

information and its related technologies), to support teaching, learning, and the advancement of knowledge, to provide economic benefits (in the global economy, knowledge and networks feed the fire of innovation and economic growth), and to preserve the intellectual and cultural assets for future generations. By incorporating these areas into their framework, digital library managers should be able to describe their roles to external audiences such as funding bodies, in making priorities and improving service to their communities, and finally in defining desired outcomes and assessing the libraries in terms of their community impact. Chapters 7 and 8, “Digital Libraries and Their Communities” and “The Prospects of Open Access Repositories,” expand on the work begun in chapter six by looking at why some digital libraries continue to succeed while others fail, and focuses on the potential of digital library repositories to have a positive impact on scholarship and increase their social and economic value.

The last two chapters examine potential paths digital libraries can follow through the maze that is the social web. Chapter 9, “Digital Libraries and the Social Web: Scholarship,” examines how digital libraries can promote the importance of scholars’ work, and increase their avenues for collaboration. Finally, chapter 10, “Digital Libraries and the Social Web: Collections and Platforms,” expands on chapter 9 to examine the transition of collections to platforms that fit well with users’ expectations for finding information, reusing data for their own needs, inviting collaboration, and generally working and playing on the web. One possibility is through crowdsourcing to leverage user strengths and encourage their support of digital libraries’ future existence.

The book should be experienced in the digital realm, rather than under the limitations imposed by the physical (read “analog”) world. While it can be

read from cover to cover, each chapter contains what could be considered hyperlinks that pinball the reader from like concept to like concept, no matter their physical relativity to each other within the book. This reviewer would not be surprised if future editions of this book will come to market as a digital download or permanent web link.

Another quote from the back cover, by Lorcan Dempsey, Vice President, OCLC Research and Chief Strategist, states that “this book provides an overview of the digital turn in libraries,” and “fills a clear gap in the library literature.” After reading *Exploring Digital Libraries*, the reviewer would have to agree. The book covers a plethora of topics about digital libraries within its 300-plus pages, while not overwhelming the reader in the process. The one complaint that this reviewer has is that the book is indeed an overview of the field, and some areas (such as streaming media) are skimmed over due to time and space constraints. This book is definitely recommended to library science students and educators, and those libraries trying to understand the digital world in which they now find themselves.—*Robert Freeborn (rbf6@psu.edu), Pennsylvania State University, University Park, Pennsylvania*

Delivering Research Data Management Services: Fundamentals of Good Practice. Edited by Graham Pryor, Sarah Jones, and Angus Whyte. London: Facet, 2014. 242 p. \$99.95 softcover (ISBN 978-1-85604-933-7).

Delivering Research Data Management Services proposes to build awareness of the need for a research data management (RDM) service infrastructure and explain how to set up such a service (including technological and human resources as well as securing institutional support). It accomplishes this through five chapters authored individually by the three editors, all currently or formerly affiliated with the United Kingdom’s (UK)

Digital Curation Centre (DCC). It discusses three case studies from institutions that have successfully launched RDM services in the United States, UK, and Australia; and two case studies from national programs in the UK. The book provides in-depth information about high-level considerations for RDM services; it does not provide instruction in best practices for managing data. An earlier publication by the same lead editor, *Managing Research Data*, may prove more useful for those seeking best practices information.¹ Since this book demonstrates the value in planning ahead through advocacy and capacity-building before tackling the preservation and provision of access to research data, it may be a good first read.

The authors have extensive knowledge of and experience on this subject, yet write clearly enough for novices to comprehend. However, readers need to have a high tolerance for acronyms, since every agency, service, and tool seems to have one. Each chapter provides enough context to stand on its own, but this reviewer would have preferred that the book had been more tightly edited to facilitate cohesion across chapters. For instance, the authors recommend that Case Study 5 (chapter 10) be read in conjunction with chapter 5, begging the question of why Case Study 5 was not positioned as Case Study 1 (chapter 6). Such sequencing would have naturally achieved the authors’ suggestion.

