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collections, while preserving the resources necessary to support various stakeholders with varying needs. Similarly, library directors must grapple with the challenge of restructuring academic space to best accommodate shifting needs for study and research space. Finally, library directors are compelled to devote scarce temporal and financial resources to marketing the library and its centrality to the academic institution. All of these demands create the need for additional entrepreneurial skills on the part of library leaders. Last, the book concludes with another coauthored essay, "Marriage between Participatory Leadership and Action Research to Advocate Benefits Equality for Lesbian, Gay, Bisexual, and Transgendered People: An Extended Human Rights Role for Library and Information Science." Authors Bharat Mehra and Donna Braquet draw attention to the fundamental role of library leaders in orchestrating change and increasing diversity within their institutions. Moreover, they encourage library leaders to actively advocate for human rights and social justice by employing research-based evidence to support proposals that advance social justice. They also suggest that library leaders must become actively involved in political decision making and administrative policy development. Academic library leaders must encourage participation within their libraries, and they must also recognize that, in the end, action is necessary to generate optimal change.

Ultimately, *Leadership in Academic Libraries Today: Connecting Theory to Practice* is a valuable tool for extant and aspiring leaders of academic libraries. It is an ambitious book in that it covers a broad area: from theory to practice to strategies for systemic institutional and professional change. Nonetheless, breadth does not preclude the depth of the individual chapter essays, all of which provide significant contributions to the library management literature. In addition, each chapter includes a salient "References" section that can guide an interested reader to an even larger body of relevant literature. In the end, leaders of academic libraries would be remiss to overlook this book. It offers something of significance to every reader. Most important, it shares a critical vision that can guide us to a more equitable, efficacious future.—*Lynne F. Maxwell, West Virginia University College of Law.*

Dania Bilal. Library Automation: Core Concepts and Practical Systems Analysis, Third Edi-

tion. Santa Barbara: Libraries Unlimited, 2014. 279p. \$55.00 (ISBN 978-1-59158-922-8). In her book, *Library Automation: Core Concepts and Practical Systems Analysis, Third Edition*, Bilal discusses at length integrated library systems (ILS), provides an overview of the Library Automation Lifecycle (LALC), and emphasizes throughout the fact that technology changes rapidly. As a result of technological change, libraries will always be involved in some kind of ILS implementation project. The book is specifically designed for MLIS graduate students, educators, and researchers interested in library automation and ILSs, yet the author also created a valuable resource that any type of library can use as a reference.

In the first chapter, Bilal provides a short description of hardware and software components and characteristics of an ILS, including purpose, environment, interfaces, and constraints. The author also discusses proprietary and open source ILS software, modules, and functions. Bilal mentions the idea that the discovery interface delivers a Web 2.0 experience by delivering multiple resources in one search, as well as social tagging and the ability for users to generate their own content about the materials within new ILSs. The shift from traditional ILS to cloud-based library service platforms is also discussed.

Most of the rest of the chapters describe the phases of a LALC project. The second chapter covers the planning process within the framework of the LALC. Bilal describes the first phase, system identification and planning, and its tasks, such as researching

existing technologies and advancements (of which the author provides recommendations), and outlining responsibilities of the project manager. She provides examples of worksheets for estimating projected tangible costs of a project. Assessing potential risks, as with every new project, is also an important part of this phase.

In chapter 3, Bilal covers the second phase of the LALC, gathering user requirements. She describes characteristics of gathering user requirements, methods for collecting essential data, and outcomes of gathering user requirements. Methods for information gathering that she includes are interviews, surveys, observations, and qualitative and quantitative methods. Bilal provides valuable information in regard to conducting information gathering, especially in regard to the various interviewing methods. She also breaks down data-gathering methods, outcomes, and tasks into an easy-to-reference table.

Chapter 4 covers the third phase of LALC, structuring user requirements and selecting a system. Bilal discusses analyzing acquired user requirements and examines sources for identifying ILS software. Creating a request for proposal (RFP) document and discussing the advantages and disadvantages of creating such a document takes up a good portion of this chapter, and with good reason: it is a massive undertaking and, once started, needs to meet the needs of the client and the vendor. Bilal describes what is needed in an RFP very clearly. The appendix has an excellent example of an RFP and illustrates quite well each of the steps Bilal outlines. She also discusses a selection of ILS products in this chapter.

