Research Libraries’ Costs of Doing Business (and Strategies for Avoiding Them)

W ith today’s relatively flat budgets, research libraries are finding their buying power further diminished by the hyperinflationary costs of library materials. Yet technology innovation, coupled with organizational restructuring, is enabling libraries not only to provide more high-quality information services but also to achieve unparalleled efficiencies in the way they do business. Money from the costs avoided is being invested in new collections and services. For example, we estimate that through their close collaboration, the eleven university libraries of the University of California (UC) annually achieve a 30 percent efficiency by avoiding at least $80 million in costs on a total combined budget of approximately $240 million.1

Research libraries are also forced to deal with information in a growing number of digital formats. Can a research library with historic collection strengths in Nordic studies and U.S. state and federal government information, for example, continue to stake claims to preeminence without keeping its collections current and thus tackling the Nordic Web and the 65 percent of government publications that are currently produced exclusively in electronic form? The answer is no. Unless the library wants to become a book museum, it requires information stewardship skills and technologies that are probably not understood, let alone available.

How long this strategy will continue to succeed depends on what further efficiencies libraries can find and on what new pressures are placed on their budgets. Looking forward, I find it hard to be optimistic:

- The cost of library materials continues to rise. Between 1986 and 2002, the price of scholarly journals grew 257 percent; the consumer price index increased only 57 percent during the same period.2 In 2002, research libraries spent one-third of their collection budgets on roughly the same number of journal titles that they had acquired in 1986. Given the growth in the number of available titles, libraries today spend ever more on a declining portion of the world’s scholarly journal literature. The cynic might say that the lion’s share of the costs that libraries have avoided in this period is being channeled into the journal publishers’ coffers.

- The penetration of the Internet into all aspects of everyday life creates other pressures. Library users’ expectations for online information services rise continuously and are shaped by the instant gratification these users get from America Online, Amazon.com, and Google. Such services are not trivial to develop, let alone maintain. Implementing them within a research library can stretch the library beyond capacity. According to a 2002 survey of the Digital Library Federation’s members, the average digital library at that time had between six and ten full-time staff.3

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Data collected recently by UC libraries suggest that where information is available in both print and digital formats, faculty and students prefer digital by an order of magnitude.4 This preference coincides with a reticence to give up on print altogether, however, since online journals are not always complete and sometimes provide inadequate image resolution. Given these evolving preferences, libraries can reduce expenditure on those materials that exist in two formats. Leveraging their consortial approach to journal licensing, for example, the UC libraries have acquired a single print copy of online journal titles supplied by selected publishers. Trust in the continued existence of the archive and in its availability to scholars who need it has enabled the libraries to cancel redundant print subscriptions. In 2004, the libraries saved $1.8 million on print subscriptions for Elsevier journals alone.

Cost avoidance on an even greater scale is available for legacy print holdings that are accessible online. JSTOR comprises online back-runs for some 400 scholarly journals. The UC libraries possess, on average, seven copies for each of the 23,000 volumes in the JSTOR collection. A single print archive could be assembled from the UC libraries’ current holdings for around $550,000. By eliminating their duplicate copies, the libraries could then save up to $53 million a year in the capital cost of shelving.

Such economies can be achieved with only some print materials, for example:

- Serial publications available in both print and digital formats
- New monographs that can be acquired
in a coordinated fashion to support specialist needs, for example with foreign language materials.

Still, these economies are available and will be significant. To achieve them, research libraries will have to re-engineer their technology infrastructure. Despite the wealth of bibliographic services available, none provide the detailed holdings information necessary to compile comprehensive print archives from existing serial collections. The coordinated acquisition of new materials, in the meantime, requires a service through which campus librarians can disclose, and work collectively to fulfill, shared acquisitions needs. While requiring essentially new platforms, these services will also have to interoperate seamlessly with existing ones, notably union- and campus-based online catalogs, to take advantage of their rich bibliographic data. In this regard, they both anticipate and require the development of highly distributed networked environments, where locally managed curatorial applications (e.g., ones that enable librarians to select, document, and manage access to digital information assets) can be layered on top of centrally managed utilities (e.g., ones that ensure the integrity of bits without regard to how they are acquired or how they may be used in the future or to whom they may belong).

By building selected print collections in a shared manner and by putting in place utilities that support the cost-effective development of local digital library services, the UC libraries seek to avoid costs amounting to another $30–$50 million a year. Will such savings support all of the new demands that are being made of libraries? If the money is simply eaten away by unmitigated steep increases in the price of library materials, the answer is no. Changing the unsustainable economics of scholarly publishing remains a key to the future of research libraries—indeed, to the continued ability of colleges and universities to provide faculty and researchers with the access they need to the world’s scholarly knowledge.

The same service model is being used to develop a digital archival repository. Research libraries must begin to act as stewards of electronic scholarly and cultural heritage lest it be lost to the academy and society at large. Yet not every research library should have to bear the cost of building the necessary infrastructure. At UC, the libraries are building a single, common digital preservation infrastructure. The CDL will use it to manage digital assets acquired on a systemwide basis. Campus libraries will use it to manage digital assets in which they take a unique local interest. The model enables the libraries to cost-effectively meet what is perhaps the greatest challenge they will confront in the coming decade. It also makes sense in an extensively distributed networked environment, where locally managed curatorial applications (e.g., ones that enable librarians to select, document, and manage access to digital information assets) can be layered on top of centrally managed utilities (e.g., ones that ensure the integrity of bits without regard to how they are acquired or how they may be used in the future or to whom they may belong).

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