

Recent Publications

BOOK REVIEWS

Markuson, Barbara Evans, et al., *Guidelines for Library Automation*, Santa Monica, Calif.: System Development Corporation, 1972.

This book is one of the products of a contract initiated by the Automation Task Force of the Federal Library Committee, sponsored by the U.S. Office of Education, and carried out by the System Development Corporation. It presents the results from a questionnaire survey made in 1970 to identify those federal libraries with operational automated systems or with plans to create one. In addition to that data, the book provides descriptive material and guidelines for evaluation and development of automated library systems.

Turning first to the results of the questionnaire survey, a total of 67 libraries out of the worldwide community of over 2,100 federal libraries reported that automation projects were either operational or planned. Of those, 59 provided sufficient detail in response to the questionnaire to be described in the book and, of those, 33 were in the Department of Defense. The description in each case includes the following data: person to contact for information, functions automated and the current status of them, background to establish context, description of system materials and parameters, equipment hardware and software, documentation, references, and future plans. These data are presented on pages 157 to 288 in a sequence roughly by major federal agency (Agriculture, DoD, HEW, HUD, etc.). Special attention is paid to the three national libraries on pages 289 to 293. Summary tables give the reader an overview of locations, agencies, applications, and parameters. Indexes are provided to the detailed listing which serve for access by type of system and equipment, and systems with special features. As a comprehensive summary of specific library automation efforts, this portion of the book serves as a useful reference.

The guidelines for evaluation include a "guide to feasibility assessment" which discusses the general evaluation of need, of equipment availability and suitability, of personnel resources, of budget, of local attitudes, of file conversion, of planning needs. More specific guidelines are presented for each of the major functional areas of application—cataloging, acquisitions, serials, circulation, reference and bibliography, administration. "System development guidelines" present issues in system planning and management, systems analysis and design, and system implementation.

The descriptive material covers a potpourri of topics: automation programs in nonfederal libraries, machine-readable data bases, commercial services, use of microforms, input/output hardware, recommended reading.

The unique contribution of the volume would seem to lie in its summary of automation projects in federal libraries since the other material, on system evaluation and on topics peripheral to the primary discussion, seems to duplicate what has been covered in several other monographs. It will, therefore, have primary value to those who are reviewing the overall progress of library automation and to those looking for examples comparable to their own situation.
—Robert M. Hayes, Becker & Hayes, Inc.

King, Donald, and Bryant, Edward C. *The Evaluation of Information Services and Products*. Washington, DC: Information Resources Press, 1971. \$15.00 ISBN 0-87815-003-X.

This reviewer's reaction to the book was one of ambivalence and, in some ways, disappointment. King and Bryant have made an impressive effort to delineate both a model and a methodology for the evaluation (including experimentation) of information transfer systems which "... record and transmit scientific and technical knowledge by means of documents. . . ." Such

systems are defined by the authors as those dealing “. . . with all functions and processes necessary to complete the transfer of documents from authors to users . . .” (p. 1).

The authors are well-known consultants in the fields of library management, documentation, and the design of information systems. Both are associated with the prestigious Westat Research Inc. and are well qualified for the task they have set themselves of providing guidance in “. . . what to measure, how to measure, and how to interpret the results . . .” (*Preface*).

Although the book is well organized, it is both difficult to read and demanding. In their *Preface* the authors state that the book was written expressly for the inexperienced student and evaluator; nevertheless, complete understanding by the reader will require an acquaintance with the fundamentals of many disciplines. The authors have used basic concepts from such disciplines as statistics, economics, probability theory, and systems analysis.

The major thrust of this book is toward the development of a methodology for the analysis and measurement of document transfer systems. Measurement as used here is “simply quantification . . .” (p. 8). Yet the authors are careful to point out that system “. . . performance is a composite of many things, some easily quantifiable and others almost impossible to quantify . . .” (p. 9). This is an important point and it is well that the authors bring it to the reader's attention early for the remainder of the book is quantitative in emphasis with the possible exception of chapter 10 on “User Surveys and Marketing Research.” In this chapter the basic techniques for interviewing, performing user surveys, and conducting marketing research are discussed. Marketing is a field of great importance to the information scientist and the authors could have strengthened their presentation by including some techniques for attitude scaling, such as Osgood's semantic differential.