Phase IV is split into two chapters. Chapter 5 covers the first part of system implementation, preparing the collection for the ILS. This involves weeding the collection, collection inventory, shelf list analysis, retrospective conversion, cost analysis, ensuring compatibility with bibliographic standards, barcoding the collection, and more. She provides a list of outsourcing options if libraries want to go that route. Chapter 6 describes the second part of phase IV, which entails more on system implementation aspects of the project. These include methods of installing the new ILS, testing a proprietary or open source system, and configuring the ILS, reminding the reader that each library needs to customize its ILS to reflect its institution's branding. There is also discussion on importing data into the new ILS as well as getting cataloguing and MARC 21 data transferred into new ILS, hardware and ILS documentation, maintenance, and support. Bilal includes a useful list of security systems vendors. The topic of staff and patron training on using the new ILS is also an essential step in this phase.

In chapter 7, Bilal describes software, hardware, and network architectures used in libraries and the advantages and disadvantages of each. The author includes on-site software and hardware hosting, cloud software and hardware hosting, software-asa-service, single-tenant software hosting, and remote software hosting. Particularly interesting is her inclusion of advantages and disadvantages of cloud computing, as well as the section on network protocols, topologies, and standards.

Bilal discusses system migration and outlines reasons and processes for migration, and she lists tasks for the completion of in-house data migration in the eighth chapter. She also mentions outsourcing as an option. Bilal carefully points out essential elements that the ILS project team needs to be mindful of during the migration process, such as data cleanup and system requirements. Data and understanding schemas and scripts are central to this phase, and Bilal recommends reviewing current literature on library automation, looking at the automation software packages, and reading case studies on how other institutions have handled the ILS migration process. Why start at ground zero when other institutions have probably already made the move and have been kind enough to pass on their processes? Something key that she mentions, especially as libraries adopt new technologies and systems, is that library automation is a constant endeavor.

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In chapter 9, the final phase of LALC, she discusses usability assessment methods for evaluating the organization's and library's websites, and the discovery interface. The focus on this chapter is primarily the user. Bilal describes various user groups, system attributes, and task attributes, and also discusses the importance of collecting data about users and information-seeking behavior, citing names that should be familiar to library students and professionals, such as Carol Kuhlthau and Donald Normand. The final chapter includes discussion of the dynamic nature of library automation in the rapidly changing computing and information technologies environment. Bilal also adds to the discussion regarding the shift of physical collections to more electronic content and collections. The increase in next-generation automation systems, advancements in computer technologies, and various other topics are also at the heart of this chapter.

Bilal has an extensive background in the material. She earned her doctorate in library and information from Florida State University and is professor of information sciences at the School of Information Sciences, College of Communication and Information at the University of Tennessee. She is well versed in information systems design and implementation, human-computer interaction, research methods, and mining the web, and teaches on these subjects. She has written extensively on user information behavior, interaction with information systems, system usability assessment, and interface design from the users' perspectives.

Bilal provides a thorough and excellent example of what libraries should put together from phase I. With the inclusion of the appendix, various lists and tables, and focus on developing technologies in regard to ILS changes, this book can provide any library with guidelines and tasks to follow to ensure its system is up and running. Since she provides information for small, special, and large libraries, Bilal has created an all-inclusive resource. The author also discusses proprietary and open source software, as well as cloud services. The only drawback to this book is the in-text citations with the full link to a site, which could be distracting to the reader. It is possible this is better for the e-book, although less so for the print version. It may have been better to include the in-citation link in terms of a superscripted number. At the end of each chapter, she includes references and websites, which may be quite helpful to anyone wanting more information on what is discussed in each chapter. Also included in the book are a comprehensive glossary of terms and a decent and well-organized index of terms.—*Lizzy Walker, Wichita State University*.