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ABSTRACT

Empirically and rationally derived bases for determining the costs for industrial libraries are suggested. Taken into consideration is the fact that recent accounting procedures and the advent of new technologies have introduced costs into the library budget so that literature and personnel costs may now account for only 75-80 percent of the total. (Author/PF)

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G. E. Randall

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BUDGETING FOR LIBRARIES (1)

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ABSTRACT: In the past the major portion of the industrial library budget, as high as 90-95% of the total, was consumed by personnel and literature costs. Empirically and rationally derived bases for determining the costs for libraries are suggested. Recent accounting procedures and the advent of new technologies have introduced costs into the library budget so that literature and personnel costs may now account for only 75-80% of the library budget.

(1) Based on the presentation given at the Janus Seminar; a joint program of ASIS & SLA Chapters in New York on January 24, 1975.

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A library budget is a statement of the estimated or planned expenditures for the fiscal year. The correlation between the budget and the subsequent financial statement is determined by such factors as the validity of the data used in the construction of the original budget, the knowledge, experience and luck of the budgeting librarian in the manipulation of the data and forecasting the future, and finally, the discipline exercised by, or on, the library manager in making the actual expenditures conform to the budget.

There are three basic approaches to library budget formulation. Established libraries which have been blessed with relatively adequate budget support in the past can review previous years' expenditures, determine trends and make an extrapolation to forecast the requirements of the coming year. In the 1974-75 recession period a number of libraries were arbitrarily given a reduced amount within which they were to operate during the next budget year. The third and ideal approach is the use of library statistics and the data originated by the trade, library associations and government to construct a budget which can be rationalized and defended.

#### DATA SOURCES

The public and academic libraries are fortunate in having had access during the 1950's and 1960's to extensive collections of statistics compiled by the Association of Research Libraries and the U.S. Office of Education. These data gave them a statistical base from which they could create standards, or at least guidelines, to assist them in budget formulation. Nothing comparable exists for the industrial library.

A limited amount of data pertaining to, or originated by, special libraries has been published by the Special Libraries Association in Special Libraries. Included among the publications have been the "Objectives and Standards of Special Libraries", the "Profiles of Special Libraries", the triennial salary surveys beginning in 1967 and an occasional unrelated article on statistics or costs. Much of the credit for the first two belongs to Ruth Leonard; Shirley Harper was instrumental in getting the triennial salary surveys underway and a number of SLA members have contributed the separate articles.

Statistics on book and subscription costs, carried annually in Publishers Weekly and the article each year in Library Journal on the entrance level salaries for new graduates of library schools are useful to the special librarian as well as to the academic and public librarians. Most of the data usable in budget construction are summarized in the Bowker Annual but because many of the tables are reprinted from the original publication, it is necessary to go to the original source for the most recent statistics.

#### BUDGET CONSTRUCTION

Special librarians have made such a fetish of claiming to be different that the uninitiated might assume there is no basis for comparability among the industrial libraries. This is not true. The three major elements of expense for almost all industrial libraries are salaries, books and subscriptions. Guide lines on all three can be established for assisting the library manager in budget construction.

Salaries. Ruth Leonard, in the "Objectives" suggested that personnel costs should run between 60 and 79% if overhead costs are not included in the library budget. When salaries, book and subscription costs are considered as an entity, it is suggested that salaries should range between 50% and 70% of the entity. The range is justified because the demands placed on the library staff vary depending on the disciplines to which the library users belong, the nature of the information requirements of the users, their geographic dispersion in relation to the library, and the service traditions of the installation.

There is an interest in determining the relationship of staff size to the number of library users. In an industrial environment there is no readily acceptable definition of library user. However, in most libraries borrowers are easily and accurately countable. For this paper borrowers will be equated with users in full awareness of the inadequacy. Although special library statistics do not provide a basis for deriving a number for staff size as related to users, it is empirically suggested that one library staff member is required per 60-80 active borrowers.

