
The Metamorphosis of the Information Resources Budget

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ABSTRACT

THE MAJOR DISCRETIONARY AREA of any library's fiscal resources is the information resources budget. The fiscal crisis occurring in higher education over the past five years has led many research and academic libraries to spend large amounts of time bemoaning the fact that they are expected to do more with less. However, academic librarians must remember that change is occurring in all segments of society, technological advancements are continuing at a faster rate than anyone had thought, and the expectations of higher education are increasingly demanding. Academic libraries must adapt accordingly. Jerry Campbell (1989) once remarked that, "the budgets of academic libraries are rooted in the past" (p. 77). This position is no longer acceptable. Since the information resources budget is the major discretionary area of a library's fiscal resources, the academic libraries must find cost-effective ways to achieve library goals through more efficient managing of this portion of the library's budget.

INTRODUCTION

The information resources budget has undergone a variety of name changes and definitions in recent years. A recent ARL (1990) Spec Kit defined the materials budget as "those funds used to acquire and lease materials" (on Specflyer) with funding used for the following: books, serials, microforms, videos, sound recordings, maps, manuscripts, government documents, computer files, binding, resource sharing agreements, preservation and conservation, consortia memberships, remote database sharing, bibliographic utility

memberships and transactions fees, computer hardware to manage computer files, computer file processing and servicing, interlibrary loan, and document delivery (p. 8). The same Spec Kit provides the following as alternative names for the materials budget: acquisitions, access, information, book, resources, collections, collection development, information access, and information resources. For purposes of this article, the term "information resources" is used to encompass the broadest possible definition of sources that libraries will be providing in the future.

The allocation of the information resources budget has long been debated in the literature. Packer (1980) summarizes a number of formula approaches and comments that most authors writing about allocation deal with the question in terms of the book budget and that serials are entirely separate and must be dealt with in a different context (pp. 277-78). Charles Lowry's (1992) matrix formula allocates funds for monographs and serials according to discipline and publishing patterns (p. 121). Carrigan's (1992) expansion of Paul Metz's proportional use methodology to electronic information (pp. 295-96) carries the allocation process beyond books and serials to a very different format.

There are as many allocation methodologies as there are libraries, and each library makes allocation decisions based on its own particular mission, objectives, and needs. A recent survey of ARL libraries found that, of the respondents, the top three most frequently weighted factors in allocation were cost of materials, inflation and the value of the dollar on the international market, and differences in costs among various categories of materials. Ranked tenth and eleventh were use of the collection and unfilled patron needs (ARL, 1990). With the transformations occurring in society, higher education in general, and university libraries in particular, libraries need to be more cognizant of other factors, including technology, in making future allocation decisions.

ACADEMIC LIBRARY BUDGETS

Murray S. Martin (1989) documented the causes of the stagnant library budgets of the late 1980s as the budget problems in higher education, price increases in materials, and technological change (p. 11). Frank W. Goudy (1993) found that the ACRL standard that the library's appropriation of the total institutional budget should be 6 percent has never been realized (p. 212). Statistics from the National Center for Education Statistics and the U.S. Department of Education indicate a decrease in libraries' percentage of education and general expenditures from 4.065 percent in 1970-71 to 3.082 percent in 1989-90. Additional trends noted by Goudy during this time period are

the decline of volumes added, dramatic increase in periodical and serial titles, growth in number of librarians slower than either the number of faculty or student population, and an increase in nonprofessional library staff (p. 213). These trends are a result of, and a reflection of, the fiscal reality and suggest a very real need for libraries to adapt to a changing information environment.

There are fewer funds flowing into libraries. At the same time there are phenomenal changes in the information environment and in the world of scholarly communication. In addition, there are other factors in society, external to the library, that continue to be an impact on library budgets. These factors are of the following nature: economic, social, political, technological, publishing, distance learning, and changes in scholarly communication. Internal factors that have a great impact on libraries are: increased user demands, the variety of media available, the access versus ownership dilemma, and the Internet as the paradigm of the new model of scholarly communication. At the federal level there is more and more talk of moving the network from government to private enterprise with the possibility that the information infrastructure will become profit-oriented. This will place a further strain on library budgets as what was once free is now transformed into yet another cost.

ECONOMIC AND SOCIAL ISSUES

The relatively weak U.S. economy continues into the decade of the 1990s. Although some areas of the country are beginning to see a strengthened economy, some areas, such as California, are not. It is feared that if California, with 16 percent of the U.S. population, cannot pull itself out of the recession, this state may delay the economic recovery of the rest of the country. It is assumed that the economy will grow again, "but not enough to fund the anticipated need for resources in education" (Ogilvy, 1993, p. 33).

A second economic condition which is especially important to libraries is the continuing increase in serials subscription costs. This fact is well documented in other sources. Suffice it to say that, between 1963 and 1990, the average price of periodicals published in the United States increased at an average rate of 11.3 percent per year and the average price of books increased at an average rate of 7.2 percent per year; the general price level increase was 6.1 percent per year (Cummings, et al., 1992, pp. 84-85). Prices for titles published outside the United States are known to have increased by higher percentages and have also fluctuated in response to currency changes.

