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Information culture and records management: a suitable match? Conceptualizations of information culture and their application on records management

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ABSTRACT

Good information and records management is assumed to promote organizational efficiency. Despite established management regimes and available technology, many organizations still consider information and records management challenging. The reason may be cultural factors. This study based on a literature review, aims to explore the academic discourse on information culture and to discuss its relevance for records management. The findings show that the concept information culture is used in various ways: as an explanatory framework; as an analytical and evaluative tool; or as normative standard. The research on information culture addresses several areas: business performance, systems implementation, the manifestation of information culture in different organizations, and a few concerns records management practices. The research settings and the objects of study varied, why general conclusions are difficult to draw, but often a positive correlation between culture and performance is assumed. The focus has been on how information is used, shared and disseminated, while the production and management, that is the vital object of records management, has with few exceptions been neglected. If information culture should fully function as an analytical framework concerning records management, a widened and more inclusive conceptualization is required, which also will enrich information culture as a theoretical concept.

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1. Introduction

Good information management and records management practices are assumed to promote organizational efficiency (Feldman & Villars, 2006). They are of crucial importance to ensure transparency and accountability in public organizations and key to e-government development (e.g. Jaeger & Thompson, 2003; Worall, 2010). These circumstances are now widely recognized and the drivers behind development of standards, models, best practices and other tools for achieving efficient and trustworthy records management regimes. Both private enterprises and public agencies have heavily invested in technological systems, and many countries have imposed stricter legislative demands in order to enhance the management of records. However, despite investments in technology and legal frameworks that governs the management of

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http://dx.doi.org/10.1016/j.ijinfomgt.2015.08.004 0268-4012/© 2015 Elsevier Ltd. All rights reserved. information resources, many organizations still grapple with the implementation of good information and records management practices. A lot of knowledge has been produced within the records management community that should by now, with all the technical advancements present, mitigate these problems, but attaining good information and records management is still a challenge in most organizations. Apparently, there must be other, less tangible, factors that impact on information and records management. Research has also proven that concerning records management, people issues had large impact, and those concern culture and philosophical attitudes. Research has also proven that *people issues* have large impact on records management, and those issues concern cultural and philosophical attitudes (McLeod, Childs, & Hardiman, 2011).

A theoretical construct used to address the role of norms, attitudes and the way organizations value information is *information culture*. Information is, however, a polysemic and fluid concept, and its relationship to the concept of records is not undisputed. Culture is also an elusive concept. To be operational, a concept has to be defined in order to get to a definite understanding of what it constitutes. This study aims to explore the academic discourse on information culture in order to elicit the different meanings attached to the concept, and to discuss its relevance for records management by addressing the following questions:

- What are the objects of studies of information culture?
- In what sense is the concept *information* used in the studies?
- How is information culture conceptualized?
- What is the presumed impact of information culture on organizations and information practices?
- How can information culture apply to records management as an analytical framework?

The article presents an introduction that gives a short background of the subject, a method which describes the techniques applied during the research process, an overview of contemporary information science research on information culture, an analysis and discussion which synthesizes the salient elements in the literature review and a conclusion.

2. Method

The study is conducted as an interpretative analysis of conceptualizations of information culture and its relation to information management and records management, based on a survey of research literature. A search was done by the authors in data bases like Google Scholar, Emerald, Science Direct, and Libris to identify the relevant literature. Using search terms such as culture, information culture, information management and records management, a set of scholarly articles and books were identified. Through the search a lot of articles focusing on organizational culture and information technology were identified but rather few discussed information culture as such. The final selection of the literature focused on articles explicitly dealing with the theme, and the analysis guided by the research questions stated above.

3. Research on information culture

The concept of information culture has its roots in organizational studies and the concept of organizational culture established by Schein (1985, 1990) in the 1980s, who defined organizational culture as "(a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid and, therefore (e) is to be taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems" (Schein, 1990, p. 111). Hofstede (2001) stated that an anthropologically agreed on definition of culture is, "[c]ulture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values" (Hofstede, 2001, p. 9, citing Kluckhohn, 1951). Alvesson (2002) defined culture as the setting in which behaviour, social events, institutions and process take place and are understood, but claimed that there is an enormous variation in the definition of the term organizational culture and that he used it "as an umbrella concept for a way of thinking which takes a serious interest in cultural and symbolic phenomena" (Alvesson, 2002, p. 3).

