

AUTOMATION PROPOSAL
FOR THE
CENTRAL STATE UNIVERSITY LIBRARY

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I. PURPOSE

The purpose of this document is to review present automated activities in the Central State University Library and to propose a revision or replacement of the present in-house system.

II. LIBRARY FACILITIES

The Central State University Library includes four patron access floors, Circulation, Reference, and the card catalog, located on the first floor; cataloged materials on second and fourth floors; Periodicals and Government Documents on the third floor. In addition, technical material processing areas are located on the first and third floors. The basement houses part of the building mechanical machinery, library materials storage, temporary offices, and a library instruction classroom. Presently the library holding includes more than 250,000 paper book volumes, 335,000 microform volumes, 20,000 map sheets, and 4,500 cassettes. Last fiscal year the 367,500 patrons utilizing the library checked out more than 76,000 volumes. The library staff is comprised of 17 professional librarians, 15 full-time paraprofessionals, and 21 part-time paraprofessionals. The building is open 88.5 hours per week when school is in session.

III. PRESENT AUTOMATED SYSTEM

Presently the library has two automated systems running in parallel, the AMIGOS/OCLC on line system connected to data base in Columbus, Ohio, and an in-house system. Our hardware connected to the AMIGOS/OCLC system includes two CRT terminals, two GE printers and an interconnected switching system. One printer normally utilizes 8½ x 11 paper to make hard copies of screen images. The other printer normally makes formatted labels for the pockets, book cards, and spine of processed library materials. The OCLC data base contains more than seven million records of cataloged titles in the MARC II International Computer Communication format. This access allows us to catalog most of our new material additions by searching and adding to the data base, order cards arranged for filing in the public catalog and library shelf list, and produce labels for the materials being processed. This system allowed us to phase out some manual searching procedures of producing our own cards for the catalogs, and typing book cards, pockets, and spine labels. We also use the AMIGOS/OCLC on line system for interlibrary loan of materials not available in our collection. AMIGOS/OCLC members continuously refine and enlarge the data base making it a very useful tool in library applications. The University Library pays costs for our use of this system which include service contracts on the terminals and printers, line and access assessments, and services such as cards, log computer tapes of our activity in the file, and so forth. The cost for utilizing the AMIGOS/OCLC system for 1980/1981 is \$35,500.00 plus service contracts.

The in-house automation system is off line, batch processing, using keypunch card input, tape storage, and disc updating, utilizing the campus IBM 370/138 system. All keypunching is done by library paraprofessionals from workform, and sent to the Computer Center for regularly scheduled maintenance/updating. All hardware, maintenance contracts, computer time and most output forms come from the Computer Center's budget. The library purchases the input workforms, labels used in acquisitions, and COM products. The system became operational before the MARC II International Computer Communications format was developed, thus our format is incompatible with the MARC II format. The file structure uses both fixed and variable fields. The in-house system includes acquisitions ordering and workflow control, addition of selected cataloging data, and storage into the library databank. Volume statistics and lists of items on order, in process, and holdings comprise the major output from the system. Lists of periodicals by title and subject are heavily used in the building. Serial renewal lists and pricing histories aid in budgeting and renewals. COM output of our master-file provide access for pre-ordering, searching and patron use, with sets of microfiche arranged by main entry, title, and call number. Having parallel automated systems presents problems and duplication of effort. Neither system alone could provide the library automated support needed for day-to-day operations, yet, the systems cannot be combined as they are incompatible as presently formatted. Too, needed automated services have not been programmed such as accounting,

circulation, an on line catalog, library management support, budget forecasting and review, collection analysis, and cooperative activities with other libraries. Our accounting budget and statistical gathering manual methods involve valuable personnel time wherein a combined, revised automated system would release personnel to perform other needed activities. An automated circulation system can provide inventory, checkout, reserve, overdue, patron clearance, and statistical support. Faster, more efficient service can be the result. Since Central State University is a commuter school, most library users desire quick service so they may leave the campus for employment or other time restraint activity. An on line catalog incorporating all library holdings would provide a "one stop" location of material at any library CRT. Our present card catalog does not include the curriculum, children's collection, periodicals, maps, or government documents. The catalog is located in one place rather than distributed at several locations as is possible with an on line catalog. Filing and maintaining the card catalog is a labor-intense job requiring accuracy, card revision, and replacement of missing or worn cards. As the card catalog expands, the time to maintain the card catalog multiplies. An on line catalog will keep file integrity without as much labor expenditure.

IV. PROPOSED SYSTEM REVISION

Since running parallel and incompatible computer systems is not an efficient method of management, the following proposal is in order:

- 1) Continue to utilize and contribute to the AMIGOS/OCLC System.

The accessibility to cataloging and library holding data is basic to libraries to provide and maintain card or on line catalogs, obtain material for faculty and students for research, and contribute data on library materials for other libraries to use. The utilization of an on line data base as AMIGOS/OCLC does this as well and lowers total library expenditures for processing for all participants due to using the same "pool" of information for technical processing.

- 2) Replace our present in-house system by electronically linking an in-house system to the AMIGOS/OCLC System. Develop or purchase a software system and supports. This may be done in two ways:

- (a) Purchasing a library system package from a library-oriented service company, or,
- (b) utilize on-campus hardware and purchase adequate software supports.

Utilizing campus equipment scheduled for replacement such as the present administrative computer may be less expensive as far as hardware is concerned.

In either situation, a computer room as requested in the 1980/1981 budget would be needed to house the equipment.