The book lacks a concluding chapter summing up the best practices, but it is left to readers to draw their own conclusions based on their institutional settings. Indeed, institutions in the UK seem to have an advantage in terms of governmental funding and shared infrastructure. In contrast, US institutions must either step up advocacy and coordination efforts at a national level or find smaller-scale solutions to the challenge of research data management. Examples of US universities’ current and emerging practices

relating to RDM services can be found in the Association of Research Libraries' *SPEC Kit 334: Research Data Management Services*.²

We can learn much from our UK counterparts and their advancements. Many of the institutions cited in this book developed RDM services incrementally, starting with pilot projects and repurposing existing resources while advocating for the allocation of additional resources. Several authors advised including the costs and risks of doing nothing in that advocacy. In chapter 5, "The Range and Components of RDM Infrastructure and Services," Sarah Jones describes "DUDs," or "Data centers Under Desks," created by research groups attempting to do their own data management at low cost. She notes, "However, while the upfront costs may be only a fraction of those quoted by central services, the risk of data loss and security breaches are significantly higher, potentially leading to far greater costs in the long run" (98). Pryor (chapter 2), and Hodson and Malloy (chapter 10) concur that data management increases efficiency while reducing the risk of data loss, necessitating the recreation of data or the loss of grant income, and leads to more successful grant proposals. A recent report on *The Value and Impact of Data Sharing and Curation: A Synthesis of Three Recent Studies of UK Research Data Centres* asserts that the return on investment in RDM services is high;³ at a mere twenty-six pages, it may be a more helpful advocacy piece on this topic than the anecdotal evidence scattered throughout the current considerably lengthier book.

Still, one would have to read many such focused reports and individual articles to achieve the depth of knowledge and advice contained within *Delivering Research Data Management Services*, provided readers are willing to invest the time in sorting out the universally applicable from the particular. Practical advice includes Jones'

recommendations in chapter 5 to map an RDM strategy to the institution's mission statement, which she finds to be more persuasive even than funding mandates, and to propose different levels of service provision to ensure that administrators choose from among a range of options rather than reject the more expensive options and therefore avoid taking any action. Jones further recommended focusing RDM policy on high-level principles rather than specifics that may evolve, since ratification by university governing bodies will be required. Whyte describes a daunting array of methods for discovering and changing data management norms in chapter 4, "A Pathway to Sustainable Research Data Services: From Scoping to Sustainability," including case studies, data curation profiles, and online surveys such as Data Asset Framework (DAF) and Collaborative Assessment of Research Data Infrastructure and Objectives (CARDIO).

Throughout the book, the authors stress the importance of metadata and persistent identifiers for discovery, deposit agreements, training for researchers, especially those in graduate degree programs whose workflows are still under development, and collaboration among librarians, information technologists, research administration offices, university administrators, and the researchers themselves. Choudhury's case study from Johns Hopkins University—the only US institution featured in the book—emphasizes that, beyond merely establishing RDM services, we need to change the culture associated with data sharing, access, and preservation. This book could be a good starting point for doing just that.—*Rachel I. Howard* (rachel.howard@louisville.edu), *University of Louisville, Louisville, Kentucky*.

References

1. Graham Pryor, *Managing Research Data* (London: Facet, 2012).
2. David Fearon et al., *SPEC Kit 334: Research Data Management Services* (Washington, DC: Association of Research Libraries, July 2013), accessed April 14, 2014, <http://publications.arl.org/Research-Data-Management-Services-SPEC-Kit-334>.
3. Neil Beagrie and John Houghton, *The Value and Impact of Data Sharing and Curation: A Synthesis of Three Recent Studies of UK Research Data Centres* (London: Jisc, 2014), accessed July 29, 2014, http://repository.jisc.ac.uk/5568/1/iDF308_-_Digital_Infrastructure_Directions_Report%2C_Jan14_v1-04.pdf.

The RDA Workbook: Learning the Basics of Resource Description and Access. Edited by Margaret Mering. Santa Barbara, CA: Libraries Unlimited, 2014. 190 p. \$55 paperback (ISBN 978-1-61069-489-6)

With the implementation of *RDA: Resource Description and Access* in 2013, catalogers have been faced with the task of learning a new set of rules and guidelines that is complex and unfinished.¹ To aid in this effort, several experts have written books dedicated to explaining RDA, clarifying the rules, and interpreting them effectively. However, there have been very few works that both make a concerted effort to guide catalogers to a clear understanding of the rules and the underlying theory, and that offer practical steps in creating RDA records. With *The RDA Workbook*, Mering and her colleagues have taken the first steps toward rectifying this deficiency, albeit in a very general way.

The book begins as any work on RDA should, with an explanation of the Functional Requirements for Bibliographic Records (FRBR). This explanation, written by Melissa Moll, takes the wise step of first explaining the *Statement of International Cataloguing Principles* (ICP) and how FRBR, and its implementation in RDA, conforms to these principles.² By doing this, Moll removes FRBR