The concept has then been adopted and appropriated by information science researchers, with various, more or less explicit definitions. A pioneer in this field was Ginman (1987, 1988) who mouthed the concept information culture in her studies of how information and its handling impacted on business performance, however without explicitly defining the concept. In her point of view, the information culture was the setting where "the transformation of intellectual resources is maintained alongside the transformation of material resources. The primary resources for this type of transformation are varying kinds of knowledge and information. The output achieved is a processed intellectual product which is necessary for the material activities to function and develop positively" (Ginman, 1988, p. 93). In her analysis information was categorized as external or internal, written or oral. The meaning of the concept could be derived from her description of chief executive officers' approaches to information as consisting of the following variables (Ginman, 1987, p. 9):

- Use of internal and external information;
- Use of oral and written information;
- Quantity of information used and attitudes towards it.

According to Ginman, information culture could thus be seen as individuals' information behaviour, shaped by the organizational climate, that is, culture. Her work formed the basis for a later study by (Owens et al., 1995), investigating the role of information systems and services in high-performing enterprises. Neither here was the information culture concept further elaborated, but it was used as an a priori term, manifested in the companies' use of information technology, their knowledge base, sensitivity to the value of information, and information ethos, that is if the value of information was acknowledged by the employees. Owen et al.'s view of information was similar to Ginman's. Information was considered as internal or external, and constituted something that could be delivered through information systems or services, or as personal knowledge.

In 1995 an empirical study was carried out in collaboration with the British Library Research and Development Department to determine whether there was a correlation between information culture and business success (Grimshaw, 1995). According to the literature review that was conducted during this study, it was confirmed that it is the human information activities which give organizations a competitive edge. Based on the literature review it was confirmed that the quality and value of information, its sources, management and communication were critical to the success of an organization. It was argued in the study that an organization's culture embraces those characteristics that are to be encouraged and that organizational culture has two levels. The first level reflects shared values and the second level is about group behaviour norms. The first level for example places value on money, innovation or the employees' well-being while the second level represents the behaviour patterns or style of an organization that is, the way people in it interact or dress. Grimshaw (1995) further posited that human resources were key elements to the organization and its culture and that if organizations were to maximize their use, information flow and communication had to be well organized. It was further confirmed in the report that information culture is part of corporate culture and it is influenced by information.

Höglund (1998) reported on a case study of a pharmaceutical company researching the correlation between information culture, organizational climate, information service quality, and performance. He argued that even though literature on organizational culture was growing, there was little use of the concept information culture. He defined information culture as part of corporate culture, concerning the valuation of information and information services, and concluded that a corporate culture that emphasizes information issues and an open communication climate, is related to positive company performance. Information was considered as *something that could be provided* through formal information services, as a company library, or through personal communication.

The impact of information culture on business performance was also the subject of Widén-Wulff (2000), who conducted a qualitative study that reviewed information cultures in 15 Finnish insurance companies. She was concerned with the internal information flow and how a rich information culture and functioning knowledge creation were connected to successful performance. Widén-Wulff defined information as a resource, and thus something tangible. Her focus was however on internal information flows and the cognitive aspects of information: "...it can be established that it is important to look at the information user in a cognitive perspective when the organisational information culture is examined. It is also important to look at the result of the use of information, which is how the organisation uses this knowledge (feedback)" (Widén-Wulff, 2000, p. 10). Through interviews she analysed the information environment, information as a resource, work processes, innovation and business success. She confirmed that information culture as a concept is complex and that it is usually described in frames of information technology. However, Widén-Wulff was not explicit herself in defining what information culture is. She stated that information culture is part of the whole organization's culture because the values and attitudes attached to information depend on the organizational situation. She contended that it is also about personal attitudes and awareness of the importance of information, information systems, common knowledge, and individual information systems in form of attitudes and information ethics. She concluded that the organizations she reviewed were aware of the importance of information but argued that it was the most difficult asset to manage.