The system revision may include the following sub-systems:

- A. Acquisitions, including pre-ordering on line searching, order entry, purchase order form generation, claiming outstanding orders, accounting statistical generation, budget forecasting, receiving and preparation for cataloging, collection analysis.
- B. Serials, including renewal lists, issue check-in, claiming, accounting, purchase/history, purchase/receipt/analysis, collection analysis, input/output, to State Union list of Serials.
- C. Cataloging, including link with AMIGOS/OCLC, form and label generation, shelf list generation, upgrading acquisition file to complete MARC II format, preparation of materials and data for patron use.
- D. Circulation, including checkout and return, holds, overdues and lost materials, student clearance, reserve.
- E. Online catalog by author, title and subject, including items in the library collections as well as on order items.
- F. Other services as bibliography generation, library assisted instruction, aids to reference service, activities as on line indexes, cable television activities and projects.

This system would be on line with hardware housed in the library building and CRT terminals on all floors.

V. USES AND BENEFITS

The proposed system would provide the following advantages and additional services for the library and campus:

- 1) Eliminate wasteful parallel systems and develop a data base comparable with international standards.
- 2) Provide a truly consolidated pool showing library holdings and items being purchased or added. Presently there are at least six separate catalogs patrons must utilize to do research.
- 3) An on line, consolidated accounting system allowing current data on the status of various accounts.
- 4) An efficient means of claiming items ordered and not received. The present manual system is not done consistently due to lack of personnel. This process would keep orders purged for better accounting and budget control.
- 5) For the first time, know what each patron has checked out to solve clearance problems. Also, patrons with overdue circulated items can be checked to clear his account before either checking more library material or leaving school.
- 6) Better control over duplicated orders. Due to the very nature of a batch automatic system such as we presently use in acquisitions, unneeded and unwanted duplicates are ordered. More efficient utilization of state money would result.

- 7) Data for faculty, department heads, and deans of their current budget allocation status. Our present manual system takes hours to gather a current status report.
- 8) Availability of bibliographic gathering tools for research, either in-house or on line with service systems.
- 9) An ongoing inventory system for collection development, data for accrediting agency visits, and budget planning.
- 10) A more efficient system for locating materials students need for research.
- 11) Development of library management support data to administer library funding more effectively.

VI. COSTS AND IMPLEMENTATION

At this point, we know of three starting costs:

1. Development of a computer room in the library: in the library budget for 1980/1981 a supplement request was made for this room. At that time, the price for the computer room walls, insulation, acoustics, electricity, computer room raised floor, communications, security, and power cutoff was \$23,460.00.

This position of the room can be built now. Air conditioning/ power regulator package was \$37,000.00. Increases in prices may add 10% or more to the figures by now.

2. Database Conversion to the MARC II International Standard Format:

This can be accomplished by adding our holdings into the AMIGOS/OCLC data base and purchasing tapes of input up to the time of conversion. Assuming we add a full time paraprofessional and utilize library student aides for conversion, the cost would be approximately \$1.50 per title.

3. Travel and communication expense: To examine various systems and software packages to decide the most efficient conversion method.

The price to obtain, install, and implement a revised system will depend upon ongoing software, hardware, and maintenance costs. In 1979, Dataphase Corporation, a leading service bureau offering system packages for libraries, proposed the following figures for their system.

HARDWARE: Year 1 purchase - CPU, disk drives, tape drives, printers, 17 CRT units including 2 CR Wand Units	\$151,730.00
Software	55,000.00
Year 2 - 18 CRTS and Portable Unit	51,220.00
Year 3 - 18 CRTS and 1 OCR Wand Unit	<u>51,220.00</u>
TOTAL SYSTEM INSTALLED WITHOUT SERVICE CONTRACTS	\$309,170.00
SERVICE CONTRACTS ON ABOVE (NOT INCLUDING INFLATION FACTORS):	
Year 1 - \$2,196.32/month or	\$ 26,355.84
Year 2 - Add \$424.35/month or	31,448.16
Year 3 - Add \$424.36/month or	36,540.48

These figures appeared in the library documents of the plan for the 80's presented in 1979, and do not account for price increases. For example, service contracts are now rising by 30% this year alone! If the IBM system is used for the library revised system, hardware price savings may result. CRT units on open bid may be less than quoted from Dataphase, but system development costs may be more than the price of Dataphase software. The implementation of the proposal would enhance all library functions and provide new and revised services to the academic community.

We propose the following schedule of implementation:

- 1981/1982: Make field trips and site visits as needed. Determine most efficient system or combination of systems for the library. Move temporary offices from site. Build computer room without air conditioning or power regulator in basement of library. Submit system budget requirements for funding. Develop 1982/1983 budget. Start task force to convert library holdings to MARC II format. purchase additional OCLC terminals as needed with a Mode M. Add full time paraprofessional for conversion of data files.
- Estimated Cost: \$90,000.00 for year 1981/1982
- 1982/1983: Install hardware and software packages. Add air conditioning and power regulator to the computer room. Start cataloging portion of revised system. Push task force on file conversion. Budget to be developed during 1981/1982 based upon system and software decisions.
- 1983/1984: Start Acquisitions and Serials Sub-systems. Test Circulation system. Push task force on file conversion. Budget to be developed in 1982/1983 based on system and software decisions.
- 1984/1985: Start Circulation Sub-system. Push task force on file conversion. Budget to be developed in 1983/1984 based upon system and software decisions.
- 1985/1986: Complete software enhancements. Complete or nearly complete file conversion. Budget to be developed in 1984/1985 based upon system and software decisions.