

Threats to Future Knowledge: The Impact of the Pandemic on Organisational Recordkeeping

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Abstract: This paper reports the outcomes from the first phase of an international research project investigating the impact of the COVID-19 pandemic on organisational recordkeeping. Recordkeeping is a critical component of organisational knowledge management, as the making and keeping of records as evidence of organisational activities and transactions enables core memory and accountability functions over time. Working from home during the pandemic has disrupted routines of records creation, storage, and management, and will likely result in substantial black holes in future knowledge. The objective of the first phase of our study was to find out what records-related initiatives were underway in academic settings and in archival institutions in the initial stages of this global crisis. We conducted an environmental scan, which showed that much attention was being paid to documenting the pandemic (e.g., collecting and preserving social media discussion, promoting the use of diaries by citizens); however, the provision of advice and standards for organisational recordkeeping at a time when regular access to organisational systems could not be guaranteed was largely missing. In the second phase, we designed a survey aimed at capturing the experiences of recordkeeping professionals who worked from home for varying lengths of time in Europe, North America, and Australasia. It is expected that this comparative study will help us envision a “new normal” for the time when the current health emergency is over. This paper concludes with a discussion of how our environmental scan and literature review have informed the multilingual survey that is currently underway.

Keywords: Archival studies, COVID-19, Comparative study, New normal, Organizational knowledge management, Records management

1. Introduction

The purpose of recordkeeping is to ensure that evidence of organisational activities and transactions is created, captured, kept for as long as necessary, but not retained when no longer required. Recordkeeping is, therefore, a critical aspect of organisational knowledge management, which includes consideration of how records as “persistent representations of activities” (Yeo, 2007) contribute to sense making, decision making, and knowledge creation (Choo, 2006). Records are regarded as authoritative evidence of what happened, and thus recordkeeping is essential to ensuring accountability and demonstrating transparency. The global COVID-19 pandemic caused unimagined disruption to workplaces, with employees often having to work from home, meetings being conducted online, and many ad hoc processes and workarounds developed to accomplish tasks dependent on organisational virtual and physical infrastructures. All this has affected the routine of recording, managing, and storing evidence of business transactions, and may hinder knowledge accumulation, distribution, and transformation.

The purpose of this paper is to discuss the initial findings of an international research project currently underway to investigate the impact of working from home during the pandemic on the processes of creating and managing records within organisations, and to raise awareness of the potential future consequences for memory and accountability. A recent study investigating the main challenges faced by archival education in the context of North American graduate archival programs highlighted the importance of conducting further research into how COVID-19 will change professional work, how the “new normal” will look like, and how this will affect archival

education (Poole and Todd-Diaz, 2022). In line with this observation, we are interested in the opportunities and challenges that await recordkeeping professionals, based on the forced experience in which everyone has been pushed to the online environment more than ever before. With that in mind, we planned to first examine how records professionals and archival institutions – which are, in most countries, responsible for the provision of advice and guidance on recordkeeping to organisations – responded to the pandemic, and which initiatives were taken to safeguard recordkeeping values during the pandemic, when people had to work from home on a large scale.

The paper begins by explaining the disciplinary context of recordkeeping and the theoretical context which informs this research project. This is followed by an explanation of the two phases of the project, namely an environmental scan followed by an online survey of records professionals. The next part consists of findings from the first phase, showing how these findings guided the development of the online survey. The discussion considers impacts and possible consequences on organisational recordkeeping, and the paper concludes with an indication of the next steps and practical applications of our study.