The impact of information culture on business performance has thus been a prominent strand of research. However, other perspectives on information culture could be recognized. An information systems perspective is for instance brought out by Leidner (1998) and Travica (2008), who studied the impact of corporate culture on the implementation of information system, or rather the cultural constraints on the implementation process. Leidner defined information culture as "the perceptions on the value of tacit knowledge to the individual and to the organization" (Leidner, 1998, p. 12) and categorized cultures according to the individuals' willingness to share information, that is if information (or knowledge) were considered as an individual or a corporate asset. The resulting hypothesis was that a more sharing attitude would facilitate the implementation knowledge management systems. Her subject of study was the creation and distribution of internal information in "systems designed to provide information to managers and professionals..." (Leidner, 1998, p. 4). Thus, she regarded information as the content of an information system even though concept is not explicitly defined. As Travica below, her primary interest was the systems as such, not the information. One strand of her discussion was, however, about tacit knowledge and how it is captured and shared within an organization, that is to say, how knowledge is reified and transformed into discrete information.

Travica (2008) studied the adoption of a self-service human resource management system in a Canadian utility company, using information culture as an explanatory framework. Information culture was defined as "beliefs (deep-set assumptions, values), behaviours and artifacts that are related to IT and information" (Travica, 2008, p. 4). Information culture was part of the organization culture, however with distinct features. Travica's findings suggested that one reason for the slow adoption of the system was the existence of various information sub-cultures with diverging aims and values, causing misunderstandings and fragmentation: one with focus on information; and, one with a systems' focus. Travica's studies had a technological approach, focusing on systems and their implementation. Even though he proposed an *information view* on organizations, his interest concerned information systems and not the information content. However, he exemplified information as "knowledge, meaning and data" (Travica, 2008, p. 4), thus adopting a rather inclusive definition embracing both cognitive aspects and the information objects as such. Nevertheless, the implicit understanding of information in the study was something that was provided with the help of an information system.

Another important strand of research is what kind of information culture is prevalent in individual organizations and how it could be assessed. Curry and Moore (2003) researched information management in healthcare and the need for a tool to measure information culture and identify areas in need of improvement. Their definition of information culture was "[a] culture in which the value and utility of information in achieving operational and strategic success is recognised, where information forms the basis of organizational decision making and Information Technology is readily exploited as an enabler for effective Information Systems" (Curry & Moore, 2003, p. 94). They used organizational culture as a starting point for their research because information culture does not exist in a vacuum, and they contended that information culture required a well developed organizational culture to be nurtured. They concluded that the adoption of IT was not sufficient to deliver effective information management, but that it had to be complemented with a good information culture. They proposed a model that encapsulated the following essential elements of an information culture and assessment criteria: the importance of effective organizational communication; organizational synergy and cross organizational collaboration; co-operative working practices and open access to information; information systems strategy closely linked to the business strategy; information management; and documentation of key policies, processes and procedures. The concept of information was not explicitly defined, but regarded as something that could be shared, a basis for communication and collaboration. Information could be explicit as various forms of documentation or data that could be accessed through information systems, or tacit, as individual knowledge.

Choo, Bergeron, Detlor, and Heaton (2008) explored the link between information culture and use of information. They argued that information values and information culture play an indispensable role in defining how people share and use information. Choo et al. (2006) reported on a case study of a large Canadian law firm where finding, sharing and processing information was critical to the organization's operations. Information culture was recognized as "the socially transmitted patterns of behaviors and values about the significance and use of information in an organization", and information was thus regarded as something that could be used (Choo et al., 2006, p. 492). However, their study also concerned knowledge management, including tacit knowledge, "the expertise and experience of individuals" (Choo et al., 2006, p. 493), that is less tangible phenomena. They focused on the information use culture in the organization and their survey included managers and professionals as well as administrative and support staff. The organization that was the subject of the research saw effective information and knowledge management as a tool to achieving business goals. Their research findings were directed to three domains and these included information management, information behaviours and values, and information use outcomes, and they identified a set of information values to assess information cultures:

