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Readers Exchange: Development and Implementation of an Online Database For Bibliographic Control of Governments Documents in a Selective Depository

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Development and Implementation of an Online Database For Bibliographic Control of Governments Documents in a Selective Depository

Cushing-Martin Library at Stonehill College has served as a selective depository for U.S. government documents since 1963. During the summer of 1988, the Government Documents Assistant, in conjunction with the campus Academic Computing Center and the Reference Librarian, began automating the documents shelflist using a database on the VAX mainframe computer housed in Academic Computing. This article describes the steps involved in implementing the current automated system.

Before automation, documents were recorded on a shelflist file consisting of at least one 5" x 8" card for each Superintendent of Documents (SuDoc) classification stem. Publications were entered onto the cards as they were received, which, of course, was not necessarily in SuDoc number order. Since most classification stems required several cards, with some stems requiring up to twenty, it was very difficult to determine if the library owned a specific document. Weeding, inventory, and other necessary functions were difficult with the manual system because the documents were not in shelf order on the cards.

The possibility of automating the shelflist arose from the method of weeding devised by the Documents Assistant for use with the manual system. She entered data from the shelflist cards onto a personal computer using the Mass-11 word processing software. Mass-11 sorted the data by SuDoc number, creating a list in shelf order which was then used to weed the collection. The documents staff, therefore, entered the information onto the Mass-11 database in order to discard the documents, but the information in the database was not used for any other reason. The Documents Assistant suggested that it would be more sensible to enter the information onto a database when the documents were received, rather than immediately before they were discarded. The information could then be used for many purposes other than solely for discarding the document. Our goal was to improve our ability to manage and consequently, to access the documents.

The Documents Assistant and the Reference Librarian agreed that the database should be not merely an automated version of the shelflist cards. Instead, the system should be improved so that more useful information could be obtained from it than was possible with the manual system. In order to ensure that the automated system would be an improvement over the manual one, the Documents Assistant analyzed the ways the library obtains, processes, stores, and retrieves documents, as well as how they are counted for statistical purposes. Documents are handled in four different ways and stored in approximately fifteen different locations. The following list of desired capabilities was drafted:

Procedure:

Desired Capabilities:

Weeding

Search for documents received more than five years ago

Sort by location and SuDoc number

Delete records

Inventory

Search by library location and SuDoc number

Reference

Search by keyword in title, including truncation

Library acquisition list

Search by date of receipt Sort by SuDoc number Add headings to list

Additional capabilities which were desirable but not vital included:

Record of shipping lists received and completed Automation of monthly and annual statistics

List of item numbers selected

Separate database file for serial publications

Claims and rainchecks distinguishable from other records

Circulation records for non-cataloged documents

With the analysis of the library's use of documents and the list of desired capabilities completed, we consulted the staff of the Academic Computing Center on campus. During initial meetings it became apparent that it would not be possible to use a personal computer for the project due to the enormous amount of memory that would be required. As a result, the possibility of using a commercial serials control system was investigated; this option was eliminated because such systems could not accommodate many of the desired capabilities. Academic Computing subsequently suggested using a database in the VAX mainframe, accessed through a terminal in the library with a direct connection to the mainframe. The advantages of this idea included the fact that the database, part of the Mass-11 word processing software in use on campus, would be flexible enough to accommodate our current and estimated future needs; also, Academic Computing assured us that we would be allowed to use as much computer memory as necessary.

In September of 1988, the library was hardwired into the Academic Computing Center and a terminal was installed in the Government Documents office. By this time the shelflist database had been set up by Academic Computing and was ready to use. Due to conflicts in the schedule of the Academic Computing staff, the Documents Assistant received very little training on the database and learned much of the system on her own. Because the library had decided to enter all new documents (except serial records) immediately into the database, the department's student aides began using the database before the Documents Assistant had become completely familiar with it. Fortunately, the student aides were very flexible in using the database, especially during

the first months of operation when procedures changed constantly, and appropriate sections of the procedures manual were written after problems arose.

