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Building Digital Libraries

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of the Catalog and Its Integration With Other Discovery Tools, report to the Library of Congress (2006), www.loc.gov/catdir/calhoun-report-final.pdf (accessed Apr. 5, 2009).

Building Digital Libraries: A How-To-Do-It Manual. By Terry Reese Jr. and Kyle Banerjee. New York: Neal-Schuman, 2008. \$75.00 softcover (ISBN 978-1-55570-617-3). How-To-Do-It Manuals 153.

Building Digital Libraries: A How-To-Do-It Manual is a departure from other literature dealing with local digital repository building, which has been written primarily with archivists' interests in mind. The aim of *Building Digital Libraries* is to appeal to the "full range of librarians involved in digital projects: systems librarians, project managers, and students, many of whom will find themselves starting, updating, or maintaining digital collections in years to come" (xiii).

Terry Reese, head of the Digital Production Unit at Oregon State University Libraries and creator of MarcEdit, and Kyle Banerjee, manager of the Digital Services Program at Orbis Cascade Alliance in Eugene, Oregon, and a designer of Oregon State's electronic documents repository, draw on their vast experience to present a concise, detailed, and accessible manual that addresses the fundamental principles of digital librarianship and provides practical information about how to build a scalable digital repository.

Throughout the book, readers are reminded that digital libraries are still in their infancy. Like any new archives, a sustainable digital repository depends on adequate funding, realistic collection development policies, and well-conceived workflows. Yet, as the authors point out, "The issues associated with increasingly common interactive information resources are more complex by orders of magnitude"

(7). Digital library tools and methods cannot yet be considered stable. Processing and access mechanisms are still new. It is difficult to describe and store varied digital objects in a way that makes them easy to find and use. With so many emerging technologies and standards, it is a wonder that this how-to manual provides such sound guidance, but it does.

Each chapter focuses on a step in the library-building process. Early sections provide broad overviews of start-up considerations and fundamentals of images and text processing, rights management, and data migration. Chapter 3, "Choosing a Repository Architecture," provides a useful assessment of the leading digital repository platforms and outlines the required and desired architectural features for any digital repository infrastructure. The content gets progressively more technical as the authors examine useful general-purpose technologies, such as Extensible Markup Language (XML), Simple Object Access Protocol (SOAP), metadata formats and harvesting, and federated searching.

To help those unfamiliar with XML understand how and why it is used in digital libraries, ample examples of XML display are shown along with an explanation of the various technologies that sprang from the XML specification (XPath, XSLT, XPointer, etc.). The authors' five-point treatise on why libraries should adopt this way of managing bibliographic description is well stated and worth sharing with those unconvinced of XML's many advantages.

The authors rightly situate metadata—and the ability to share it—at the hub of a successful digital repository. Being able to bring the desired information object to the surface is crucial to success. They cover the history, strengths, and challenges of metadata standards, such as Dublin

Core, Metadata Object Description Schema (MODS), Metadata Encoding and Transmission Standard (METS), as well as efforts to enable the interoperability of data across the Semantic Web.

Demand only continues to grow for access to local repository content outside the traditional user interface, and the authors provide instruction on many of the technologies that make that possible. Beyond a relatively detailed explanation of Open Archives Imitative Protocol for Metadata Harvesting (OAI-PMH), chapter 6 provides an overview of microformats, a relatively new phenomenon in digital computing that enables better structured Web publishing.

Conceptual aspects of building digital libraries and technical details of the book are, for the most part, equally weighed, but the emphasis is squarely on the technologies that enable a dynamic repository. Readers looking for collection policy guidance, sample copyright clearance, or production workflows will not find them here. The need for good workflows and sound collection and copyright policies is endorsed, but not explored.

Building Digital Libraries is a desk reference for those directly involved in building digital libraries as well as a robust introduction for any library worker interested in the concepts and technologies that enable digital libraries to function. As the authors aptly point out, "It is not necessary to learn the technical details of the myriad of technologies that libraries depend on. However, it is essential to understand the purpose, advantages, and major limitations of technologies to get the most benefit from them" (263).—Nicole Saylor (nicole-saylor@uiowa.edu), University of Iowa, Iowa City.