- Information integrity—the use of information in an appropriate way at the individual and organizational level;
- Information formality—the willingness to use and trust institutionalized information over informal sources;
- Information control—the extent to which information is continuously presented to people to manage and monitor their performance;

- Information transparency—openness in reporting and presentation of information on errors and failures, thus allowing members to learn from mistakes;
- Information sharing—the willingness to provide others with information in an appropriate and collaborative fashion; and,
- Pro-activeness—the active concern to think about how to obtain and apply new information in order to respond quickly to business changes and to promote innovation in products and services.

These values, with the exception of integrity, were significantly correlated with perceptions of information use outcomes. Their research established that information values and behaviour accounted for more than one third of the variance in information use outcomes. The same approach was used in a larger study of a public health agency, a national law firm and an engineering company, with the aim to establish whether there was a systematic way to identify the information behaviour and values that characterize the organizations' information culture. The findings showed that the three organizations were characterized by different sets of these values, thus expressing different information cultures.

Douglas (2010) carried out a qualitative study and explored the values, attitudes, beliefs and behaviours that government departments in Western Australia had towards information. She contended that even though information was pervasive in all government departments, it was not well understood how the departments related to it, what value they ascribed to it, and what attitudes and behaviour they had towards the information. Her study revealed that information culture is complex, systemic and reflexive. She identified an intricate relationships between information culture and organization culture, information management and information use, and based on her data analysis she developed a new definition for information culture: "An emerging complex system of values, attitudes and behaviours that influence how information is used in an organization. It exists in the context of and is influenced by an organizational culture and the wider environment" (Douglas, 2010, p. 388). She contended that information culture is an important aspect that gives organizations a competitive advantage if well aligned with business strategies.

A particular form of information assets are constituted by records: "information created, received, and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business" ("ISO 15489-1:2001"). According to Thomassen (2001, p. 374), "[r]ecords are distinguished from other documents by the reasons of their creation. Unlike books in a library, which are the product of a conscious collection activity, records have in common the fact that they are linked to the process that produced them. Records are processbound information, that is to say, information that is generated by and linked to work processes." Records management is "[the] field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records" ("ISO 15489-1:2001"). The distinctive feature of records is not their informative content, but their function as documentation of human activities and evidence of transactions. However, "records consist of data/documents/information. They may consist of all these things simultaneously. Thus, a record may be a collection of data. It may be one document or a sequence of documents. It will definitively consist of information in some form" (Reed, 2005, p. 102).

With a few exceptions, the relationship between information culture and records management has rarely been explicitly discussed. However, cultural impacts on records management practices have been acknowledged by some researchers. Shepherd & Yeo (2003) postulated, that an organization's culture is a set of shared values and assumptions held by its members of staff. They further argued that analysing an organization's culture helps create an understanding of why an organization functions the way it does. The management of records requires an understanding of an organization's culture in order to establish how records are appreciated and used, the attitudes of the employees and the management of the organization and the norms embraced by the organization. This facilitates the assessment of an organization's records management needs. Foscarini & Oliver (2012) emphasize the diversity of organizations and discuss the importance of understanding sociocultural dimensions of digital preservation. Instead of aiming for uniform solutions, situated, culturally sensitive approaches to the management and preservation of records are argued for i.e. both Shepherd & Yeo and Foscarini & Oliver claim a need to adapt to individual traits of the organizations in order to enhance records management procedures.

