Chapter 3
Automation and Collection Management: A Short History and Recent Trends

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ABSTRACT

The history of library automation can be traced to early printing methods of the 7th century A.D. The earliest collectors of books were usually religious scholars who amassed the religious texts of the day. Monks from East and West travelled great distances and often at great peril to gather meticulously hand-copied texts. Early inventions of woodblocks, and, later the printing press, enabled the mass-production of books that resulted in libraries’ expansion into the secular world. Librarians have continued to bring technological advances into their work, combining web services, programming scripts, and commercial databases and software in innovative ways. The processes of selection, deselection, and assessment have been enhanced through these new products and services. The authors discuss a variety of technological applications for collection activities that have allowed collection managers to work more efficiently and better understand the use of their print and electronic collections. The effects of automation on the people involved in collection management are also explored.

INTRODUCTION

This chapter discusses the automation of collection management. Historically, the availability and diversification of materials along with new developments in technology have ushered in improvements in library collection maintenance. Libraries have successfully transitioned from tending small collections of manuscripts to managing the multi-format, multi-location, electronically available, and even occasionally preserved only for the purposes of being accessed at the point of catastrophe with our technological infrastructure collection. The decisions collection managers must make today have never been more complex.
The rise of the electronic resource has introduced new challenges for librarians working on collection management tasks with all formats of resources. These challenges are met with open source and vendor systems that can bring together data across sources. New metrics have been created to analyze the value of publications. Patron-driven acquisitions introduces the concept of “just in time” as opposed to the traditional “just in case” method of selection. The preservation of millions of print materials in digital format by entities such as HathiTrust can potentially change the answer to fundamental questions about our collections.

Even given everything that technology can do for assisting with collection management, the decisions that must be made daily regarding our libraries are still made by librarians. Conversations with faculty, input from our users, online chat interactions with students, and the specialized subject knowledge required of our profession are still an integral part of how the business of collection management is done in the 21st century.

This chapter discusses how advances in technology have changed the selection, deselection, and assessment of library materials. It describes existing technologies for each of these areas of collection management. Finally, it examines the continued need for human involvement in this traditional area of librarianship.

BACKGROUND

When it comes to library collections, practitioners refer to associated professional duties and methodologies as collection management or collection development. Hazen (1991) takes up the difference between collection management and collection development, stating that the newer, preferred term of collection management “subsumes collection development…but it also encompasses preservation” (p. 291). Collection development, on the other hand, consists of policy formation, selection, and acquisition. Roughly a decade later in a classic library and information science textbook, Evans (2000) prefers the term collection development and postulates its six components, all of which operate in a “constant cycle”: selection policies, selection, acquisition, deselection, evaluation, and community analysis (p. 16). More recently, Gregory (2011) says that collection development represents a “subpart of collection management that has primarily to do with decisions that will ultimately result in the acquisitions of materials” (p. xiv). Conversely, the umbrella term collection management focuses on “information gathering, communication, coordination, policy formation, evaluation, and planning that results in decisions about acquisitions, retention, and provision of access to information sources” (p. xiv).

All three authors referred to earlier explicitly mention how technology drives change, both within libraries and within the practice of collection management (Gregory, 2011; Evans, 2000; Hazen, 2011). In the Springer Handbook of Automation, Kaplan concludes that libraries are “witnessing the opening wedge in the dissolution of the ILS into a series of independent modules that communicate with each other by means of Web 2.0 services,” and that the “future will be one of distinct functional modules that communicate with one another by exploiting the concept of unified resource management” (p. 1296). While a great deal of the literature focuses on the impact of automation on collection management since the 1960s until the present day, Broadus (1991) points out that “the spread of printing” was the catalyst behind collection developments’ shift toward “selectivity” after centuries when the “major challenge to those in charge of libraries was to find things to collect” (p.5).

Collection assessment, powered by automation and standardization, figures prominently in the last five years of collection management literature, particularly for making decisions regarding selection and deselection of monographs, databases, and journal subscriptions. Wilde & Level (2011), in naming resources used to make
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