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A Bibliography on Operations Research in Libraries

Michael K. Buckland and Donald H. Kraft

PREFACE

The purpose of this Reader is to present a selection of writings designed to instil an understanding of the nature and scope of operations research in libraries. It is hoped that many of those who peruse these articles and chapters will continue to be interested in this approach to library problems.

In order to facilitate further explorations, the following bibliography has been specially prepared in order to complement the readings themselves. Nobody should launch into a reading spree and attempt to wade through all the items in the bibliography. It should, instead, be regarded as a display from which the reader can select the individual items which are of particular interest.

The quantity of writings on library operations research is larger than is commonly realised. This may be because the items are rarely labelled as operations research and are sometimes obscurely published. It has been difficult for the compilers to define and adhere to a satisfactory definition of scope. The approach has been to include examples of quantitative approaches to problem-solving in libraries, especially when this involves, explicitly or implicitly, the use of a model. Other items generally represent topics which overlap with library operations research. A good example is bibliometrics which has a substantial literature, but which is often purely descriptive and not problem-oriented in any serious way. Therefore, only a selection of items from the literature of bibliometrics has been included. These can serve as samples and, if more are needed, reference should be made to biblio-

ographies on that topic, such as Pritchard's extensive list. Similarly, few items have been included from the literatures on user-studies, cost-accounting, library administration, and so on.

This bibliography was a collaborative venture and was compiled in the following manner: Buckland had been accumulating references for a few years. This accumulation was believed to be rather comprehensive up to about 1970 but much less so for subsequent years. Kraft, in teaching operations research to library science students, had also been collecting references and undertook to update and edit the material assembled by Buckland.

A special acknowledgement is due to Professor Vladimir Slamecka, Director of the School of Information and Computer Sciences at Georgia Institute of Technology. Professor Slamecka prepared "A Selective Bibliography on Library Operations Research" for the Chicago Graduate Library School Conference on "Operations Research: Implications for Libraries" in 1971 and graciously gave the compilers permission to cannibalise his listing into the present bibliography. Also, the help of Mr. Dennis McDonald, a doctoral student in the College of Library and Information Services, University of Maryland, and Ms. Linda Kip, a masters student in the School of Librarianship, University of California, Berkeley, is acknowledged. In addition, bibliographies from the data bases of the National Technical Information Service (NTIS), the Goddard Space Center of the National Aeronautics and Space Administration (NASA), and the Educational Resources Information Center (ERIC) were used.

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