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ABSTRACT

This study identifies, estimates, and compares the cost of copy and original cataloging of print and non-print materials with four major online database vendors--the Online Computer Library Center (OCLC), the Research Libraries Information Network (RLIN), the Western Library Network (WLN), and the University of Toronto Library Automation Systems (UTLAS International)--pertaining to their support products and services. In order to assess potential library costs for using the vendor services, a mix of 40 midsize libraries comparable in their size of collection, number of cataloging staff members, and annual cataloging output, were randomly selected to participate in the study. Information gathered was then analyzed in order to calculate the annual total cost and the average cost of cataloging per work hour. The methodology employed in this study can be utilized as a model for libraries to assess the cost of cataloging output and serve as a guide for the allocation of resources. The survey questionnaire is included in the appendices, as well as a list of libraries under study. (Contains 27 references.) (Author/JLB)

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FOUR ONLINE DATABASE VENDORS:
AN EVALUATION AND COST ANALYSIS OF
THEIR CATALOGING SUPPORT SERVICES

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Anthony P. Chan

Dec. 1990

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Four Online Database Vendors
An Evaluation and Cost Analysis of
their Cataloging Support Services

Abstract

Automation cost studies performed on libraries for the past ten years have generally been performed to describe the cost differences between manual and automated cataloging; the various options offered by profit and non-profit database vendors; and costs incurred for utilizing these services for cataloging functions. An assessment of the true costs of utilizing any database vendors includes an evaluation of library operations in the technical services department. This study evaluates four major database vendors/bibliographic utilities pertaining to their cataloging support services and costs of utilizing any one of the four vendors. In order to assess potential library costs for using the vendor services, a mix of forty midsize libraries comparable in their size of collection, number of cataloging staff members, and annual cataloging output, are randomly selected to participate in the study. Information gathered from the libraries under study is then analyzed in order to calculate the annual total cost and the average cost of cataloging per work hour. The methodology employed in this study can be utilized as a model for libraries to assess the cost of cataloging output and serve as a guide for the allocation of resources.

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Introduction

This proposed study identifies, estimates, and compares the cost of copy and original cataloging of print and non-print materials with four major online database vendors, namely, the Online Computer Library Center (OCLC); the Research Libraries Information Network (RLIN); the Western Library Network (WLN); and UTLAS International, pertaining to their support products and service. It is intended to serve as a guideline for libraries to evaluate each of the cataloging support vendors by identifying the pros and cons of utilizing each of these services, and comparing the potential costs involved in utilizing these services for cataloging library materials. Library personnel costs will also be examined and assessed by gathering information from the libraries under study, and the result being incorporated as part of the overall cost analysis. It is hoped that an accurate analysis of the study results will help to lower the cost of operation through greater efficiency of use of resources; facilitate greater ease and efficiency of access to bibliographic, holdings, location, and availability data; improve ease and timeliness of maintenance of data; integration of branches, bookmobiles and main library; and improve availability of data for effective management decision making.

Since the increasing costs of automated cataloging support services affects or limits a library's capability in providing direct or indirect services to its patrons, it is, therefore, essential to facilitate a thorough and effective integration of automation support into cataloging operations in order to meet the new challenges as well as any future needs of the libraries.

LITERATURE REVIEW

Automation surveys have dealt with computer technologies ranging from computer hardware and software to expert systems and their applications. Publications such as the "Online database search services directory"¹ provides information on institutions currently utilizing online databases and costs charged by the vendors. Both Dabbitz² and Watson³ have published guides for evaluation and maintenance of telecommunication systems.

Literature on cataloging costs is sporadic and mostly outdated. A study done by Bills in 1983 was concerned with cost comparisons of manual and automated systems,⁴ but precluding start-up costs, annual fixed costs and equipment and software maintenance expenditures. The study involved the Illinois Valley Library System (IVLS) and thirty-three of its participating libraries. The project was conducted to assess the costs and benefits of OCLC use in small and medium-sized libraries. The cost assessment of pre-OCLC cataloging included the costs of library in-house catalog card production, card reproduction, vendor-supplied catalog cards and the amount of time spent on in-house production of catalog cards. The cost assessment of OCLC cataloging also included the cost of card production. Furthermore, time and salary costs for online cataloging and retrospective conversion were taken into consideration.

The result of the study was a cost comparison of pre-OCLC and OCLC cataloging.