Prior to automating the shelflist, student aides checked a card file of item numbers to determine which items on a shipping list should be included in a shipment. After automation, a separate database of item numbers selected by the library was created, to be consulted instead of the cards. This database includes the item number, the classification stem, and the library location of the majority of publications within the stem. A printout of the database is currently used by the student aides to decide which documents we should receive.

The records in the database include the complete SuDoc number, the title of the document (up to 100 characters), the date the document was received, and the location code. Temporary location codes designate publications to be weeded, included on an acquisitions list, or with another temporary status.

In order to control the quality of the new records that are entered into the database, students add new records to a temporary database file separate from the main file. The Documents Assistant reviews the temporary records for accuracy before adding them to the main database. Once they are entered into the main database, they are sorted by SuDoc number and assigned record numbers. When a search query is entered by the user, the VAX searches the database sequentially for matching records. The user may designate a specific section of the database to be searched, decreasing the processing time required.

The librarians and assistants of Cushing-Martin Library are extremely pleased with the automated shelflist database. While the amount of time required to process a shipment of documents has not changed considerably from pre-automation days, the system saves time in several ways. First, and foremost, the system allows us to serve the public efficiently through subject and SuDoc number access. Under the manual system, it was not possible to check our records to see if we owned a document on a specific topic without checking other bibliographic tools first. Using keywords and Boolean operators for subject access, we can now search the database for documents. Our ability to provide accurate and efficient documents reference service, therefore, has increased substantially under the automated system.

Second, each semester the Catalog Librarian compiles a list of materials, including government documents, recently acquired by the library. Before automation, the Documents Assistant manually assembled the documents component of the list by sorting through the shipping lists and choosing the new documents to include on the list. Information about the documents was entered onto Mass-11, sorted by SuDoc number, and edited to arrive at the final list. Currently, a temporary location code is entered for new documents that will be added to the Recent Acquisitions list. Each semester, all records with the temporary code are printed, edited, and submitted to the Catalog Librarian for inclusion on the list. This eliminates the need to search manually through the shipping lists and greatly decreases the amount of time needed to compile the list.

Weeding is the third process which has been simplified and made more efficient by the automated shelflist. Under the manual system, it was difficult and time-consuming to weed old and outdated documents from the collection, since the records were not in SuDoc number order on the shelflist cards. It was necessary to enter and sort the records on the word processor before discarding the documents. Currently, the records for the appropriate section are printed from the database and checked against the shelves. The documents are reviewed and either retained or discarded according to government regulations. Until all old records have been added to the database, weeding will continue to require some use of the manual shelflist cards.

We expect inventory to be much less labor-intensive under the automated system than under the manual one. Comparisons between our records and the documents themselves should be much easier due to our ability to sort and print in SuDoc number order.

The major weakness of the automated system is its inability to check for spelling errors or to make changes easily. We have solved this problem by using the word processor to check for errors. However, time spent converting files from the database to the word processor and vice versa could be eliminated if the database itself were capable of identifying and correcting the errors. A second weakness is that the computer sorts data character-by-character, instead of entity-by-entity. Since this results in errors when sorting by SuDoc number, the Documents Assistant must check the results and make appropriate changes. The staff of Stonehill's Academic Computing Center have been extremely supportive throughout the implementation of the database. Our system represents the largest use of a database on campus, and it has provided the Academic Computing staff with the opportunity to discover the capabilities and problems of the system. They have willingly increased our allocation of memory in the VAX mainframe, and they back up our files daily. Implementation of the database would not have been possible without their cooperation and support.

Eighteen months into implementation of the database, we are pleased with the progress we have made toward our original goals of improving our ability to manage and to access the documents. We plan to continue to improve both the management of our documents collection and the quality of the access we provide to our patrons, with future enhancements to the system.

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