There are also a few empirical studies supporting the presumed impact of cultural factors on records management practices. At the university of Northumbria a project was conducted in 2007-2010, providing a global set of real evidence on the management of electronic records (McLeod et al., 2011). It focused on designing an organization-centred architecture from three perspectives: (a) people, including vision, awareness, culture, drivers and barriers; (b) working practices including processes, procedures, policies and standards; (c) technology in terms of the design principles for delivering effective management of records. The findings proved that the so called people issues were predominant, fundamental and challenging, and that they concerned culture, philosophical attitudes, awareness of records management and electronic records management issues, preferences, knowledge and skills. McLeod et al. (2011) contended that archivists also had to change their attitudes and demonstrate a leadership in records management issues in order to promote a proactive approach. Svärd (2011), in her studies of Swedish municipalities observed that the organizations had many information systems, a very strong legal framework that regulated the management of records, and to a certain degree an understanding of what constituted effective records management. Nevertheless, the municipalities still faced enormous challenges which were not only technical, but often organizational and cultural. This research further confirmed that the attitudes that the different categories of employees had towards each other created barriers to promote information and management issues. This was clearly demonstrated through the information planning project, where certain categories of people like the archivists and IT-staff were left out because they were considered as a hindrance other than a resource. It was clear that where collaboration did not exist, records could not serve their full potential. Wright (2013) used Curry and Moore's (above) framework in a larger quantitative study in order to assess the information culture in a Canadian public institution. Her apprehension of information culture was "values, beliefs, and codes of practice towards information management" (Wright, 2013, p. 15), and the assumption was that a relationship existed between information culture and compliance to formal record managements programs. A strengthened information culture would, according to the author, lead to better compliance. The findings, however not unequivocal indicated, that training would be a driver for information culture and thus records management practices.

Oliver has specifically addressed the issue of information culture and records management, the latter regarded as a subset of information management. Her conceptualization of information was "an integral part of a communicative transaction" (Oliver, 2004, p. 289) that could be de-contextualized and transferred over time and space to other circumstances. Oliver (2004) carried out comparative case studies and investigated information management in three universities in Australia, Hong Kong and Germany. She aimed to enhance an understanding of the interactions of organizational culture with information and its management, which was considered as the information culture of the organizations. Her research perspective was grounded in the fact that the values accorded to information and the attitudes towards it demonstrate information culture. She adopted the model of information management since it was more inclusive of different specialisms. She further contended that information management is a complex issue and involves different occupational groups. Oliver (2008) further explored the concept of information culture and focused on national as well as corporate characteristics that shape organizational culture. To establish whether national cultural dimensions impacted information cultures Oliver conducted three case studies in different regions. Her perspective was that information cultures exists in all organizations, but an effective information culture requires effective communication flows, cross-organizational partnerships, co-operative working practices and open access to relevant information, management of information systems, clear guidelines and documentation for information and data management, trust and willingness to share information. Information cultures could be assessed according to the level of "recognition and acceptance of societal requirements for managing information; recognition and acceptance of organisational requirements for managing information; attitudes to sharing information; utilisation of information technology; trust in written documentation; preference for low or high context communication" (Oliver, 2008, p. 379). A salient difference between the organizations was the acknowledgement of information as "knowledge" or "evidence (Oliver, 2008, p. 366), where the latter was a significant characteristic of the German case. Based on her empirical research Oliver constructed a framework to help with the identification of information culture characteristics from a records management perspective, including e.g. respect for information as evidence and as knowledge, trust in information, and trust in organizational systems, further developed in a more comprehensive textbook (Oliver & Foscarini, 2014). The authors here recognized not only the use of information sources as part of information practices and object to cultural influence, but also the importance of how records are produced and handled (Oliver & Foscarini, 2014, p. 9). In spite of this, these aspects are not incorporated into the analytic framework or object to a more elaborated discussion.

4. Analysis and discussion

The interest for information culture can be regarded as an offset of the contextual turn in the information sciences. Much of the early research about information, its function and use considered individuals' cognitive perceptions and treated their interaction with information and information systems as isolated phenomena. However, at least since the 1990s contextual and social aspects of information, its handling and use have gained attention (Vakkari, 1997), and a focus on information behaviour in real-life situations, for instance organizational settings, have been established (Wilson & Walsh, 2007).