2. Recordkeeping

For thousands of years, human beings have been relying on various forms of recollection of what was said or done at earlier moments (from marks on rocks and knotted cords, to written texts and images). With more sophisticated methods of recording and more complex societies, the reliable creation, exchange, and preservation of trustworthy information became a necessity (Yeo, 2018). Recordkeeping hence emerged as a set of concepts and techniques, but also tools, systems, and technologies, that would allow people to capture, organise, store, select, dispose, access, and use the evidence of their activities for a variety of purposes. The 20th century saw the elaboration and consolidation of Western models and methods for the management of records throughout their life cycle (e.g., Brenneke, 1953; Schellenberg, 1956; Jenkinson, 1957; Cencetti, 1970), that is, from the moment of their creation as by-products and instruments of practical activities to their “archivalization”, i.e., “the process of selecting records for retention in an archive” (SAA, n.d.). In the 1990s, a new conceptualization of records, the “records continuum model” (McKemmish and Piggott 1994; Upward 1996), made its appearance, and later became the foundation of a new, holistic and dynamic understanding of recordkeeping, much more attuned to the needs of digital records, known as “recordkeeping informatics” (Upward et al. 2018).

The international records management and archival community agrees that today’s disruptive technologies and the interconnected work processes that rely on those technologies require a radical rethinking of what constitutes a record and how organisations can remain accountable when nothing appears to be fixed and stable around them. The international standard for records management ISO 15489 (ISO 15489-1, 2016) builds on the notion of the records continuum and of recordkeeping as a comprehensive enterprise. With its emphasis on the idea that every organisational actor has some recordkeeping responsibility, and that each entity has to decide what they accord record status to, ISO 15489 defines records as “authoritative evidence of business events or transactions” having authenticity, reliability, integrity, and usability as key characteristics. In order to manage records as records, recordkeeping professionals (e.g. archivists, records managers, information officers, documentation specialists) apply methods, such as records classification, appraisal for records retention and disposition, archival arrangement and description, which all rely on the creation and management of metadata (ISO 23081-1, 2017). The international standard insists that metadata for records is essential “to indicate and preserve context and apply appropriate rules for managing records” (ISO 15489-1, 2016).

In our research, we recognize that the complexity of this networked age, where records come in all forms and media, may last for a nano second, and reside in multiple spaces at the same time, calls for an approach to recordkeeping that takes into consideration not only what may exist as official, formal record of business activities, but also any workarounds and local, “stabilized-for-now” practices that attest to how individuals, organisations, and machines process information and knowledge (Oliver and Foscarini, 2020). In other words, following recordkeeping informatics ideas, we understand recordkeeping as a basis for an organisation’s accountability framework, and conceive the latter not as a static, taken-for-granted structure, but as an always negotiated social and ideological construct that shapes and is shaped by all kinds of evidence of our “acting together” (Foscarini, 2014).

COVID-19 has accelerated and complicated many of the information-related processes and attitudes that were already in place in most organisations before the pandemic (Oliver et al., 2021). Electronic management of born-digital records, digitization of physical resources, use of cloud computing for online collaboration and virtual networking, remote access to organisational information systems, these are just some of the recordkeeping practices that, in the first quarter of 2020, suddenly became an unavoidable necessity for everyone. As in any emergency situation, there was no time to plan the move from in-person to online, and some workplaces were better prepared than others to adapt to this change. Some may have surrendered to chaos; others have likely developed new policies or updated existing ones to deal with the unusual circumstances; others again may have sought advice from their local archival authorities. In most countries, national or regional archival institutions are responsible for providing guidance on how to manage records, and in some cases, also to inspect that recordkeeping laws and regulations are properly followed (Oliver et. al., 2021).

Two years after our world has been turned upside down by this unpredictable event, we still do not know what impact the pandemic has had on organisational accountability frameworks, the recordkeeping systems supporting such frameworks, and the future knowledge of our activities and transactions which relies on those systems (Choo, 2006). In the next section, we describe our overall research objectives and the methods used to operationalize them.

3. Research Design

To address our overarching research question – i.e., how has the COVID-19 pandemic impacted organisational recordkeeping? – we decided to start with a review of existing initiatives (e.g., surveys, academic papers, industry reports) focusing on changes to work practices – particularly those directly or indirectly relevant to the management of records and archives – during the initial stages of this global emergency. Our environmental scan took place in the summer of 2021 and included materials published in English between March 2020 and July 2021. The questions guiding this first phase of our study, were:

- What inquiries have been or are being conducted to find out how the pandemic has impacted work practices?
- Are there any ongoing or closed surveys looking at records and archives management during the pandemic?
- What kinds of guidance (if any) have national or local archival institutions been providing to support recordkeeping during the pandemic?