Another study done by Druschel⁵ in 1980 was concerned with the cost analysis of manual and automated cataloging. However, the scope was limited to the cost comparison of an automated network system (WLN) and a local manual system of cataloging and book processing at the Washington State University Libraries. In this study, the cost assessment of both manual and automated cataloging was based on the analysis of two factors: staff costs and subscription costs per item catalogued. Both factors were itemized and compared as the costs of bibliographic searching, National Union Catalog search and processing of catalogued items. The study results indicated that the automated system was about 20 percent less costly than the manual system.

In 1980, the University of Oregon Library's Subcommittee on Bibliographic Utilities⁶ conducted a study on OCLC, RLIN, and WLN. The report evaluated information on the vendors' size of database and components and compared their technical processing operations such as acquisitions, cataloging, and database management capability.

A study done by Webster and Warden⁷ was conducted to compare the bibliographic utilities for special libraries. The report evaluated and briefly compared the services available, start-up costs and service fees among OCLC, RLIN, WLN and Utlas.

The 1980 Norton and Hirst⁸ study was conducted to compare OCLC and RLIN cataloging in a special library. The comparison was based on searching and cataloging of items at various workloads. The study also evaluated the quality of bibliographic records, hit rate and software applications between the two vendors. The cost analysis was grouped into two categories: nonrecurring costs and recurring costs. The nonrecurring cost category was itemized as start-up costs, terminal purchase and installation fees. The recurring costs category was itemized as annual cataloging expenditures, equipment maintenance, and telecommunication costs.

The latest review on database vendor services and cataloging costs was conducted by Saffady in 1989.⁷ This study provided information on several database vendors in regard to their system capability, services, and costs for cataloging purposes. The study also compared six major bibliographic utilities that provide cataloging support services. Start-up costs, annual fixed costs and transaction-specific costs were all itemized and grouped into three categories. The purpose of which was to calculate the costs of cataloging based on workload or titles cataloged per year among the bibliographic utilities. The report provides a framework and serves as a guideline for cataloging cost assessment and evaluation of the four bibliographic utilities under study.

A wealth of literature is available and serve as guidelines for assessing training needs and evaluation of training programs. Kallenbach and Jacobson¹⁰ conducted a study to evaluate staff

response to changes from manual to automated cataloging. The study compared OCLC and RLIN cataloging and stated the advantages and disadvantages of utilizing the two systems, and staff response to the different modes of cataloging. The study also examined the different methods of training for first-time users provided by the two bibliographic utilities and staff response to each of the training methods. Since the study was based on strict observation, no measurement on staff performance was provided to serve as a framework for future evaluation.

Kearsley,¹¹ Merrill,¹² and Dean¹³ have also published literature regarding computer-based training and instructional design; and Heines¹⁴ on the use of interactive, computer-managed instruction.

The cost-benefit factor of computer training has also been studied by Kearsley,¹⁵ Thompson,¹⁶ Head,¹⁷ Hawthorne,¹⁸ Kirkpatrick,¹⁹ Metzoff,²⁰ Mohr,²¹ Newstrom,²² Patton²³ and others. Among the various literature, Head's²⁴ study on cost analysis provided a model for program or system evaluation and assessment of the cost-benefit factor. By following this model, training needs can be evaluated allowing the assessment of appropriate programs or systems for implementation.

The fact that the proposed study is concerned with the costs involved in cataloging, information derived from the literature examined is limited to within two years since the data on services and costs needs to be as current as possible.

OBJECTIVES

The objectives of this study are:

- 1) To assess the various costs* of cataloging utilizing the different vendors under study;
- 2) To allow libraries assessing the potential training needs and allocation of library staff once the new system (any one of the four vendors) is implemented;
- 3) To evaluate the total cost of cataloging taking objectives 1 and 2 into consideration.

*Per item copy cataloging cost, original cataloging cost, time spent on copy and original cataloging and telecommunication costs.

STUDY LIMITATIONS

The proposed study evaluates only online database service offered by bibliographic utilities and the potential costs of utilizing these services. The CD-ROM option is excluded from the study because of the magnitude and complexity of this fast-growing technology. The effect of CD-ROM on cataloging warrants separate and independent studies if any library opted to examine the pros and cons and the costs of utilizing this laser disk technology. The study should also serve as a basis for evaluating the CD-ROM option.