The demographics of this country, which are another economic factor, are changing dramatically. Multiculturalism, or the ethnic mix of the population, is moving from the predominant white European

base to one of dramatically different cultures. It has been said that California's white majority will be the minority in a few short years. Although the changes in population mix are not occurring as quickly in the rest of the country, "the major cultures of the world are meeting, from east and west from north and south" (Ogilvy, 1993, p. 33) in California.

As the ethnic mix in the general population changes, so will the population in the colleges and universities of the United States. Evidence of more diverse students and faculty throughout the country can be seen by merely reading the *Chronicle of Higher Education* regularly. Providing for the needs of these new library users and researchers will be a factor in future decisions regarding collections and services. It will no longer be possible to work within a totally English-language based information infrastructure. Expansion to include other languages and cultures will make the acquisition process even more complex, particularly when the countries of the world have progressed at different speeds in the use of nonprint media and electronic resources.

THE UNIVERSITY AND ITS LIBRARY

Where the university library used to be "the heart of the university" for funding purposes, it now finds itself in competition with other campus units for scarce resources. University libraries are being required to "do more with less" by their institutional administrations and often must justify their existence when requesting funds. Goudy (1993) found that, although there has been increased institutional support for some areas on campus, the library is not one of these places. In fact, administration, research and public services, and student services have been the recipients of increased funding rather than instruction and libraries (p. 214). Assessment has become the buzzword at institutions of higher education, and universities have become very concerned about this in relation to their funding authorities be they legislative bodies or boards of trustees. Where the library fits into this picture is not easily understood. Often viewed as a supporting unit at the institution, it is usually given a low place in the hierarchy when new programs and projects are instituted. The library budget is seen as an "overhead" cost and therefore can be a prime candidate for reduction.

In addition, distance education is becoming a more viable alternative in teaching those students who, for various reasons, do not attend classes on campus. Kascus and Aguilar (1988) contend that institutions of higher education may increase enrollment of off campus students as a "way of preserving the status quo and remaining competitive and financially solvent" (p. 31). However, traditional

library services must be provided to these students since academic responsibility requires the institutions, including libraries, to provide off campus students with the same resources that are provided to students on campus. Regulations may specify what should be provided by libraries. At the very least, if not regulated, academic libraries must be prepared to provide access to the core collections whether they be at the main campus or at another library. Provision of information electronically to distance learners could be a considerable additional cost to an information resources budget that is already overcommitted.

TECHNOLOGY AND PUBLISHING

The increasing production of electronic sources of information has changed the way libraries traditionally operate. The new electronic information technology is reshaping user perceptions of the role of the library as libraries move from print-based to electronic-based information sources. Electronic technologies are requiring us to reconsider the importance of on-site ownership of materials. At the same time, faculty, as well as some librarians, want not only the electronic sources but also the print sources as "back-up." This presents the library with a financial dilemma as it seeks to allocate its ever-diminishing resources. The costs of purchasing articles on demand are real enough but not really perceived as part of the information resources budget.

The number of books and journals published in paper format continues to increase. Electronic journals are also becoming available in a number of disciplines. Selection of materials for inclusion in the academic or research library is becoming incredibly problematic as librarians have more to choose from and less to spend on these resources. Once again librarians must be cognizant of the increasing number of information resources and provide for electronic resources within the budget whether these sources be purchased, leased, or accessed.

SCHOLARLY COMMUNICATION AND USER DEMANDS

Will the electronic information technology change the whole process of scholarly communication in academia as we know it? Will the university become the primary publisher rather than have as its traditional role "generating knowledge, giving it away to the commercial publisher, and then buying it back for our scholars at increasingly prohibitive prices" (Cummings, et al., 1992, p. 133)? If the entire information distribution system changes, it will certainly have an immediate financial impact on libraries. While there is much talk of universities taking back control of scholarly publication, there

are many roadblocks such as the peer review process and the guarantee of textual quality in the electronic media. Taking back control of scholarly communication by universities is likely to be slow, and libraries should be involved.

Linked with changes in scholarly communication are the increased demands of library users, students, and faculty. Students want the information now. That demand, coupled with the technology available, makes it difficult for libraries to deny students either the information they need from the on-site collections or access to information held in other library collections.

Users seem to want it all—ownership, access, and the Internet. Recently a library science student asked what the library's policy was on electronic journals. His premise was that since the Internet is free, it would not cost very much to print the electronic journal, put it in a binder, and thus make it accessible to students. He apparently has confused—as many students, faculty, and librarians do—"free" with the fact that someone is paying for the electronic connection. In addition, there are also copyright issues, in some instances, staff costs in downloading, printing, binding, cataloging, and storage of materials.