The materials identified as of interest to the project (27 sources overall) were organised using the following categories: Field/Discipline; Survey included (Yes/No); Source and scope of study; Document type; From records management/archival sectors (Yes/No).

The most relevant sources (nine from records management/archival sectors, and nine from other sectors, including psychology, education, and corporate consulting) were described in an annotated bibliography, and used as a basis for the second phase of our study. As explained in the next sections, the results of our environmental scan were rather disappointing. Most archival authorities did not show much concern about the fact that the usual and ordinary course of business was being profoundly altered by the pandemic, and this would have consequences for the records created. Thus, we thought we should learn more about the kinds of work arrangements that organisations or individual employees enacted or put up with during these unusual circumstances. This brought us to design our own survey, entitled “Records Management and COVID-19: Towards a ‘new normal’,” which, at the time of writing this article, is being administered to recordkeeping professionals in Europe, North America, and Australasia.

Questions in our survey revolve around the respondents’ experiences working with organisational records and systems from home in comparison to their pre-pandemic experiences. The findings will help us answer the overarching research question mentioned above, identify any lessons learned from the pandemic approach to recordkeeping, as well as imagine new ways of managing authoritative information resources in distributed work environments.

The survey was developed in English, and then translated into Dutch, French, Icelandic, and Italian by members of the research team, who also obtained ethics approval by their respective universities. We have been using Qualtrics (www.qualtrics.com) as a platform for this multilingual survey, which is administered by the Institute

of Social Science at the University of Iceland. The survey is designed to take a comparative look at the experiences of information professionals in Iceland, the Netherlands, Italy, Canada and New Zealand. The analysis and discussion of this survey's results might suggest that we extend the survey to other countries (and languages). Furthermore, we plan to conduct in-depth interviews with survey respondents who may have expressed an interest in participating in a follow-up study.

4. Phase One – Findings

4.1 Documenting COVID-19

In this section we briefly discuss selected articles, policy documents and initiatives that emerged from a literature scan. We also provide some insight into how the archiving profession in a few countries has responded to the pandemic. When we look at archival institutions, it can be observed that archives worldwide were calling on citizens to document their lives in the pandemic. The Society of American Archivists (SAA) stated that archivists always must deal with gaps and silences, “[b]ut with history unfolding around us, we have a chance to contribute to minimising those silences and creating a documentary record that is aware of itself” (SAA, 2020). In that respect the pandemic offered a tremendous opportunity to immediately record for later purpose. In May 2020 SAA published an annotated resource list of many initiatives by academic institutions, historical and cultural societies, including guidance on how to conduct such documenting activities. Most initiatives of archival institutions were limited to calling on citizens to record aspects of their lives in the pandemic with the aim of making these documents part of institutional collections. The list mentions a few initiatives that go beyond documenting. The authors of this article share Ananya Chakravarti's concern about the one-sidedness of the collections that are now being formed (Chakravarti, 2020), and agree with the more substantial approach taken by Canadian archivists.

At an early stage of the pandemic, the Royal Society of Canada established a COVID-19 taskforce and working groups tasked to prepare policy briefings with the aim of providing policymakers with evidence-informed perspectives. Since then, numerous reports with policy recommendations in different societal areas have been published. One of these working groups published the policy briefing “Remembering is a Form of Honouring: Preserving the COVID-19 Archival Record” in which the authors paint a bleak picture of Canadian archival institutions in this respect (Jones et al., 2021). The report qualifies the collection and preservation of records as patchwork. The argument relates to the narrow focus of archival institutions on the official government records and the lack of strategy and resources to guarantee that non-governmental COVID-19 records will be preserved, and thus do justice to a multitude of voices in society, including marginalised ones. Many of the issues the authors address existed before the pandemic, but COVID-19 has made these problems apparent. The report recommends policy changes in three areas: funding of memory institutions, capacity to preserve digital records, and ensure archival research governed by ethical procedures.