Ginman (1987, 1988), Owens et al. (1995), Grimshaw (1995), Höglund (1998) and Widén-Wulff (2000) directly explored the link between information culture and business success and claimed a correlation between the approach to information and the outcome of the business. Other authors had focus on other issues, for instance the cultural impact on information practices like systems implementation and records management (Leidner, 1998; Travica, 2008; McLeod et al., 2011; Svärd, 2011; Wright, 2013), or argued for the necessity to understand information culture in order to accommodate to the organizations' need for information services (Shepherd & Yeo, 2003; Foscarini & Oliver, 2012). However, implicit in all the studies was that the performance of the organizations was depending on the information culture. This has also triggered a need to identify and analyse the features of information culture. Choo et al. (2006, 2008) and Curry and Moore (2003) have contributed to the field by defining the salient components of information culture, aiming at evaluating or assessing the information cultures of particular organizations. Oliver (2004, 2008) identified information models that exist in organizations and hence re-force the type of information culture that is espoused. Oliver's research points out the necessity to understand information culture from a broad perspective since it includes organizational, national and geographical challenges. Oliver further detailed the factors required for an effective information culture and Douglas (2010) identified the different types of culture that could be found in an organization. Their works both showed the complexity of information culture as a concept and highlighted problem areas to be addressed if organizations are to develop an effective information management culture.

The notion of information is central in the discussion pursued by information culture researchers. Implicit in the information culture discourse is information as a resource or asset that should be valued. A few of the authors explicitly defined the concept of information and others exemplified the kinds of information that was explored, which thus made it possible to derive the meaning of the concept. However, the concept is fluid and can be used in various ways. Capurro and Hjorland (2003, p. 356) posited that information "has been taken to characterize a measure of physical organization (or decrease in entropy), a pattern of communication between source and receiver, a form of control and feedback, the probability of a message being transmitted over a communication channel, the content of a cognitive state, the meaning of a linguistic form, or the reduction of an uncertainty". They also stated that information as a concept can be universally defined and that it is anything that is of importance in answering a question. Buckland (1991) identified three principal uses of the word "information" which included: information-as-process - the change of knowledge due to an act of informing or communicating knowledge; information-as-knowledge - what is cognitively perceived, intangible knowledge; and, information-as-thing-objects, such as data and documents, that are referred to as "information" because they are regarded as being informative.

In the previous studies information is often used as a generic concept, covering all forms described above, and sometimes passing over meanings. A common view is to categorize information as either external or internal, written or oral (Ginman, 1988; Grimshaw, 1995; Owens et al., 1995; Höglund, 1998), or as something that could be provided through information systems or services (Höglund, 1998; Leidner, 1998; Curry & Moore, 2003; Travica, 2008). However, information in the sense of personal knowledge and the potential of obtaining knowledge, that is "information-as-process" according to Buckland (1991), was also addressed, Widén-Wulff (2000) related information to knowledge and the cognitive aspects of gaining knowledge from information. Leidner (1998), Curry & Moore (2003), Choo et al. (2006) and Travica (2008) also referred to personal or tacit knowledge. Information is seen either as a material object or as knowledge, but in both cases it seemed to have "thingish" characteristics, something that could be reified. A general view pursued by the authors is the informative characteristics of information. Oliver (2008) was the only one that problematized the information concept and pursued a discussion about the different apprehensions of information-asknowledge and information-as-evidence, and has thus enriched the notion of information culture. Records are not just about content, they are not just sources of information, but instruments used to conduct business activities. Besides having an information content, they accomplish transactions as results of activities performed by organizations or persons, and thereby serve as documentary evidence of those activities.

The attitudes towards and values attached to information, or to information practices, are cited by the authors as indicators of information culture. In general, it is argued that information culture is intertwined with organizational culture; either it is regarded as a part of the overall organization culture, or it is influenced by it. If this reflects a real difference in the way information culture is perceived, or if it just is a way of expression (if so, not that precise), is difficult to tell. Another difference is if behaviour is considered as a part of the culture or something that is impacted by information culture. Again it is not entirely clear if this is expressing different conceptualizations or different foci of the studies i.e. if the aim is to study cultural impacts on practice, an analytical distinction between information culture and information practices, that is behaviour, is necessary, while when comparing or evaluating different cultures the distinction is not that obvious.

