

# **Evaluating and Measuring the Value, Use and Impact of Digital Collections**



# **Evaluating and Measuring the Value, Use and Impact of Digital Collections**

Edited by  
**Lorna M. Hughes**



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# Foreword

This set of chapters on digital collections fills an important gap in the professional literature of the memory institutions: libraries, museums, and archives. While much has been written of late on the evolution of digital scholarship, most analyses are written by and for scholars. These chapters are written by librarians, archivists and scholars engaged in building, assembling and digitizing content for a range of audiences, largely in the humanities. As noted in the acknowledgements, the book emerged from an expert seminar in e-research. The result is a coherent arrangement of chapters from a group of authors collaborating toward a common goal of identifying metrics for digital collections.

They survey developments, concerns, best practices and criteria for evaluation in a wide range of projects across the United Kingdom, Australia and New Zealand – where these authors currently are based – with reference to projects in the United States and elsewhere. The comparison of efforts in libraries, museums and archives, which in turn serve universities, schools, theatres and other environments, offers a rich set of case studies. A number of policy issues cut across these environments, most notably intellectual property rights and provenance.

Information professionals, managers and students alike will find much of value in this volume. The current environment of accountability is particularly problematic for the humanities. The ‘impact’ or value of collections may not be evident for years, decades, or even centuries after the origin of the materials, yet funders demand immediate economic indicators. These chapters take a balanced approach, acknowledging the trade-off in short and long term assessment of value, and to whom.

In all fields, the availability of scholarly content in digital form makes possible new research questions, methods and uses. The humanities especially have benefited from the ability to digitize historic documents, to mine large corpuses of texts, audio and images, and to assemble widely dispersed cultural objects into common repositories for comparison and analysis. Yet digitization is a means for scholarship and learning, not an end in itself. Careful assessments are required of trade-offs between usability and honesty to original form, between image quality, speed of access and cost, and between assorted other project-specific factors. Managers must identify their goals clearly to steer their way through the sea of standards that apply to digital projects. The orientation towards assessing use and users is particularly valuable, as it is often under-appreciated in digital projects.

Some of the projects represented here go well beyond scholarship, making

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historical resources useful not only for research, teaching and learning, but also for ‘enjoyment’. Would that all digital projects keep the joy of discovery at the centre of attention!

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# Acknowledgements

Many of the papers in this volume were initially developed at an Expert Seminar hosted by the Centre for e-Research at King's College London on 12 July 2010. Participants in that event presented their initial ideas for this book, and the discussions that followed shaped the content that has emerged. The participants were Sheila Anderson and Simon Tanner (King's College London), Ann Borda and Lyle Winton (University of Melbourne), Jean-Claude Guéron (University of Montreal), Andrew Prescott (University of Glasgow), Claire Hudson (the Victoria and Albert Museum), Ben Showers (Joint Information Systems Committee), Milena Dobrev (University of Strathclyde), Claire Warwick (University College London) and Monica Bulger (University of Oxford). From the discussions at that event, ideas emerged about other strands that could be included in the book, and I am grateful to Melissa Terras, Claire Ross, Vera Motyckova, David Robey, Andy O'Dwyer, Leo Konstantelos and Gillian Oliver for contributing chapters and additional material that have shaped and completed the content in this volume. I would also like to thank Marilyn Deegan, Harold Short, Andrew Green, Arwel Jones and Avril Jones for their assistance and much-valued input to the project.

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# 1

## Introduction: the value, use and impact of digital collections

*Lorna M. Hughes*

### **Background and context**

#### **The aims of this volume**

A key motivation for developing this volume was the need to address the ‘use’, ‘value’ and ‘impact’ of digital collections in the context of an expanding mass of digital content with tremendous potential. Specifically:

- How can we understand how digital collections are being used, and by whom?
- How do we assess their value, and add value over time, in order to make decisions about which collections to digitize or make available, and how?
- How do we assess their impact on scholarship, on knowledge transfer and on information management and access?
- How do we ‘measure’ value? What can be measured, and how?
- Is it possible to ensure their sustainability, value and impact over time?
- How might we apply indicators of use, value and impact to inform funding decisions and policy making for the future?

#### **The explosion of digital initiatives**

This volume of essays is, in many respects, a follow up and companion to *Digitizing Collections: strategic issues for the information manager* (Hughes, 2004).<sup>1</sup> Since its publication, digitization initiatives have continued at a tremendous pace in libraries, archives and museums, as well as in higher education. Digitization of existing library, museum and archive collections is still a major priority, where funding can still be found for these initiatives. The National Library of Wales is continuing to digitize two million pages of historic Welsh newspapers and journals in a three-year project that will conclude in 2012, with funding from the Welsh Government.<sup>2</sup> The British Library is partnering online publisher Brightsolid to digitize up to 40 million pages of newspapers. In the USA, the Smithsonian Institute has a remit to digitize its entire collection: a challenge considering that the Smithsonian is home to 137 million objects, 100,000 cubic feet of archival material and 1.8 million library volumes.<sup>3</sup> In the UK, the Joint Information Systems Committee (JISC) has launched a new phase of digitization via its e-Content programme, for projects that will be completed in 2012. This is the era of Google, and mass digitization initiatives to put our cultural heritage online are flourishing. This has been described as a ‘data deluge’ (Hey and Trefethen, 2005), and it has a huge impact on scholarship, teaching and public engagement.