As an alternative way of securing documentary evidence of the pandemic, government agencies and other public institutions subject to archival law have been issuing guidelines and specific retention schedules. An example of this approach is the guidance developed by the University of California Records Management Committee to help identify the administrative COVID-19-related records including their retention periods (University of California, 2020). Dutch policy goes a step further by declaring the pandemic a so-called “hotspot” (an extraordinary event that deserves to leave a detailed record). Consequently, usual administrative retention periods for COVID-19-related documents are automatically labelled for permanent retention (Nationaal Archief, 2020).

4.2 Archival work during the pandemic

LYRARIS, an international non-profit organisation serving archives, libraries and museums, released a survey in June 2020 aimed to collect trends and archival practices during the pandemic. 45 states in the USA were represented in the survey with a total of 253 responses (Klettlinger, 2020). The primary goal was to provide guidelines on how to safely collect archival material despite the pandemic. The results showed that the greatest obstacle was the limited physical access to the archives due to building closures. Some archives allowed their staff to enter in shifts while socially distanced from one another. This allowed for the opportunity to drop off donated materials. These donations were collected as archivists were concerned that historical records would otherwise be lost or as stated: “we encountered many folks who spent their at-home time cleaning and were searching for appropriate ways to dispose of their discoveries. That's why we wanted to continue to accept donations, since we feared that the alternative was the artefacts' destruction.” (p.11). While collection of paper material was limited in comparison to earlier times, digital collecting continued as usual. Still, preservation of

digital data was challenging as many staff members were using temporary solutions as they were not able to access servers from their institutions due to lack of remote access. Respondents indicated that they were better aware of the need to improve their digital preservation practices by revising workflows and creating or updating policies. It was also seen as an opportunity to advocate for more resources to improve infrastructures and support digital collections. Born digital materials were 88% of the most collected material (p. 14) and the documentation of current events was the primary motivation for 50% of the respondents during the pandemic as it was an opportunity to collect unique materials of historical value. Hence, the results show that the most comfortable format to collect during the pandemic was digital as it allowed employees to work remotely with little to no social contact.

Similarly, the National Archives of the United Kingdom, conducted a survey across England, Scotland and Wales into the impact of the pandemic (The National Archives, 2020). 203 responses were received, mostly from local authorities (36%) and higher education (19%). The main purpose was to capture a national picture of how COVID-19 was disrupting archive services in order to better plan necessary support for the sector and “to understand the reality of this sudden change to our normal ways of working” (p.1). During the first months of the pandemic most service recruitment had been paused or frozen while lockdown was in place which caused restructuring of services. Survey questions focused on funding, impact on recruitment and innovative workarounds. Most respondents (78%) expected reduced income and funding, many (67%) had their employees working from home and some (38%) were utilising social media channels to engage with their audiences. Some also mentioned their campaigns to collect content relating to the pandemic, such as diaries. Access to digitised content was available by some of the archives (10%) while a few (3%) indicated that their service had no digitised content.

4.3 Impact of the pandemic on records management

Surveys conducted in North America and Scotland likewise sought to understand, or at the very least draw attention to, the impact on records and information practices and how these practices changed in response to, or as a result of, the pandemic. A private sector survey by Iron Mountain noted the top five challenges to records and information management programmes as being: shift to remote employees; preparing for office re-entry; continued compliance with regulations; technology; and cybersecurity (Iron Mountain, n.d.). The survey results suggested that respondents intended to focus on a range of technical and social approaches to meet those challenges, including the use of Cloud-based solutions, process automation and reconsideration of existing office layouts.

The COVID-19 Impact on Recordkeeping in Scotland survey conducted by National Records of Scotland sought to capture a national picture of the pandemic's disruption to public authorities, inform plans for sector support, and understand changes to ways of working. Interestingly, over 50% of respondents considered the impact of COVID-19 arrangements on records and information management services as an opportunity to raise the profile for those services rather than perceiving the changes as a threat or challenge to their function (National Records of Scotland, 2020a). The survey found that 100% of respondents, a group largely made up of Local Authority and Health and Social Care sectors, had not yet adapted retention and disposal schedules to ensure the capture of Scotland's COVID response, thereby creating a risk of information loss and subsequent non-compliance with statutory and regulatory obligations. The rapid adoption of “new technologies, software and communications” that were not part of the “existing records management infrastructure” were seen to contribute to that risk (National Records of Scotland, 2020b).

