Government Information Quarterly 26 (2009) 341–348

Contents lists available at ScienceDirect

Government Information Quarterly

journal homepage: www.elsevier.com/locate/govinf

Public sector readiness for digital preservation in New Zealand: The rate of adoption of an innovation in records management practices

Daniel G. Dorner

Victoria University of Wellington

ARTICLE INFO

Available online 14 January 2009

Keywords:
Digital preservation
Records management
Preservation management
Diffusion of innovations theory
Government records

ABSTRACT

Recent legislation in New Zealand has placed statutory obligations on its government organizations to introduce sound records management practices and to ensure long-term access to their digital records. To obtain a base level of knowledge on current digital preservation practices and on awareness of digital preservation issues, an online survey was conducted of the nation's government organizations in March 2006. The survey, which achieved a response rate of 42.4%, found that most organizations were knowledgeable about basic aspects of their digital resources but their awareness of digital preservation was generally low, and digital preservation activity was modest overall. To identify possible reasons for this situation, Rogers' (Diffusion of innovations. 5th ed. New York: Free Press. 2003) Diffusion of Innovations model is used to discuss digital preservation as an innovation and the level of readiness for digital preservation as the innovation's rate of adoption. The paper concludes by using Rogers' model as the basis for making recommendations aimed at helping the government's lead agencies to increase New Zealand's public sector readiness for digital preservation.

© 2008 Elsevier Inc. All rights reserved.

1. Introduction

New Zealand's public sector organizations are now creating almost all of their information in digital form. Much of this material has long-term value, for example, as organizational records that support ongoing business continuity, as primary data that enable evidence-based decision making, and as intellectual assets that embody the institution's corporate thinking. However, this material is at risk due to technological obsolescence, lack of organizational policies, insufficient resources, fragile storage media, and other threats.

The preservation activities managing these threats are characterized by a high degree of uncertainty in which much experimentation and a variety of techniques are employed by different organizations to meet their individual needs. The research described in this report identifies the level of organizational awareness of these issues and the current activities taking place in this area in order to determine the present state of readiness for digital preservation in New Zealand's public sector.

Recent legislation has given new impetus to preservation requirements for government information that has actually been in place for more than two decades. In 1982 the Official Information Act established clear requirements for New Zealand's public sector organizations to provide public access to their official information (including any information recorded or stored by means of a computer) unless there is good reason for withholding the information (Official Information Act, 1982). Recent changes to New Zealand's legislative environment provided the framework and incentive for Archives New Zealand and the National Library of New Zealand to fund this study to develop a base level of knowledge about digital preservation awareness and activities within the nation's public sector.

The Public Records Act of 2005 has mandated Archives New Zealand to be the long-term repository for the public sector's electronic records and has set out specific requirements for every public office including local government "to create and maintain full and accurate records in accordance with normal, prudent business practice" (Archives New Zealand, 2005). Furthermore, under section 17 of the Act, all public sector records must be preserved in an accessible form for future reference. A phase-in period gives government agencies until 2010 to establish sound records management practices. In that year, independent audits of agencies' records management practices will commence.

In a similar vein, the National Library Act of 2003 set out requirements for the National Library of New Zealand to manage the legal deposit of the nation's public documents in both print and electronic form. While the Act exempts public records as they are defined within the Public Records Act 2005, it includes those "public records made available to the public (for example, public records that have an ISBN or ISSN number)" (National Library Act, 2003, s. 29). This requirement means that public sector organizations must make available to the National Library any internet documents or electronic documents that have been made available to the public and have been deemed by the National Library to be presented for legal deposit.

As well as these mandates, the country's *Digital Strategy* (New Zealand, 2005) called for a national content strategy to be developed and launched by December 2006. One of the five key elements of *The New Zealand Digital Content Strategy* is "managing and preserving

0740-624X/$ – see front matter © 2008 Elsevier Inc. All rights reserved.
doi:10.1016/j.giq.2008.11.003

digital content" (New Zealand, 2006). The Content Strategy highlights the need for "well-managed government records…[as] a vital component of democratic accountability, enabling citizens to hold government to account for its actions."