The common ground for all the works listed in this review is however that information is a valuable asset that affects the performance of the organizations, and the way information is regarded is a cultural trait. Curry and Moore (2003) even narrowed their definition of information culture to a positive apprehension of information, which however limits the analytical value of the concept. The central aspects of an information culture that are emphasized in the studies are how information is used and shared, i.e. access to information and willingness to exchange information, that is to collaborate. High scores of information use and sharing is considered as indications of a positive information culture (even if not always explicitly termed as such) and claimed to correlate with business success. The objectives of records management, however, is the creation and capturing of information (i.e. records), and its further administration to ensure accountable business processes and the access to authentic, reliable, accurate and usable records (e.g. "ISO 15489-1:2001"). These aspects are in general not paid attention to as elements of information culture. They are noticed by Oliver & Foscarini (2014), but not emphasized in their analytical framework.

5. Conclusion

Some of the authors above, from Höglund (1998) to Douglas (2010), claimed that information culture is still missing in current research and that although the term is used, it is not well defined. This overview confirms these conclusions to some extent. Cultural aspects on information and information management are recognized as an area of research, however information culture as a concept and a phenomenon is perhaps not a widespread issue. The authors reviewed above have from various angles of approach addressed information culture: information culture and business performance, information culture and systems implementation, information culture and records management practices, and the manifestation of information culture in different organizations. The research settings varied and represented both the private and public sector. This leads to the fact that the types of information culture that authors presented in their articles were also different, why general conclusions of the studies are difficult to draw. Even if some explicit definitions are provided, there is a certain "fuzziness" adherent to the concept. It is used as a generic concept to capture a complex field of relationships between phenomena difficult to pinpoint, as values, norms, atavistic ideas and behaviour etc.

What can be concluded from the studies is that the concept of information culture is used in various ways in the studies: as an explanatory framework that elucidates features of the organizations and their performance; as an analytical and evaluative tool; or as normative standard. Each could be useful, however it is necessary to clarify the purpose of using the concept. In the first case, the assumption is that in each organization a distinct culture has developed that determines or at least conditions the approach to information, that in turn impacts on the organization's performance. Information culture is here considered as an independent variable, explaining a certain outcome. Information culture can also be used to analyse the characteristics of organizations concerning information and information management, usually in order to compare different organizations and/or evaluate the organizations. This is also based on an assumption of a positive correlation between culture and performance. It is here necessary to establish operational criteria of assessment, i.e. define good versus bad cultures. The works that are reviewed are rarely so blunt, but implicit is a valuation of different types of information cultures, and also an ambition to improve existing cultures. This means that information cultures not just exist, but that they are also malleable and possible to effect changes upon. A questionable standpoint in several of the studies is, however, that information cultures are assessed according to a universal scale-good information cultures, no matter what kind of organization or environment, nurture information sharing and collaboration. Some works (e.g. Wright, 2013) acknowledged that in some kinds of organizations, where for instance security requirements are high, sharing and dissemination of information is restricted. Nevertheless, a more nuanced discussion about what information should be shared, how and with whom collaboration is required, is lacking in most of the studies.

The literature review demonstrates that the focus of most researchers is on information in general, either as knowledge or as an object, primarily addressing the informative qualities of the content. The concept of records, however, embraces other properties than just content and the information's value as a source of knowledge. It also takes the information's evidential and transactional properties into consideration. There is paucity of research on information culture and records management, but a few researchers have explored the impact of cultural aspects on records management. Nevertheless, it can be said that it is the output of information and information management that has been of interest in defining information cultures. The cultural impact on the input, how information is created, captured and preserved has rarely been acknowledged. Thus, the question is still open if there is a tangible correlation between information cultures as conceptualized above and records management practices. If information culture should fully function as an analytical framework concerning records management, it has to be widen to also include how information is created, captured and preserved, as well as how information is used, shared and disseminated. This would also contribute to an enrichment of the concept of information culture and expand its analytical value.

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