METHOD

In order to assess the cost of implementing an online database system, actual cataloging workload and time spent on cataloging will have to be considered as part of the overall analysis.

The population targeted for this study is a mix of 40 midsize libraries in the continental U.S. (Ten libraries currently utilizing services from each of the four vendors under study)(see Appendix A). These libraries are chosen to

be included in the study because they are comparable in terms of their size of collection (between 150,000 and 250,000 vols.), the number of cataloging staff (between 2 to 6), and their annual output of cataloged materials (between 7,000 to 15,000 titles). A survey was conducted to gather the above information and served as an assessment tool to evaluate potential cataloging costs.

Information about the four database vendors under study was obtained directly from the Saffady report.²⁵ The type of information available from the report includes the size of vendor database or number of online records available; database characteristics; start-up costs (cost of utilizing leased line or dial access, hourly rates); and transaction specific costs. Telephone interviews were conducted with the four vendors only to obtain a listing of the libraries currently utilizing their services. The purpose is to identify comparable midsize libraries to assess their cataloging costs for utilizing any of the vendor services.

Instrument

The survey instrument, provided in the Appendix D, is designed for use as a mail questionnaire. It is based on the questionnaire developed by Pungitore²⁶ and Buckland, Dolby and

Madden.²⁷ Changes were made in order to solicit answers that will identify the sizes of collection, number of staff, computer software and hardware applications, quantity and types of materials catalogued annually, and time spent on staff training. Information gathered will help to assess the costs and potential needs for training staff to operate the systems.

Procedure

The initial efforts in this study were directed toward questionnaire development and definition of the survey population. This was performed during the first week.

The American Library Directory²⁸ was consulted for the purpose of identifying comparable libraries in terms of their sizes of collection and the number of staff in the cataloging department. Telephone interviews were conducted with the various vendors under study in order to obtain listings of the libraries currently utilizing their services, verifying data already obtained from The American Library Directory. Data on annual cataloging output (titles cataloged per year) was obtained from the completed questionnaires. Furthermore, information pertaining to start-up costs, annual fixed costs, and transaction specific costs was obtained from the Saffady report.²⁹

Revisions were made during the second week before the questionnaires were sent to the 40 libraries under study. Telephone interviews with the vendors were conducted during the second and third week of the study. The initial mailing included a cover letter, the questionnaire itself, and a stamped and pre-addressed envelope. The cover letter serves to provide a brief purpose of the study and emphasizes the importance of participation of that library and provides instructions for the respondent. An example of the first cover letter is included in Appendix B. Stamped and pre-addressed envelopes were provided for the return of the completed surveys.

The second mailing was done after allowing three weeks for the surveys to be returned. Another copy of the questionnaire was provided to the respondent in case of the first one being misplaced. An example of the second cover letter is included in Appendix C. The gathering and updating of information pertaining to the vendors under study began the second week of the study after the questionnaires were being sent to the libraries under study. Primary sources of vendor information were drawn from the Saffady report.³⁰

Data Analysis

Table 1 presents the percentage of survey responses. As indicated, the total response rate was 60%.

Table 1.--Survey Responses

	Sent	Responses	Usable
OCLC	10	6 (60%)	5 (50%)
WLN	10	7 (70%)	6 (60%)
RLIN	10	6 (60%)	5 (50%)
UTLAS	10	5 (50%)	0 (0%)
Total	40	24 (60%)	16 (40%)

The libraries utilizing the Utlas cataloging support service had either switched to other bibliographic utilities or discontinued subscription with Utlas.

The analysis of data obtained from the Saffady report³¹ and the participating libraries is similar to the methodology employed by the Saffady report. The cost estimates are followed by a unit cost analysis that calculates the cost of cataloging a

single item and producing a set of catalog cards at various annual workloads. The cost of producing catalog cards was included for calculations. Start-up costs are amortized over the useful life (five years) of system components and added to the annual fixed costs. The resulting total is then divided by the annual cataloging workload and the rounded quotient is added to the transaction-specific costs, producing the following formula:

$$U = \frac{(S/L) + A + T}{W}$$

where U = the unit cataloging cost;

S = the total start-up costs;

L = the useful life of start-up components;

A = the total annual fixed cost;

W = the annual cataloging workload (number of titles); and

T = transaction-specific costs.