This context of legislation and strategy set the stage for this research. It was conducted by a team from Victoria University of Wellington on behalf of Archives New Zealand and the National Library of New Zealand to provide a base level of knowledge from which to guide national priorities or actions related to current digital preservation issues. The data for the research was gathered via an online survey that ran from 20 March to 18 April 2006.[1]

2. The research problem

The problem addressed in this research was a gap in knowledge about the current state of readiness for digital preservation within the New Zealand public sector given recent legislation and national strategies related to digital content and their requirements for Archives New Zealand and the National Library of New Zealand. There were two main aspects to consider when addressing this problem. The first revolved around the level of awareness within public sector organizations of the issues surrounding digital preservation. Specifically, this aspect related to the level of knowledge within each public sector organization about corporate and statutory recordkeeping requirements, the need for appropriate policies, the level of corporate control of digital material, knowledge of both financial and staffing resource requirements, and the awareness of the threats to digital material. The second revolved around current organizational practices regarding the creation of digital material, short-term storage practices, and long-term depository arrangements. By integrating the knowledge of organizational awareness of digital preservation issues with current practices related to digital material within those organizations, it was possible to determine the current state of readiness for digital preservation within the New Zealand public sector.

3. Research question, objectives and sub-questions

The project team focused on answering the following broad research question in order to address both aspects of the research problem: *What is the current state of readiness for digital preservation within the New Zealand public sector?*

The primary objective of the research was to obtain a base level of knowledge on public sector awareness of key digital preservation issues and on current digital preservation practices to guide national priorities and actions. The following seven sub-questions addressed the research problem identified above and formed the basis of the survey questionnaire.

1. What are the current storage practices for digital material in public sector organizations?
2. What is the current level of organizational awareness of digital preservation in the context of corporate and statutory recordkeeping requirements?
3. What is the current state of preservation policies within public sector organizations?
4. What are the current issues surrounding effective corporate control over data management?
5. What is the current level of awareness regarding staff and funding resources for digital preservation within public sector organizations?
6. What are the current threats to digital preservation within public sector organizations?
7. What are the needs of public sector organizations in regard to future actions or national priorities for digital preservation?

4. Definition of terms

The following definitions are provided to ensure that readers understand the meanings of the key terms as used in this research project:

- *Digital preservation*: the managed activities necessary to ensure the maintenance of, and ongoing access to digital material over time, for as long as it is required for legislative or business purposes.
- *Public sector*: the core state-sector organizations as listed on the State Services Commission website at the time of the survey (State Services Commission, 2006) under the headings "Public Service Departments," "Non-Public Service Departments," "Crown Agents"—including the 21 District Health Boards, and "Crown Research Institutes." Note that in this article the term "government agencies" is used synonymously with "public sector organizations."
- *Readiness*: readiness involves two aspects: (1) the level of organizational awareness of specific digital preservation issues, and (2) the managed activities that specifically address digital preservation currently taking place within public sector organizations.

5. Literature review

During the preparation for the project, the research team found that the digital preservation literature in archives and records management focused largely on explaining or proposing technical aspects of digital preservation (e.g., see Gladney, 2004; Jantz & Giarlo, 2005). The team was unable to locate any earlier research that examined the readiness of organizations for preserving the digital records created in the course of their normal business activities. As a result, the research relied heavily on earlier research that focused on the readiness of cultural institutions for the preservation of their digital collections of heritage resources.

Over the past few years, the preservation of the digital collections in cultural heritage institutions has been the center of attention for several collaborative organizations and national bodies in the U.S. and the United Kingdom. The focus of these organizations has been to understand institutional needs for digital preservation and to develop toolkits and workshops to address specific issues (e.g., Beagrie, 2005). These issues have been identified in their research which has included several surveys relating to digital preservation readiness.

The Cornell University Library, with grant funding from the U.S. National Endowment for the Humanities (NEH), conducted seven workshops between 2003 and 2006 on digital preservation management for institutions with digital cultural heritage collections. Prior to each workshop, the participants completed an online survey "to assess their institution's readiness to develop and maintain a digital preservation program" (Kenney & Buckley, 2005). Similarly, in May 2005, the Northeast Document Conservation Center (NEDCC), with funding from the Institute of Museum and Library Services (IMLS), conducted an online survey on digital collection policies and practices as the first component of a project to develop a methodology for assessing the digital preservation readiness of cultural heritage institutions (Clareson, 2006). The findings of the survey clearly identified a serious concern—on the one hand they showed "the growing presence of digitization in libraries, archives, and museums," whereas on the other hand they identified, "a distinct lack of policy to deal with the preservation of these items once they are created" (Clareson, 2006).

In the U.K., the Digital Preservation Coalition conducted a national needs assessment survey in 2004 of its member organizations in order

[1] The full report of this research to Archives New Zealand and the National Library of New Zealand is available on the National Library of New Zealand website. (See Dorner, D.G., Liew, C.L. & Crookston, M., 2006).

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات