

PANEL DISCUSSION: HOW GREEN IS DIGITAL PRESERVATION?

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ABSTRACT

Digital preservation practitioners, for the most part, regard themselves as the custodians of our digital legacy, identifying with, and in some cases updating library and archival roles to ensure the safe long-term stewardship of digital assets. Outside of the digital preservation community, it is quite possible (or even probable) that preservation is construed as a mindset where the principal goal is to devise ways of keeping as much digital material as possible in perpetuity. It is only a short step from this assumption to arrive at the conclusion that the whole preservation enterprise is not only environmentally reckless in its ever-increasing demand for server and storage space, but more fundamentally chaotic in its aspiration to defy the capacity of digital librarians, archivists and data managers to keep the social, cultural, scientific and scholarly record well ordered and categorical.

1. INTRODUCTION

There are a number of ways that the objectives of digital preservation may be interpreted, and these match the myriad motivations of those who preserve materials, both for themselves, or more often, on behalf of various designated communities who have decided to entrust their long-term investment in digital assets to expert practitioners. In most cases, the motivations to preserve are transparent and commendable, and are borne out of a positive desire to ensure that subsequent generations have the opportunity to creatively engage with our digital legacy.

This panel is not an attempt, therefore, to brand any parties or processes as being 'anti-green'. Preservation is not primarily designed to address the environmental agenda; its principle purpose is to ensure continuity of memory. However, environmental questions can provoke emotive responses and there is a risk that if the preservation community does not rehearse effective responses to the potential charge of being uninterested in environmental issues, due to its apparent objective to keep ever larger quantities of digital material for the foreseeable future (demanding ultimately unquantifiable amounts of electrical power), the preservation and environmentalist communities are set to collide.

2. INFORMATION LIFECYCLE MANAGEMENT

One issue that the panel might have to address is where the points of engagement between preservation and green issues actually are. Broadening the scope of preservation concerns to encompass aspects of information management brings environmental issues more clearly to the fore. A recent JISC-funded study, Greening Info Management (<http://bit.ly/bz2mJL>) looks at the potential value of using information lifecycle management techniques to reduce the overall quantity of data requiring management/preservation, thereby cutting personal and organizational energy consumption. Some of the key points of this report will feature in the discussion.

3. THE PANEL

The panel brings together a variety of opinion and expertise from the US and UK.

"On the whole, we probably don't need to question the motivations to preserve, but it may be timely to think about our objectives. We need to ensure that institutional information policies and strategies are fit for purpose in the face of climate-change and other environmental imperatives." (Neil Grindley)

"It has been the experience of the Internet Archive, that if an institution does NOT address issues of power consumption, etc. there will be a much more limited volume of digital preservation and access that the institution will be able to support over time. The primary operational costs beyond labor costs are usually what you pay for the resources you consume." (Kris Carpenter)

"Digital preservation is used to the idea of managing long term risks so we should be predisposed to thinking about long term environmental risks. As well as being inherently sensible it will become more important in our attempts to influence policy. At the very least we need to be certain that our chosen solutions do not inadvertently become part of the problem." (William Kilbride)

"Holistic positions [are needed] which address the Green agenda and ensure effective stewardship of resources. There appears to be a gap between the well-established understanding of information management

per se, and its potential importance for furthering the efficiency of energy usage within the HE and FE sectors.” (Diane MacDonald)

“Current hard disk storage is becoming the major consumer of power in data centers. This is both a problem for digital preservation, and an opportunity. Technological changes in the pipeline are likely to both slow the decline in hard disk costs and increase the competitiveness of alternative storage technologies.” (David Rosenthal)

researching, writing and speaking on digital preservation for more than a decade

4. BIOGRAPHIES

Neil Grindley, JISC (the Joint Information Systems Committee), 5 Lancaster Place, London, U.K.

Neil Grindley is the Digital Preservation and Records Management Programme Manager with JISC and is responsible for a number of projects, studies, and other initiatives that raise awareness and increase the capacity of relevant communities to engage with digital preservation as part of a life-cycle management approach to the creation and exploitation of digital resources.

Kris Carpenter Negulescu, Director, Web Group, Internet Archive, San Francisco, U.S.A.

Kris leads a team responsible for: cultivating IA’s web collections and providing access to researchers and the general public; developing the Heritrix open source web crawler and Wayback machine as well as other tools used to search, mine and replay archived web content; providing expertise and services in web archiving, data mining and access to libraries, archives, museums, and memory institutions around the globe.

William Kilbride, Digital Preservation Coalition, York, U.K.

William is the Executive Director of the Digital Preservation Coalition and has a wealth of experience of coordinating cross-domain preservation and archiving initiatives in all sectors of UK activity. His work for the DPC brings him into contact with practitioners and senior decision-makers and positions the DPC as an influential body that helps to shape and refine UK preservation policy initiatives.

Diane Macdonald, University of Strathclyde, Strathclyde, U.K.

Diane is the interim Head of Innovation services at the University of Strathclyde and the lead author of the Greening Information Management Study.

David Rosenthal, LOCKSS, Stanford University, California, U.S.A.

David is Chief Scientist of the LOCKSS digital preservation program at Stanford University Libraries. He is a long-time Silicon Valley engineer who has been