Data on the start-up costs, annual fixed costs and transaction-specific costs among the four bibliographic utilities obtained from the Saffady Report is presented in Table 2.

As Table 2 indicates, three cost categories are established. Start-up costs include the costs of workstation equipment, communication software, telephone line installation, equipment installation, start-up service fees, and documentation and

Table 2.--Cataloging Costs among the Bibliographic Utilities

	OCLC Leased line†	OCLC Dial Access*	RLG Member	WLN Leased line	WLN Dial Access	Hourly Rates	Unlimited Access
Start-Up Costs							
Workstation equipment	\$3,400	\$1,600	\$3,400	\$4,000	\$4,000	\$1,600	\$1,600
Communications software	--	150	--	--	150	150	150
Telephone line installation	750	270	750	750	270	270	270
Equipment installation	250	--	--	200	--	--	--
Start-Up service fees	1,250	1,250	3,000	--	--	2,775	2,775
Documentation & training	1,000	1,000	1,000	1,200	1,200	1,000	1,000
Total Start-Up Costs	\$6,650	\$4,270	\$8,150	\$6,150	\$3,220	\$5,795	\$5,795
Annual Fixed Costs							
Network membership fee	--	--	--	--	--	--	14,400
Network access fee	1,200	220	--	2,220	--	--	--
Equipment leasing	--	--	--	540	--	--	--
Equipment maintenance	456	192	408	480	192	190	190
Software maintenance	--	18	--	--	18	20	20
Telephone line charges	1,764	360	2,772	1,920	360	360	360
Total Annual Fixed Costs	\$3,420	\$790	\$3,180	\$5,160	\$570	\$570	\$14,970
Transaction-Specific Costs							
Telecommunications	--	--	--	--	--	--	--
Local telephone call	--	0.10	--	--	0.10	0.10	0.10
DB connect time charges	--	1.05	--	--	4.27	3.00	--
Search/record usage charge	1.46	1.46	2.17	0.65	0.65	1.55	1.55
Labor							
Clerical	1.28	1.28	1.28	1.28	1.28	1.28	1.28
Paraprofessional	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Card production	0.83	0.83	0.56	0.95	0.95	0.80	0.80
Total Transaction-Specific Costs	\$9.57	\$10.72	\$10.01	\$8.88	\$13.25	\$12.73	\$9.73

†Independent member, full service, prime-time rates

Source: Library Technology Reports 25 (July/August 1989): 463-534

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training. Among the four vendors, this category varies from \$3,200 to \$8,150, depending on leased line or dial access.

The annual fixed cost category is itemized as network membership fee, network access fee, equipment leasing, equipment maintenance, software maintenance and telephone line charges. The data presented indicates a broad range of \$570 to \$14,970 annually.

The transaction-specific cost category includes the cost of local telephone calls, database connect time charges, search or record usage charge, labor (clerical and paraprofessional) and card production cost. The total transaction-specific cost varies from \$8.88 to \$13.25.

Using the formula, the unit cost calculations provide a framework for analysis of different cataloging support services within each group and across groups.²² At a given number of titles cataloged per year, the average unit cost of copy and original cataloging is compared within the confines of the libraries studied. The unit cost of staff training of each library under study is expressed in terms of work hours which can be translated into dollar amounts. From Table 2 and the information provided by the libraries under study, the annual total cost of each library utilizing the individual vendors is calculated by adding the annual fixed costs to the annual transaction-specific costs. Information derived from the Saffady Report²³ was used as a basis to determine the average hourly cost of cataloging for the libraries. It is calculated using the following formula:

$$C = \frac{A}{W}$$

where C = the cost of cataloging per work hour

A = the annual total cost of cataloging
(the total of the annual fixed costs
and annual transaction-specific costs)

W = the total no. of work hours
(average no. of work hours spent on
cataloging per day x 260 days*)

*based on a five-day workweek

Data on the average hourly cost of cataloging for the libraries is presented by libraries in Table 3.

The libraries responded to the survey are presented in numerical order and grouped by vendors. The numbered libraries represent libraries listed in Appendix A.

The annual fixed costs of each library varies from \$570 to \$6,240, depending on whether the library utilizing leased line or dial access, and whether it is a member of one of the bibliographic utilities under study.