5. Phase Two - Status

5.1 Analysis of research from outside the records management sector

Our phase one findings reveal that little impetus was placed on understanding how information professionals have been impacted in their everyday work lives. This gap in understanding has informed our comparative study. It is evident that COVID-19 altered the conduct of information management work and service provision, with many institutions implementing a range of limitations around physical access to collections with digital access, collection and communication becoming part of the “new normal”. However, this was coupled with an apparent lack of practical advice or standards being issued from archival authorities. More broadly, this suggests a cultural shift within the everyday work environments of information professionals worthy of further research.

Several surveys and research papers from outside the records management/archival sector, which have surfaced through the environmental scan, have supported our survey design process and helped us formulate some of

our questions. These non-records management-related publications focused on how various workplaces across industries had been affected by the pandemic. We identified nine references as most relevant to our research interests. These references were sourced from private to public sectors, from corporate consulting reports to national census surveys. Kniffin et al.'s article (2021) was particularly useful to frame our approach to creating the survey questions. These organisational psychologists categorise the pandemic's impact on the workplace and on workers, and list various moderating factors, thereby showing what kind of mitigating factors should be taken into consideration when assessing the impact of the pandemic on working from home.

Among the nine references identified through our environmental scan, seven incorporated the use of surveys. The Canadian Workforce of the Future survey conducted by PricewaterhouseCoopers (2020) displayed insights using data visualisations that conveyed a strong narrative of the impact of COVID-19 on the workplace. While a survey by McKinsey & Company (Lund et al., 2020) offered a comprehensive documentation of results across multiple countries, and how comparisons across variables can be meaningfully conveyed. Another survey conducted by the Boston Consulting Group focused on employee sentiments about the future of work (Dahik et al., 2020) which included questions about productivity, wellbeing and work tools used. Together, these corporate consulting surveys provide a good framework for variables to consider in the context of the impact of the pandemic on work processes. The national census surveys that we consulted provided analyses with more emphasis on social factors. For instance, the StatCan Working from Home: Productivity and Preferences Questionnaire (Mehdi and Morissette, 2021) asked about barriers to productivity one might face at home, and compared the data across many variables such as sex, age, education, occupation skill level, marital status and presence of children.

5.2 Contextualising the comparative study

Through the environmental scan detailed in phase one and a brief overview of some initiatives in the regions covered in our study, risks to compliance from information loss and newly implemented work-from-home practices can be seen to be a global concern amongst records and information professionals. For instance, in Australia, guidelines from archival authorities stressed that when working remotely, the obligations to create and manage records of all business activities remain the same and provided advice for employees to enable them to fulfil their recordkeeping responsibilities while working from home. In Iceland, the National Archives insisted on the same issues but provided limited advice (National Archives, 2020a) other than around matters such as electronic consent on municipal council minutes (National Archives, 2020b). Whilst in the Netherlands, advice on cyber risk and the responsibilities of working from home were issued soon after mandatory work-from-home directives were given (Nationaal Cyber Security Centrum, 2020). The Public Record Office of Victoria made available the most detailed advice for employees, managers and heads of departments in May 2020. The guidance showed an awareness of the risks of creating, managing and sharing information in a digital environment that may not replicate the pre-pandemic experience or tools employed for communication and information sharing (The Public Record Office Victoria, 2020). This awareness was repeated in the range of considerations Archives New Zealand suggested information professionals respond to with their practice (Archives New Zealand, 2020). Alongside these examples of high-level guidance, there was also some evidence of more granular advice responding to specific information and records systems in place and the expectations of workers to meet institutional information requirements. The University of Toronto Archives and Records Management Services (UTARMS) issued guidance considering the work environment at home, record/document tracking, email management, control of physical records, and revision of existing information procedures (McCutcheon and Klumpenhouwer, n.d.).