King and Bryant have succeeded in presenting a theoretical model for a document transfer system. How close this model approximates real life is a moot question. The traditional weaknesses of such models have been their tendency to oversimplify and to dichotomize. Yet the reviewer felt the mod-

els used in the text did not suffer seriously from either problem, with the possible exception of the retrospective searching model. Here the model did seem contrived and overly rigid in its insistence upon a fixed sequence of events. Nor was it clear how the model handled the iterations necessary to reach an acceptable level of response between a system and user if the analyst (coder) who places the request in the system language must do so before seeing the test documents. The experience of the reviewer has been that the documents themselves will often serve to sharpen the request in a synergetic relationship between user and system.

While most of the mathematical modeling appeared to be rigorous and based upon sound assumptions, the methodology proposed for studying the information (document) transfer process left something to be desired. King and Bryant's methodology suffers both from occasional lapses and some obvious typographical errors. For example, the standard normal distribution has a mean of 0 and a standard deviation of 1, not a mean of 9 and standard deviation of 1 as page 254 suggests. And on page 45 the word binomial has been substituted for binary. Of a more serious nature is the suggestion by King and Bryant that “. . . Depth interviews can be expected to take around one-half day each . . .” (p. 243). The reviewer knows of no interviewer who would undertake to hold a respondent's attention for a half-day, and most trained interviewers recommend against allowing the interview to last longer than one hour. Nor can the reviewer agree that “. . . the group (interview) provides a climate of emotional support that permits expression with complete candor . . .” (p. 238), or that diaries should be classified as questionnaires. The latter are useful tools for the study of information systems, but they remain intrinsically different.

The book has succeeded in outlining a detailed methodology for evaluating a document transfer system and represents the distillation of many project years of experience at Westat in the evaluation of bibliographic services and their products. As such it will be of interest to a much broader spectrum of reader than the librarian, and it is unfortunate that the library administra-

tor was not made an explicit as well as implicit member of the audience.

It is interesting to note that many of the views expressed by King and Bryant are not those of the traditional librarian and demonstrate a professional liberalism more characteristic of the information scientist than the librarian. For example, King and Bryant feel that ". . . it is not important whether the facility under evaluation actually possesses the requested documents—only that its response time and certainty of retrieval be at acceptable levels . . ." (p. 51).

The reviewer found the planning diagram for a retrospective search experiment, the six basic functions involved in a document transfer process, and the authors' insistence that to evaluate document transfer systems one must derive both performance figures as well as study failure, all typical of the very basic insights the authors share with their readers and refreshingly simple in application.

In addition to their difficulties with the methodology, the authors also experienced some difficulty in their understanding of the information product itself. For example, they state on page 56 that ". . . an important information product in document transfer systems is published recurring bibliographies which may be used for either current awareness when initially sent or retrospective searching purposes at a later point in time. . . ." Such a statement is quite misleading, since use of a recurring bibliography as both current awareness and/or retrospective tool depends upon a factor not discussed in the text, namely the ability of the bibliographic tool to cumulate itself. Or at another point the authors state ". . . there is some evidence that users can predict the number of documents which satisfy their requirements . . ." (p. 116). The reviewer finds it difficult to accept this statement. The reviewer is also uncomfortable with the authors' statement that ". . . the richer the entry vocabulary developed, the less the intellectual burden on the indexer, and the greater the economies in the indexing operation . . ." (p. 152). If the word *richer*, as used here, implies a greater number of indexing terms and hence a larger file, it may or may not be more effective (depending upon the care with which the terms were chosen). Such a file cannot be more *effi-*

cient to use or maintain, however, because of its increased size. The result is neither greater economy nor a lessening of the intellectual burden on the indexer.

The most serious quarrel the reviewer has with the authors concerns their discussion of costs and the lack of consistency in their treatment. Cost is a recurring theme throughout the book and an area in which the authors are clearly at home and well qualified. Nevertheless, their discussion would have been greatly strengthened had they been able to present a uniform approach to the study of costs. In chapter 9 costs are spoken of as the measure of resource consumption or the ". . . using up of certain resources . . ." (p. 218), while earlier costs are considered to be the ". . . input of resources to a system in terms of monetary units . . ." (p. 11). The difference between input and consumption may appear slight but to the reviewer it represents a philosophic shift which drastically affects the entire costing process. This discrepancy was later pointed out by the authors on page 230 and is due, at least in part, to the fact that chapter 9 was prepared by a different author (Wiederkehr) with a different point of view.