ALTERNATIVES

Librarians should take advantage of the current economic situation and crisis in higher education and think in terms of new directions that at any other time might be too painful. It is time to make the tough choices and find more efficient and effective ways of living with what we have. We cannot hope for more because it is not going to be there in the discernible future. Therefore we need to redirect the information resources budget away from print and into cooperative arrangements such as resource sharing, cooperative purchasing agreements, and cooperative storage of low use materials, purchase electronic access through databases, and buy document delivery through vendors. The goal thus becomes the provision of information when it is needed and not its purchase in case it is needed.

Cooperative collection development and resource sharing have been concepts that academic libraries have generally tried to avoid. Our colleagues in the public library sector have been more successful in these efforts. Even with the preferred option being the continuation of local ownership, at least for heavily used materials, other possibilities must be considered. There should be some reallocation of information resources funds to cooperative collection development programs and resource sharing, with an awareness that: "The aggregate cost to individual institutions may not be lower, but access to larger universes of material may be facilitated" (Cummings et al., 1992, p. 142).

The Research Libraries Group Conspectus Project has been one of the more successful cooperative collection development efforts in building collections of participating institutions that complement each other. This model should be explored by other university libraries and adapted for local and regional use. University libraries within a region should discuss the distribution of specific subject responsibilities among themselves, even while recognizing the cost of maintaining collections for shared use.

The OhioLINK project links the information resources of eighteen of Ohio's academic institutions thus making it more than a cooperative collection development project. It allows all library holdings to be available to all libraries in the group as well as the ability to use commercial databases and the Internet. Shared access to resources also enables libraries to negotiate more favorable terms from vendors. In the case of the Internet, cooperative access may be the only course available to the smaller institutions.

David F. Kohl (1993) has noted that the issues raised in developing and implementing OhioLINK suggest the need for a total rethinking of the way libraries provide information services. These issues are:

1. The costs and work to implement automation projects are always unpredictable and far greater than planned.
2. Cooperation is no longer a marginal nicety but a central necessity.
3. Separately identified, large-scale cooperative projects allow great potential advantages in the competition for funding.
4. As the vision of the virtual statewide library is implemented, the role of the local bibliographer changes substantially. (p. 44)

These four issues should be explored by all academic libraries as a basis for the rethinking of the information resources budget as they divert funds from books and journals to greater access to information.

Buying and loading databases on the local online system provides access to these important tools. At the same time, the print and/or the CD-ROM versions should be canceled. Libraries can no longer afford to have a number of different formats for the same bibliographic tool. Funds for these databases should be charged to the information resources budget.

Document delivery of requested journal articles should also be charged to the information resources budget. Low use and high cost journals should be canceled with the library guaranteeing delivery of the requested item within a specified time (forty-eight hours or less). Through consultation and education, the faculty should be persuaded that this is the only way that libraries are going to be able to provide information given the constraints of current and future budgets.

THE NEW INFORMATION RESOURCES BUDGET

What will the information resources budget look like in a few short years? It will contain line items for books, periodicals, document delivery, databases, and cooperative collection development activities. The percentages will change with a larger percentage directed to the electronic delivery of information. Technology suggests that the scientific journals will be replaced by electronic access to the data and research needed by faculty in the sciences, although the process of conversion to electronic format may be slower than would be desirable because of the effect of conversion on the publisher's cash flow.

The traditional budgetary split by academic libraries of 60 percent serials and 40 percent books has become unworkable for many of the reasons mentioned previously. Regional cooperation in ownership of periodicals has been replaced by the ability of libraries to obtain articles on demand from commercial or library sources. Alternative or electronic access to books is less feasible and probably more expensive so books must be owned or borrowed. The growing area of electronic or online resources that now must be provided will soon represent a larger, if not the largest, proportion of the total funds allocated for all information resources.

Universities will have effectively defined their missions and curricula so that they will be more specialized in their programs. When this occurs, libraries will be able to reorganize and adapt to providing the specialized information resources required by their constituency and to rely on other institutions to provide resources in other fields of study.

Certain fields of study, particularly the humanities, have not seen technology change their methodologies of inquiry and research as has happened in the sciences. Thus we can expect to continue to purchase a greater percentage of books and periodicals in these subjects.

CONCLUSION

The Mellon report found in its survey of twenty-four ARL libraries that the amount spent on salaries in academic libraries is consistently falling and in 1991 was at 52 percent. Operating expenditures stood at 14 percent and information resources around 34 percent (Cummings et al., 1992, p. 47).

One suspects that included within the 14 percent for operating expenditures are some automation costs of access to information resources. Jerry Campbell's (1989) argument to change the 60/40 split and shift funds from staff to materials, access, and technology (p. 79) becomes more defensible and attainable.

The rapidity of change is forcing all librarians to rethink everything that they do in operations, services, and information

resources. Library managers must recast or reshape information resources budgets to more accurately reflect the uncertainty in the higher education environment, the transformation of scholarly communication, and to most effectively manage these limited fiscal resources.

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