While some advice from authorities was evident across the regions covered by our study, there is however little to explain how that has flowed into the practice and experience of professionals in the new work-from-home reality. The ISO white paper, *Insights on Records Management Challenges While Working Remotely*, released in March 2022, reveals the ongoing need for a focus on the realities of work-from-home in COVID-19 times (ISO, 2022). We are anticipating that with phase two and further phases of our project, we will start to understand more fully how information professionals have experienced the early stages of the pandemic and what implications they envisage or have perceived through that new everyday work life. We anticipate that a range of risks, challenges and opportunities will reveal themselves.

6. Discussion

Recordkeeping is an essential part of organisational knowledge management as it enables core memory and accountability functions over time. When thinking about how to shape those qualities of authoritative evidence,

accountability and memory, we see a gap between the theoretical and conceptual approach on the one hand and the implementation of archiving functions in practice on the other. While the digital turn has long shown that the traditional view of archiving is not enough to shape and ensure authoritative information resource management, we see that the archiving practice still strongly adheres to the traditional view of records which must be properly managed as collected end products. This picture also arises from the analysis of the literature related to archiving in times of COVID-19. While the pandemic has pushed society into a digital mode on an unprecedented scale, the literature we reviewed mainly emphasised the importance of the activities of archival institutions seeking to document the unique event, rather than reflecting on the impact of 'total digitality' in work and life on the recordkeeping processes themselves and going beyond the traditional tasks of collecting, preserving and accessing the collected materials. Despite the few critical voices, such as Chakravarti (2020), it is striking that we have encountered little reflection from recordkeeping professionals, working in collecting institutions, on this form of documenting in which citizens are massively encouraged to record their experiences and observations during the pandemic. In their call for citizens to document their lives, many initiatives offered lists of questions that could serve as a "tool" to determine what kinds of issues would be worthwhile to record and preserve. It is a questionable form of institution-driven archivalization in which archival institutions affect record-making based on predefined ideas of what to document.

Although we do see some initiatives in which attention is paid to responsible archiving during working digitally from home, including the provision of guidelines and advice, the picture that emerges from the surveys analyzed in our environmental scan is that concerns of professionals are mainly related to disposal, often emphasising that the obligations to create and manage records of all business activities have not changed. At the same time, little is known about the experiences of information professionals who had to fulfil these responsibilities in their daily work. It is not only interesting to look back at how information professionals shaped their work during the pandemic, but it is very important that we gain more knowledge and insight into their experiences, because it seems that partial working from home is taking on a structural form in many organisations. Where the office used to be the centripetal centre for employees towards which information management was geared, the new office is taking on a more distributed character. This is the underlying reason for conducting a survey among information professionals in different countries. Their experiences, knowledge and insights will provide important inputs for answering the question of how authoritative information resource management could be organised in a distributed work environment. This touches on the essence of designing and organising recordkeeping processes and goes beyond the equally important but traditional aims of documenting a special period or of ensuring that documents are preserved.

7. Conclusion

The impact of the pandemic and consequent working from home arrangements for many employees worldwide is likely to have contributed to increasing reliance on digital channels to achieve organisational goals. However, this digital transformation may result in an absence of evidence, the information that documents business activities and provides accountability, which is an essential component of transparency. The archives and records community has the professional responsibility to ensure that recordkeeping occurs, and that the information is created and maintained in such a way that it can be kept for as long as required but no longer than necessary. Our research questions for this first phase were targeted at the archival authorities, aimed at finding out whether they had undertaken any investigation of the impact of the pandemic on workplaces and what kinds of guidance they had issued. Our preliminary findings suggest that the pandemic itself, and its impact on society, was the main focus of attention for archival authorities rather than how to ensure organisational recordkeeping when employees were predominantly working from home. We hope that the gaps we identified through our environmental scan help organisations develop work practices that prioritize essential recordkeeping activities and acknowledge the employees' needs. The next step in our research is to investigate the experiences of recordkeeping professionals in the Netherlands, Iceland, Italy, Canada and New Zealand via an online survey to collect baseline data, and to provide the basis for in-depth interviews.

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