King and Bryant's measuring of costs with dollars is regarded by the reviewer as much too restrictive. To measure system costs only in dollars is to severely limit comparisons between, as well as within, systems. Indeed, the reviewer questions the comparative value of dollar costs in any system for the following reasons: a reader wishing to use these figures to compare his system with another cannot do so until he knows something of the methodology by which they were developed, the period when the figures were taken (how old they are), or the place (geographical location) where the costs were in effect. The reviewer feels that measures of search effort using time or number of documents examined rather than dollar costs are much more appropriate and sensitive as indicators of resources consumed.

In conclusion, this reviewer would characterize the book as a successful initial attempt to codify a formalized methodology for the study of document transfer systems. It needs some fleshing out and some sharpening of methodology, but it is nevertheless

a good first step. More discussion on the use of specific analytical tools (Latin square design, regression analysis, marketing research techniques, etc.) would have added immeasurably to the text. Sections 12.4 and 13.1 on elementary statistical measures and experimental design should be moved to the front of the book. These are prerequisites if the reader is to fully grasp what he reads. It would also have strengthened the ties between author and reader if someone with a background in the traditional disciplines of library science (cataloging, reference, acquisitions, etc.) could have been allowed to comment on the manuscript before publication. Aside from those points mentioned earlier the methodology is basically sound and a second edition should see a further refining of both the strategy and tactics for studying document transfer systems. The book is strongly recommended to the experienced systems person having no previous background in document transfer systems, as well as to the beginning library analyst or administrator with sufficient background (calculus, economics, systems analysis) who needs assistance in planning the experimental design for a systems study.—*Robert W. Burns, Jr., Colorado State University, Fort Collins, Colorado.*

Woman and the Equal Rights Amendment: Senate Subcommittee Hearings on the Constitutional Amendment, 91st Congress. ed. by Catherine Stimpson in conjunction with the Congressional Information Service. New York and London: R. R. Bowker Company, 1972. xvi, 538p. \$12.50.

A news story from South Africa a couple of years ago reported the case of a civil servant named Sylvia who underwent a series of sex change operations, switched to the name Andre, and upon returning to work medically certified as a male, received an immediate pay increase.

Less bizarre, but possibly more startling because they occurred here under our laws, are the patterns of sex discrimination revealed in these U.S. Senate subcommittee hearings on the Equal Rights Amendment (ERA).

Testifying in May 1970, witnesses point-

ed to the legal distinctions between men and women for jury service (women in only "28 states . . . serve under the same terms as men"); and to differing penalties for men and women who commit identical crimes ("the legislative rationale seems to have been that it required longer to rehabilitate a female criminal than a male"). Another of many illustrations was the double standard for admission to certain state educational institutions (during one recent period 21,000 women were turned down for admission to the University of Virginia, while not one male was rejected); and in some states "women attain the age of majority at 21, while men attain majority at 18."

The ERA says simply: "Equality of rights under the law shall not be denied or abridged by the United States or any State on account of sex." At one sweep, the measure would declare men and women equal before the law. "Even if the equal rights amendment did nothing but state the principle," declared witness Caroline Bird, "it would be worth it." Yet both opponents and proponents agreed that constitutional adoption would affect a substantial array of federal and state laws, including the draft and a large body of family law and protective legislation whose benefits and obligations are applied selectively, to one sex or the other.

Major controversy centered around ERA's ramifications for protective legislation. This covers wages and hours and other working conditions such as rest periods, seating provisions, weightlifting limitations, etc. Advocates of the amendment strongly urged the extension of these laws to men, but viewed the protections as "restrictions" on opportunity when applied to women only. Basically, proponents of ERA preferred to risk the possibility that it might eliminate such legislation than to qualify ERA in any way. Representing labor's objections however, one AFL-CIO witness summarized labor's serious concern that "enemies of labor legislation powered by a combination of middle class feminists and employers, could speedily wipe out all forms of protections afforded specifically to women, whether they are 'restrictive' or not. . . ." A majority of the labor movement has firmly opposed ERA from the start, al-