The annual transaction-specific costs is calculated by multiplying each library's total number of titles cataloged by the transaction-specific costs per item derived from Table 2, and added to the library's total annual telecommunication costs, if any. As indicated in Table 3, this category ranges from

Table 3.--Average Hourly Cost of Cataloging
(by libraries)

Libraries	Annual fixed costs	Annual transaction-specific costs	Annual total cost (A)	Hours spent on Cataloging per day	Annual no. of work hours (W)	Average Cost of Cataloging per Work Hour (C)
OCLC						
1	\$ 5,241	36,212	41,453	4	1,040	\$ 39.80
3	5,241	82,667	87,908	4	1,040	84.60
4	1,420	77,040	78,460	2	520	150.90
7	4,600	90,686	95,286	4	1,040	91.60
10	5,241	65,328	70,569	4	1,040	67.90
WLN						
13	\$ 6,240	80,183	86,423	4	1,040	83.10
14	570	107,200	107,770	4	1,040	103.60
17	5,700	14,044	19,744	9	2,340	8.40
18	6,240	133,632	139,872	16	4,160	33.60
19	5,700	133,200	138,900	10	2,600	53.40
20	5,700	92,640	98,340	10	2,600	37.80
RLIN						
22	\$ 3,440	70,225	73,665	8	2,080	35.40
23	3,180	90,090	93,270	12	3,120	29.90
24	3,440	53,570	57,010	8	2,080	27.40
29	3,180	144,744	147,924	6	1,560	94.80
30	3,440	41,075	44,515	4	1,040	42.80
UTLAS						
--	--	--	--	--	--	--

*Refer to Appendix A for listed libraries

\$14,044 to \$144,744.

The annual cost is the sum of the annual fixed costs and annual transaction-specific costs. The annual number of work hours of each library is calculated by multiplying the hours spent on cataloging per day by 260 (number of work days per year). The average cost of cataloging per hour of each library can be established by dividing the annual total cost by the annual number of work hours.

As indicated, the libraries under study vary significantly on the hours spent on cataloging as well as their annual total cost of cataloging. As a result, the average cost of cataloging per work hour fluctuates widely from approximately \$9 to \$150.

The average cost of cataloging per work hour (C) doubles when the annual total cost (A) doubles if the annual number of work hours (W) remains constant. The data also suggest that the more hours spent on cataloging, the less the average cost of cataloging per hour. This indicates that it would require more hours on cataloging to be allocated among staff in order to maintain a lower average cost of cataloging per work hour.

Conclusion

While the study result reflects a correlation between fixed and variable costs and provides a framework for comparison among the bibliographic utilities and libraries under study, an economic analysis based exclusively on unit costs gives the potentially misleading impression that the cost differences among bibliographic utilities become less important as the annual cataloging workload increases (as reflected in a library's annual transaction-specific costs), providing that the annual number of work hours remains constant.

When calculating the total bibliographic utility charges incurred in a given library installation, the slight differences in unit costs encountered at higher annual workloads can have a much more significant impact than much greater differences in unit costs characteristic of lower annual workloads.

In order to fully and economically utilize the vendors for cataloging, libraries must consider the two major factors that influence the average cost of cataloging, namely, the hours spent on cataloging per annum and the annual total cost. Based on Tables 2 and 3, libraries should be able to utilize this report as a guideline to calculate the costs of cataloging according to the transaction-specific costs, their annual work load, and the number of hours spent on cataloging.

Based on vendor price lists in effect in June 1989, the cost estimates are subject to change. OCLC, RLIN and WLN restructure their pricing annually while Utlas pricing is revised from time to time. Telecommunication costs also vary among companies and from state to state. However, this report should retain its conceptual validity despite changing prices.

Timeline for the Study

Activity	1	2	3	4	5	6	7	8	9	10	11
Develop questionnaire		*****									
Telephone Interviews			*****								
Revise instrument				*****							
Print instrument & Cover letters					*****						
First mailing						*****					
Second mailing								*****			
Receive responses							*****	*****	*****	*****	*****
Analyze data										*****	*****
Report findings										*****	*****
Distribute report											**



NOTES

¹Online Database Search Services Directory, 1st ed. (Detroit, Michigan: Gale Research Company, 1984).

²Paul Daubitz, The Public Manager's Phone Book (Dedham, Mass.: Artech House, c1985).

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²⁴Head.

²⁵Saffady, 465-466.

²⁶Verna L. Pungitore, "Development and Evaluation of a Measure of Library Automation," Library and Information Science Research 8 (1986): 67-83.

