items by fifteen writers, excluding six unpublished dissertations. The index locates entries by item number rather than page number (possibly indicating it was prepared prior to printing), which makes locating some subjects in the text a matter of close-scanning several pages. The textual material is well organized and clearly presented. A few minutes spent with the introductory and explanatory paraphernalia will amply reward the user of this exemplary bibliography.—Dale Manning, English Bibliographer, Vanderbilt University.


It is no longer the question of whether or not to automate, but rather "when" and "what" to relegate to the computer. This inevitable automation offers great opportunities for management—or mismanagement. Make the wrong decision and resources are wasted to the detriment of everyone. More than a warning to archivists and records managers of the fast approaching computer revolution in their field, this work provides general and specific recommendations for analyzing needs, making choices, and implementing automation projects. Easily divided into two presentations, it can be used as a guide for step-by-step procedures or as a discussion of current trends and possible avenues for the future.

The first part, chapters 1 through 4, provides a structured and systematic approach to the task of moving archives and records management functions to a computer-based environment. Just as the project should proceed, this work guides the reader through the preplanning process, the EDP survey, the planning process, and implementation. While the matrix decision-making model may be familiar to some, Kesner cannot point to the widespread use of the model by others. However, he has successfully used the suggested matrices in his own work at F. W. Faxon and, previously, at the Archives of Appalachia and the Archives of Labor and Urban Affairs. The material presented here is valuable because of its specific application to the archival environment.

The preplanning process analyzes the information system requirements of archival and records administration. Automated techniques within such processes as fund-raising, word processing, publication production, grants administration, financial accounting, physical control of records, collection development, and reference services are identified. Without referring to specific products, Kesner discusses hardware and software options in the EDP survey. He cannot and does not try to cover the universe of products in the space allotted this chapter. Of great value are the references to publications that inform and update those interested in new products and systems. The number and quality of references are strengths of this work. However, the chosen format of listing the notes at the end of the work proves laborious for the individual reader wanting to refer to the notes while reading the text.

The planning and implementation processes are the core of Kesner's work and are presented in chapters 3 and 4. Here he introduces his evaluation matrix for comparison of vendors, products, and services and discusses the use of consultants, the financing of equipment, the selection of software, and the most effective use of EDP industry resources.

The second part, about a third of the text, is more "futuristic" and looks at the role that archivists and records managers will play in managing and determining the disposition of the ever-increasing amount of machine-readable records. The author is emphatic, believing that archivists and records managers must be activists in their organization, asserting their influence early in the decision-making process for determining retention and disposition of machine-readable records. Kesner feels that not taking a more active
role will result in the responsibility for those decisions being assumed by others less attuned to the importance of retaining information of lasting value. This is an enthusiastic presentation that covers the span of present and developing technology, all the way from computer output microfilm to optical disks. Quite understandably the material is cursory. However, there are numerous references in the notes to more detailed sources, a characteristic of this work that adds considerably to its value.

*Automation for Archivists and Records Managers* is not a lengthy work, cursory in nature as the author intended, and written from the author’s preference for stand-alone, small computers point of view. While the work concludes with a chapter on machine-readable records, there is only minimal discussion on the developing laser/optical technology. Likewise, very little discussion is given to description and intellectual control of records. Kesner admits in the preface that he neglects some areas due to lack of experience; these two areas may have purposely been given little attention. Notwithstanding these two weaknesses, this work will prove to be useful for the archival or records center administrator about to embark on a journey into automation.

The scope of Margaret Hedstrom’s *Archives & Manuscripts: Machine-Readable Records* is best described by the definition of “machine-readable” as given in the glossary: “Information in a form that can only be processed directly by a computer, usually in the form of magnetic or electronic impulses.” This manual, the latest in the Society of American Archivists’ Basic Manual Series, outlines techniques and guidelines required to locate, appraise, accession, process, and preserve machine-readable records. The manual will be welcomed by archivists and others who are beginning to acquire various machine-readable files on various machine-readable media. Hedstrom assures the reader that it will not be necessary for archivists to become systems analysts, computer programmers, or experts in hardware and software in order to meet the challenges of the proliferation of machine-readable records; however, new skills and new techniques will need to be adapted from the traditional archival principles and established practices. Hedstrom’s work will assist greatly in developing these skills and techniques.

An understanding of machine-readable records must be accompanied by at least a minimal knowledge of how the computer works. In the first chapter, Hedstrom describes the components of the computer and how these components interrelate; explains the difference between systems software and applications software; and discusses the automated records system, its input and output, and the documentation essential to understanding a system and the records created by that system. The presentation is well done, and, in twelve pages, the author lays the essential groundwork for further study of machine-readable records. The archivist who has some experience with microcomputers may wonder if the system shown in figure 1-1 is a microcomputer system, or is it really a minicomputer system? The possible error is of marginal consequence, and it is easily defended as the delineation between microcomputers and minicomputers becomes less discernible.

Chapter 2 describes how records are logically arranged and physically stored on various media. The media covered are punchcards (also called IBM or Hollerith cards), tapes, disks (including diskettes), and drums. Although punchcards are fast disappearing from use with most systems, it is quite conceivable that any archival program receiving machine-readable records will be faced, from time to time, with a decision about punchcards. It is equally conceivable that an archivist may be faced with a similar decision about punched paper tape. Punched paper tape is not covered in this manual, except to say that it is obsolete. The magnetic media, which will make up the bulk of an archives’ machine-readable records, are described succinctly and accompanied with illustrations. The overview of the logical organization of data files is particularly helpful in gaining intellectual control over machine-readable records and learning how to appraise them.

The usual archival activities (inventories and surveys, appraisal, accessioning and
processing, records scheduling, preservation and maintenance, and access and reference services) and how they must be modified when working with machine-readable records are discussed in chapter 3. Forms, used primarily at the State Historical Society of Wisconsin, are included. Of interest to those wanting more information will be the increased number of footnotes. A significant issue with machine-readable records is their preservation and maintenance. Hedstrom warns that "under optimal conditions, tape cannot be expected to last more than twelve to twenty years." There is also associated extra maintenance such as rewinding every one or two years and rigid temperature and humidity controls. The archivist having the option to decline acceptance of machine-readable records or unable to operate within the constraints would be well advised to consult this section before making a decision to accept machine-readable records.

The final chapter discusses archives and the office of the future. As Hedstrom states, there are major changes forecast in media storage. Currently, magnetic media do not meet all the criteria developed by archivists and records managers for acceptable archival storage media. New storage media being developed and discussed by the author are optical disks and computer assisted retrieval (CAR) of microform images. This chapter may overwhelm the archivist struggling to deal with magnetic storage media, and now another type of media is soon to proliferate. These media, particularly optical disks, will, no doubt, generate another manual in the series. But, for now, Hedstrom's manual will provide assistance to archivists and others who must meet the challenge of machine-readable records.—Bruce Q. Frost, University of Illinois at Chicago.