The make-up of the staff can be considered from two different directions. Because the ordering, receiving, cataloging and catalog maintenance functions require approximately one-third of the industrial library manpower, there should be two readers' services/administration staff members for each technical processing staff member. The nature of the library activity is such that the professional members of the library staff should be given adequate clerical support. To achieve this, the ratio of clerical to professional staff members should range between 1:1 and 3:1.



Only in the larger libraries where specialization can be achieved is it likely that the 3:1 ratio is possible.

The two sources of salary information are the Carlyle Frarey annual article on entrance level salaries paid new graduates of library schools and data from the triennial SLA salary survey. In 1973 the average entry level salary was \$9,500; the SLA 1973 survey reported an average salary of \$14,000. Because special libraries should not be exclusively staffed with new graduates, the SLA average is proposed as the basis for computing the professional staff salary costs.

There are no comparable data on salaries paid the library clerical assistants. In the typical industrial environment, the functions performed by the library assistants are frequently underrated as compared to those done by the clerical, stenographic and secretarial employee. Not only does the library assistant have to have above average clerical skills but must also have detailed knowledge of complex procedures and an extensive knowledge of at least the arrangement of the library resources and holdings. In many situations, the library assistant is expected to work with minimal supervision, act independently and exercise judgement. In terms of the 1973 dollar, the salary range for the experienced library clerk seems to range between \$7,500 and \$11,000 with an average of about \$9,000.

Book Costs. In determining the number of books the library budget should accommodate, two guide lines are offered. For each library borrower, the library should plan on having to acquire two to three books per year. A more logically derived number can be obtained by determining the number required to keep the book collection on the current side of obsolescence. In a

library providing information support to personnel engaged in a changing technology, an out-of-date book used to solve a current problem may be counter-productive. Even in a discipline such as mathematics, the library user has a right to suspect and object to an acquisition program which does not result in a reasonable number of current titles in the collection.

In an established collection it is necessary to replace 10% of the book collection each year if the average age of the titles is to be less than ten years old. If only 90% of the collection is to be replaced in 15 years, the acquisition rate must be 6% per year.

To determine the cost of the book acquisition program, obtain the average cost of the type of book added to the collection and multiply by the number of books to be added to keep the collection current. In 1974, Publishers Weekly reported in its February 3, 1975 issue, the average science book cost \$20.83 while the average technical book cost \$17.74.

Subscription Costs. It is not as easy to obtain a defensible estimate for library subscription costs as it is for books. On the basis of number of subscriptions per borrower, a figure between 1.5 and 2 is suggested. Because the unit cost of a journal subscription is much higher than it is for the average book (science books in 1974 averaged \$20.83 while subscriptions to chemistry-physics journals were \$65.47) and because the journal collection is considered to be of more value to the scientific user than the book collection, an expenditure of two to three times the book budget was warranted in 1974.

To see how a budget would be constructed for books and journals with the suggested numbers, consider a hypothetical library with 30,000 books

and having 800 chemists and physicists as users. At a 6% replacement rate, the book budget would have been \$37,500 in 1974 ( $30,000 \times .06 = 1800 \times \$20.83 = \$37,494$ ). With only 1.5 subscriptions to chemistry and physics journals for each user, the subscription cost would have been \$78,500 ( $800 \times 1.5 = 1200 \times \$65.47 = \$78,564$ ). For these conditions, the subscription costs were slightly more than twice the book budget.

Estimating the cost of periodicals to be two to three times the book budget can not be arbitrarily used in the future because, for the past eight years, the annual increase in subscription costs for chemistry and physics journals has averaged 24% while the increase in books costs have grown only 9% per year.

Minor Budget Elements Common To Most Libraries. In addition to the three major items, most industrial libraries also budget for binding, supplies and travel.

The selection of the journal titles to be bound is governed by the probability of subsequent use, the space available to house the bound journal collection and the adequacy of the library budget. Unless there are overriding reasons for doing so, journals which are not indexed or abstracted in the secondary journals should not be bound. The records of past use can be of assistance in selecting the titles to be bound. A word of caution. Many journals which are browsed by users to be kept informed of current activities need not be bound. Therefore, the decision to bind should be based on the records of use of journals which are at least one year old when they are borrowed, read, or photocopied.