²⁷Lawrence F. Buckland, James Dolby and Mary Madden, Final Report, Phase I: Survey of Automated Library Systems (Maynard, Mass.: Inforonics, Inc., 1973).

²⁸American Library Directory, 42nd ed. (New York: R.R. Bowker, 1989-90).

²⁹Saffady, 465-466.

³⁰Ibid, 469-480.

³¹Ibid, 489-517.

³²Ibid, 496-514.

³³Ibid, 465-517.

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APPENDIX

APPENDIX A

OCLC libraries:

1. Ashland University Library (OH)*
2. Bexley Public Library (OH)
3. Florida Southern College Library (FL)*
4. Illinois Wesleyan University Library (IL)*
5. Knox College Library (IL)
6. Lima Public Library (OH)
7. Palm Beach Community College Library (FL)*
8. Sul Ross State University Library (TX)
9. Westerville Public Library (OH)*
10. William Jewell College Library (MO)*

WLN libraries:

11. Bellingham Public Library (WA)*
12. Eastern Montana College Library (MT)
13. Evergreen State College Library (WA)*
14. Gonzaga University Law Library (WA)*
15. Missoula Public Library (MT)
16. Pacific Lutheran University Library (WA)
17. Shoreline Community College Library (WA)*
18. Sno-Isle Regional Library (WA)*
19. Walla Walla College Library (WA)*
20. Whitman College Library (WA)*

RLIN libraries:

21. American Philosophical Society Library (PA)
22. Burlingame Public Library (CA)*
23. Cleveland Museum of Art (OH)*
24. Daly City Public Library (CA)*
25. Madera County Library (CA)
26. Menlo Park Public Library (CA)
27. Naval Postgraduate School Library (CA)*
28. O'Melveny & Myers Law Library (CA)
29. Oceanside Public Library (CA)*
30. Saint Mary's College of California Library (CA)*

UTLAS libraries:

31. Carnegie Mellon University Library (PA)
32. Central Main Power Co. Library (ME)*
33. Gainesville Public Library (FL)
34. Hofstra University Library (NY)*
35. Lebanon Valley College Library (PA)
36. Niagara County Community College Library (NY)*
37. Pasco-Hernando Community College Library (FL)
38. Roanoke Bible College Library (FL)*
39. South Burlington Community Library (VT)*
40. University of Southern Mississippi Library (MS)

*indicates libraries responded to survey

APPENDIX B

Cover Letter for First Mailing

The USA Library
3456 Main Street
Anytown, USA 43210

October 1, 1990

Dear Director:

As a student of the Kent State University School of Library Science, I am conducting a study to assess the costs of utilizing the database vendor currently providing cataloging services to your library.

The objective is to assess and compare cataloging costs of four major bibliographic utilities, taking into consideration the acquisition of computer hardware and software, initial setup and training needs. It is hoped that the study would serve as an indicator for maximizing productivity and minimizing costs in cataloging and processing library materials.

Your participation is crucial to the accuracy of the study. The enclosed questionnaire should not take too long to complete. However, it is important that you complete the questionnaire and mail it in the enclosed, stamped envelope by October 1, 1990. The study is expected to be completed in December 1990. Study results will be distributed to participant libraries upon request.

Thank you very much for taking the time to complete this questionnaire. If you had any questions, please do not hesitate to contact me at (614) 644-6942, Monday to Friday, 8 am. to 5 pm.

Sincerely,

Anthony P. Chan

Enc: Questionnaire
Stamped envelope

APPENDIX C

Cover Letter for Second Mailing

The USA Library
3456 Main Street
Anytown, USA 43210

October 14, 1990

Dear Director:

About one month ago a questionnaire regarding the database vendor currently providing service to your library was sent to you. Your response to this questionnaire has not yet been received. Your library has been chosen to take part in this study in order to assess cataloging costs by evaluating various online database vendors and training needs.

In case the original questionnaire was misplaced or lost in the mail, I have enclosed another one. However, it is important that you complete the questionnaire and mail it in the enclosed, stamped envelope by November 1, 1990.

Thank you very much for taking the time to complete this questionnaire. Your participation in the study is crucial to the accuracy of the study.

Sincerely,

Anthony P. Chan

Enc: Questionnaire
Stamped envelope

APPENDIX D
QUESTIONNAIRE

Please indicate your response by circling or writing an X in the space provided.

