Department (in charge of documenting the problem and writing a claim report), an employee of Public Works (for gathering facts and offering feedback on the report), the Claims Department (for the official decision based on the claim report), eventually lawyers and experts if the citizen decides to appeal, and finally the records manager who inherits the claim report and processes it according to institutional information practices. Each one of these actors imposes a specific documentary trajectory to the final claim report, namely with regard to its classification, choice of title, registration of metadata, storing of hard or digital copies, choice of information system on which to keep the report, retention period and number of copies to keep. Thus a single document experiences several "parallel lives" that complexify its capture, management and future use.

Once sent to the Records Management Department, claims files are processed according to the recordkeeping functions in order to keep track of decisions and reuse them in the future if necessary: evaluation according to retention requirements, archival classification, description, indexing and preservation. The values that pertain to records kept in a claim file, including reports, are primarily determined by the need for the city to defend its interests. The respondent mentions legal consequences if the decision is challenged by the complainant— a situation that greatly complexifies the matter. The director of the Public Works Department explains that the majority of recorded information acts as an insurance policy for the municipality in case of possible litigation: "*We keep a lot of records in duplicate and triplicate and I know it annoys the records manager. We explain to him that we need them. I can't assume that one record or another is somewhere in another department and that I just have to phone somebody to access it. It doesn't work like that (A-6).*"

The respondents' information practices are intrinsically related to their working methods in the conduct of their activities. They see this as an inseparable logic, and expect their information practices to be respected by their records manager. It would remain to compare this rationale with the records manager's, in order to observe negotiating mechanisms set up

by each party within the context of their management activities. Middle managers who were interviewed recognize the value of information practices consistent across the municipality. They stress the need for the organization to keep reliable and authentic informational traces. However, several respondents chose not to comply (in whole or in part) with these practices because they do not correspond to the personal documentary solutions they have implemented. This type of situation highlights tension points between standardization and personalisation, and the power dynamics between employees and the bodies responsible for information governance within the organization. When employees create personal documentary solutions without discussing it with the records manager beforehand, there is actually a lack of negotiation and an avoidance strategy. Employees are thus questioning the logic of top-down enforcement of information governance of which the relevance and means are endorsed by the leadership of the organization. Negotiation occurs when employees are forced to assert the relevance of the information practices they have put in place; in the case of middle managers, personal practices often become those of the unit they lead. It seems that the daily governance of information is a "negotiated governance", that there is direct confrontation between employees and the bodies in charge of recordkeeping, or that confrontation and negotiation are avoided.

Conclusion

It is not always easy for records managers to find common ground to make all employees adhere to governance of records generated through business processes. At the time of Web 2.0 and social media, people are now used to being participatory and creative. This could be an avenue to consider in the implementation of strategies and tools. We could consider, for example, faceted classification integrated in records creation in office suite software as a means to foster the organizing and indexing of information and knowledge in organizations, in relation to business processes; folksonomy type collective indexing; or the construction of information cartography to support research through information visualization. Collaboration between various fields of study (Information and Archival Science, Cognitive Science, Semiology, Knowledge management, Information Technology, etc.) seems essential to create innovative solutions. Finally, to refine their set of tools, records managers need to have a better understanding of the negotiation mechanisms used by employees in the personal management of their information, as well as the factors underlying these mechanisms (context, issues involved, roles of employees and organizational units involved, balanced distribution of power in the negotiation, etc.). Ultimately, it is important for information

professionals to create a strong information culture within organizations, where the records produced in the conduct of business processes are recognized not only for their probative value, but also for their symbolic and strategic value.

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