As a basis for budgeting, the librarian whose collection can grow should plan on binding a number of volumes equivalent to 80 - 150% of the titles on the subscription list. Translated into usable numbers, a library with a subscription list of 1200 titles should plan on binding 1000 - 1800 volumes a year. There is no correlation between a publisher's volume and a binder's volume. Some publishers volumes are so small that two or three should be combined for binding; in other cases a publisher's volume must be separated into three, four or even more binder's volumes. Binding costs vary according to the size (height) of the volume, the amount of work to be done and the interest of the binder in getting new contracts. For estimating purposes in 1975, \$8.00 per volume could be used.

The cost of supplies will depend on how effectively the company stationery store meets the library's requirements. The library should plan on having to purchase such unique supplies as book pockets, date-due slips and inter-library loan request forms. Nothing in the literature is known which provides guidance on this budget item. Although few of the supplies will be used with the books, it is suggested that the supplies budget be equivalent to \$.50 per book purchased.

Each professional member of the library staff should be encouraged to participate in professional society activities by being reimbursed for travel to at least one meeting a year. Staff members who are elected or appointed to major offices or who are invited speakers should be entitled to attend more than one meeting. To accommodate this expense, the library should budget \$400 - 600 per professional staff member for travel.

Budget Elements for Which Guide Lines are not Formulated. The two areas in which guide lines are not formulated are costs unique to an

installation and the costs recently engendered by the new technologies. Uniqueness justifies the first exemption; insufficient experience explains the second.

Budgeting and accounting practices vary not only from company to company but frequently from location to location within a company. As a result, the budgets for some libraries include items such as rent, overhead and service charges. Inasmuch as these costs are determined by local policies, there is no way to establish guide lines of general applicability.

The new technologies have resulted in expenditures which are new to the library community. The improvements in photocopying techniques have resulted in a basic change in inter-library loan practices. Books are still loaned from one library to another but when a library user needs an article in a journal not held by his library, the requirement is filled by the holding library sending a photocopy of the requested article rather than the lending of the issue or bound volume containing the article. There is no standard fee for the service; it ranges from no cost to a service fee plus per page charges of \$.50 or more. This charge may be augmented in the future by the addition of a royalty fee for the copyright owner.

During the past three or four years there has been a dramatic increase in the number of commercially available data bases pertinent to library services in two areas. Companies such as SDC (System Development Corporation) and Lockheed are offering on-line information retrieval services from bibliographic data bases created by the government, institutions and commercial organizations. The MARC tapes created by the Library of Congress are an integral element of the commercial cataloging services offered by

OCLC (Ohio College Library Center) and firms such as Jostens, Inforonics and Information Dynamics.

The commercially available on-line information retrieval services have charges which include telephone line costs, connect on-line costs which range from \$25 to over \$100 per hour, depending on the data bases accessed, the off-line printing charges ranging from \$.04 to \$.10 per item determined by the format required plus the cost of the terminal located in the library.

The industrial librarian who is curious as to how he can justify to management the costs of on-line computer searches has been given some help by Stanley Elman in the January 1975 issue of Special Libraries. In 1973, Elman recorded the time required to make 48 manual searches. He reported that the average search required 22 hours at a cost of \$220 plus a \$30 support charge. Between May and September 1973, Elman's library also performed 66 searches using the Lockheed DIALOG on-line retrieval system. The average search required 45 minutes and cost \$47.

For years many libraries found that 90 - 95% of their budget covered their literature and personnel costs. Within the past five years, because of the impact of the new technologies, these libraries have found that the literature and personnel charges now account for only 75 - 80% of their budget.

#### CONCLUSION

With relatively few exceptions in isolated cases, the value of information supplied by libraries has not been determined. It is possible, however,

to present .get justification to management which merits approval on rational grounds. It is hoped that this presentation will assist librarians in the formulation of budgets which are accepted and which will enable them, the library managers, to provide the level of service expected of special libraries.

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