1. How long ago did your library install its first computer operation? (Please check one)

1 year.....
 2-3 years.....
 4-5 years.....
 6-7 years.....
 8 or more years.....

2. Which database vendor currently provides services/support to your library's cataloging department?

3. How long have you been utilizing this service? (Please check one)

1 year.....
 2-3 years.....
 4-5 years.....
 6-7 years.....
 8 or more years.....

4. Please indicate whether you have any of the following pieces of equipment utilized for cataloging functions on-site in your library and how many of each you have?

a. Terminals	YES	NO	How many?....	-----
b. Minicomputers	YES	NO	How many?....	-----
c. Microcomputers	YES	NO	How many?....	-----
d. Data sets/modems	YES	NO	How many?....	-----
e. Wordprocessors	YES	NO	How many?....	-----
f. Printers	YES	NO	How many?....	-----
g. Other				
-----			How many?....	-----
-----			How many?....	-----

5. What kind of communication link is utilized to connect your library and the vendor? (Please check when apply)

- a. Dial access.....
- b. Leased line.....

6. Which telecommunication service(s) currently provides links to connect your library and the vendor?

7. What is the annual cost of utilizing this service?

- a. Dial access.....\$ _____
- b. Leased line.....\$ _____

8. How many staff members are responsible for cataloging (copy and original)?

Professionals

Paraprofessionals

- None.....
- 1.....
- 2-3.....
- 4-5.....
- 6-7.....
- 8 or over.....

- None.....
- 1.....
- 2-3.....
- 4-5.....
- 6-7.....
- 8 or over.....

9. How many of your cataloging staff have had prior experience in operating computers at time of installation? (Please check one)

- None.....
- 1-2.....
- 3-4.....
- 5-6.....
- 7 or more.....

10. How many of your cataloging staff (professionals and paraprofessionals) have had experience in operation with the vendor currently providing services to your library before they acquire their positions? (Please check one)

- None.....
- 1-2.....
- 3-4.....
- 5-6.....
- 7 or more.....

11. How many hours a day do your staff (professional and paraprofessional) spend on cataloging using the online system?

Professionals

Paraprofessionals

None.....
 1-2.....
 3-4.....
 5-6.....
 7-8.....
 9-10.....

None.....
 1-2.....
 3-4.....
 5-6.....
 7-8.....
 9-10.....

12. What is the average annual salary of your cataloging staff?

Professionals

Paraprofessionals

\$.....

\$.....

13. Please indicate the types and quantities of materials processed annually. (If information on no. of records is not available, please check each category on a yes-no basis)

<u>Type of material</u>	<u>Titles</u>	<u>vols.</u>	<u>Total</u>
a. Monographs	-----	-----	-----
b. Serials	-----	-----	-----
c. Manuscripts	-----	-----	-----
d. Government documents	-----	-----	-----
e. Audio-visual materials (Audio-cassettes, records and videotapes)	-----	-----	-----

14. Does the system have authority file information in machine readable form? (Please check when apply)

- a. Yes.....
 Author (Personal and corporate).....
 Subject (Topical and geographic).....
 Series (name and/or title).....
 b. No.....
 If you check no, please go to question 15.

15. Does the system use the authority files to generate:
 (Please check when apply)

- a. Cross reference cards for the card catalog?...
 b. Cross reference entries for book catalogs?....

16. Does your library utilize other vendor's for authority control if it is not accessible through your current online system?

- a. Yes.....
- Name of vendor.....
- b. No.....

17. Can the system be used to retain and update holdings information?

- a. Yes.....
- b. No.....
- If yes, can it accomodate more than one call no. for the same title?.....

18. Does your system have the capability of modifying or correcting MARC records? (e.g., Do you add, delete, or replace data fields in the MARC record?)

- a. Yes.....
- b. No.....

19. When you prepare input for your data base, is original keying being done online?

- a. Yes.....
- b. No.....

20. What was the initial period of time set by your library for training your staff in utilizing the online system for cataloging?

- 1 week or less.....
- 2-3 weeks.....
- 4-5 weeks.....
- 6-7 weeks.....
- 8 weeks or over.....

21. What was the actual period of time spent on staff training?

- 1 week or less.....
- 2-3 weeks.....
- 4-5 weeks.....
- 6-7 weeks.....
- 8 weeks or over.....