## Digitization in an economic downturn

This is an auspicious time to take stock of this mass of digital content, and consider its impact, value and use. The global economic decline that began in 2007 has led to serious cuts in funding for almost all humanities and cultural heritage initiatives, including the development of, and support for, digital collections. In the arts, humanities and cultural heritage world, especially in the UK, the threats to funding have become a reality, with the closure of the Museums, Libraries and Archives Council (MLA), cuts to the Arts Council, and to Research Council funding overall. In the USA, there have been calls to withdraw federal funding from the National Endowment for the Humanities.<sup>4</sup> This economic 'austerity' has created significant institutional and societal pressures on cultural heritage and higher education organizations.

Partly as a consequence of the reduction in funding, we have seen a sharper emphasis on the need to demonstrate the 'impact' of publicly funded resources and research, as a means of quantifying the value of the investment in their creation. Research councils and funding agencies, notably the Arts and Humanities Research Council (AHRC) in the UK, have placed an increasing emphasis on 'impact' and 'evidence of value' of all research that they fund (AHRC, 2006) for several years. This focus on understanding the 'evidence of value and impact' of digital research and collections in the arts and humanities was one of the reasons that AHRC ICT Methods Network was funded from 2005 to 2008. This was a national organization that provided a forum for the exchange and dissemination of expertise in the use of information and communication technologies (ICTs) for arts and humanities research. In its final evaluation report, the Methods Network was able to provide a considerable body of evidence that there was indeed 'evidence of value' of the use of digital collections for scholarship and research in the arts and humanities:

The new research that has been enabled by ICT . . . has depended upon the development of new kinds of resources, such as large corpora in literary, linguistic, musicological, and television and film studies domains, the digitization and digital-encoded representation of materials in classics, history, literature and history of art, and the creation of databases in archaeology and the performing arts. This recognition that the future generations of scholarship in the arts and humanities will depend upon the accessibility of a vast array of digital resources in digital form is becoming more widespread. (Hockey and Ross, 2008)

Since then, the Browne review (Browne, 2010) has called for evidence of the 'value' of the arts and humanities to society, and there is increasing pressure for scholarly research to demonstrate economic and social impact, despite the fact that the 'economic benefit of the arts and humanities' is a topic for which there is little hard evidence at this time. Nonetheless, the AHRC has produced two publications that set out the arguments for the 'value' of the arts and humanities, in the recent publication edited by Jonathan Bate, *The Public Value of the Humanities* (Bate, 2010) and in the AHRC report *Leading the World: the economic impact of UK arts and humanities research* (AHRC, 2009). A noteworthy web-based initiative, 4Humanities (<http://humanistica.ualberta.ca>), organized by leading digital humanities scholars, has also been set up as an advocacy organization for the value of digital collections and methods in the humanities.

## The need for open and useable digital collections

Another recent development that provides part of the background to this volume is the increasing focus on the value and use of ‘open’ scholarly resources for research. While publicly funded research outputs are intended to be freely available (even if this is not always the case, and as Robey discusses in this volume, the demise of the Arts and Humanities Data Service in the UK in 2008 has made it harder for publicly funded resources to be used and sustained), digitization that has been funded by commercial entities is frequently subject to licensing and use restrictions. Notably, in the UK the digitization and redistribution of the census materials and similar ‘name rich’ resources has been made possible by commercial entities including Ancestry.com and Find My Past.

While these efforts have digitized and made available an enormous range of primary source materials, there is some concern that resources that are not ‘open’ are less valuable for scholarship. This is of particular concern, as the availability of large-scale, distributed collections allows new approaches to scholarship in a number of disciplinary areas.<sup>5</sup> The idea of taking a ‘big picture’ approach to historical and cultural issues, working with large-scale data across disciplines, is gaining ground in scholarly enquiry once more. This is the type of research highlighted in the American Council of Learned Societies report, emphasizing the opportunities ‘to reintegrate the cultural record, connecting its disparate parts and making the resulting whole available to one and all, over the network’ (ACLS, 2006). Underpinning this re-integration, of course, is the principle of freely available and open data for aggregation, use and reuse: ‘the full range of online content needs to be made available to all, quickly, easily and in a form appropriate to individuals needs’ (JISC Strategic Content Alliance, 2010).

Some organizations have made the principle of providing freely available digital content where possible (see Prescott’s discussion of the National Library of Wales in this volume), but this is not always possible, especially in the current economic climate. There are various approaches: can data be chargeable for a time to recover the costs in making it? Under what conditions can cultural heritage content be monetized? This volume is not about business models for digital content, but there is an implicit understanding that ‘price’ and ‘value’ could become interconnected – people may have to pay for valuable resources. There are also issues related to sustainability – the digital content must be sustained as long as charging models are in place – which adds to their cost. In a related development, commercial entities have raised concerns about digitization of out of copyright materials in libraries (Sabbagh, 2010). However, these discussions lack the evidence of the actual economic ‘value’ of digital resources, and work is under way to address this balance, developing a ‘deeper understanding of the social and economic impact of digitization’ (Hargreaves, 2011).

## The cost of digital creativity

While the economic data is incomplete – and this volume is not a quantitative analysis of business models for digitization – one thing that is very clear is that digital collections are expensive to develop, manage and sustain over the long term. This has been