



PII: S1464-9055(99)00085-8

## **TWO ASPECTS OF QUALITY IN TECHNICAL SERVICES: AUTOMATING FOR QUICK AVAILABILITY, AND IDENTIFYING PROBLEMS, EFFECTING SOLUTIONS**

HEIDI HANSON

Head, Catalog Management Department  
University of Maryland Libraries  
College Park, MD 20742  
E-mail: hh41@umail.umd.edu

JOHN SCHALOW

Head, Cataloging Department  
University of Maryland Libraries  
College Park, MD 20742  
E-mail: js368@umail.umd.edu

*Note: This paper was presented at the ALA ALCTS CCS Catalog Management Discussion Group, June 27, 1998.*

### INTRODUCTION

More and more, libraries are looking to automation to solve problems as they strive to meet their customers' expectations for quality service [1]. Automated cataloging solutions have been devised at the University of Maryland to use staff, computing, and financial resources effectively. The University of Maryland Libraries have implemented automated acquisitions and cataloging processes using their CARL integrated library system and vendor services provided by OCLC, MARCIVE, and Blackwell. The objective is to provide better service to customers by speeding up the work and utilizing staff resources more effectively. Quality control may be an issue when automated cataloging processes are implemented [2]. This paper describes the approach taken at the University of Maryland to assure that any errors or problems with technical services processing are identified and addressed promptly.

### TRADE-OFF: FASTER OR BETTER?

When cataloging processes are automated, there are trade-offs between processing speed and meticulous quality review. Automated loads of bibliographic records do not receive the level of

scrutiny that manually entered records receive. A catalog record with misspelled access points, incorrect MARC tagging, or incomplete subject headings cannot be retrieved correctly by users searching the online catalog. University of Maryland Libraries relies on OCLC and other vendors to supply records that are under authority control and follow national standards. At this time, the University of Maryland has not implemented an authority module in the CARL system. When an authority control module is in place, a system of post-cataloging routines, including exception reports to assure that headings are consistent and controlled, will be implemented.

### SPECIAL TREATMENTS

We can no longer consistently provide the individualized special treatments which some of our public service units expect; for example, selecting one of several copies of a book being cataloged for a branch and making it a non-circulating copy. Also, consistent treatment cannot be given to some books in numbered series. Cutter numbers for artists, authors, composers, etc. may be inconsistent with past local cataloging practice. Some of the records will not fit neatly into the cataloging done before and the Public Services staff are aware of this. When users ask for special treatments, changes are made to records. The fact is that patrons value speed of access to records and library materials, and this may be achieved through automated processes.

### AUTOMATED CATALOGING PROCESSES

Several cataloging services make available large batches of bibliographic records for specific categories of library materials. The following are three examples of automated cataloging services the University of Maryland is using to provide better access to the libraries' collections.

#### *OCLC's GOVDOC service*

The University of Maryland Libraries is a full Government Printing Office (GPO) depository library receiving thousands of U.S. government publications each month. Cataloging of United States government publications is accomplished by subscribing to OCLC's GOVDOC service. This has been done since 1991, at a load of approximately 2,000 records per month.

#### *OCLC's WorldCat Collection Sets Service*

Records for microform sets purchased through OCLC's WorldCat Collection Sets Service are regularly loaded. As an example, "Hebrew Books in the Harvard College Libraries," a microfiche set consisting of approximately 5,000 titles, was recently purchased. Concomitant with purchasing this set, the bibliographic records were ordered from OCLC. Within weeks of making the fiche available to the public, bibliographic records were in the system. This would have been impossible to accomplish in the manual environment, and requires strong communication and coordination between selectors, and Acquisitions and Cataloging staff.

#### *OCLC's PromptCat Service*

Many libraries are saving both cataloging costs and processing time using OCLC's PromptCat service [3]. At Maryland, the entire book approval plan—approximately 20,000 titles per year—

has been turned into a purchase plan. PromptCat provides bibliographic records for these titles at the same time as the book. The cataloging process with PromptCat has become essentially a check-in process where Acquisitions staff match the book with the record and identify problems or books without records, which are then sent to Cataloging. Currently, less than 10% of the books are “bounced” to Cataloging. Acquisitions completes all of the work required to process the book including creating the item record, barcoding the piece, and then sending the piece for labeling. This streamlined approach enables us to deliver the purchase plan books to the patron within a week of receipt.

## UPGRADING AND MAINTAINING RECORDS

When automated cataloging processes are used to add new records to the online catalog, individual scrutiny of each bibliographic record is no longer feasible. Instead, other automated processes are expected to provide a measure of quality review as records are added to the online catalog database.

### *Record Overlay Rules*

Our loaders follow record overlay rules that assign a hierarchical value to records based on record origin and encoding level. If a “K” level record is loaded, it will not overlay an “I” level record. Loaders also retain certain locally defined fields, for example, a locally defined and indexed MARC tag for identifying certain special collections so that the information within these fields is not lost during record overlay.

### *Loader Reports*

Loader reports identify records which may require additional work. The reports identify problem records including records loaded without call numbers or holdings, bad branch/location/media codes, barcode problems, and others. Cataloging staff process these reports and resolve problems immediately.

### *Bibliographic Notification Service*

OCLC’s Bibliographic Notification Service delivers upgraded and altered records when a master record previously acquired by an OCLC member library is upgraded from less-than-full level cataloging, or when a 505 field has been added or enhanced. These are loaded weekly at the rate of approximately 50 per week or 2,500 per year. Bibliographic Notification supports tape loading and enables the acceptance of incomplete CIP records without manual upgrading, since completed records will later be delivered automatically. It also enables the acceptance or creation of records with lower encoding levels. However, one of the things the catalogers are learning is that in this environment, maintenance of the OCLC master record is as important as making the changes on the local system, since the OCLC record may eventually come back to us and replace the local record. As a National Enhance library and a member of The Program for Cooperative Cataloging’s BIBCO and CONSER programs, University of Maryland Libraries has the capability of changing the OCLC master record.

## IDENTIFYING PROBLEMS, EFFECTING SOLUTIONS: POST-CATALOGING QUALITY CONTROL

Part of delivering quality to our users is correcting problems when they occur. The Technical Services staff has found that our customers, whether they are online catalog users or public services staff, are quick to inform us when they find a problem with the work that has been done. And when mistakes are pointed out, every effort is made to correct the problem. Within the Technical Services Division at the University of Maryland Libraries it was known that problem materials were being sent back to this division and that corrections were being made, but there was no system for receiving or analyzing reports of errors in processing. Division managers had no information, other than anecdotal, about the quantity of problems customers were reporting, the nature of the problems, or the sources of problems. Customer problems were usually corrected, but the person who received the problem and fixed it may or may not have known how it happened in the first place, or whether it could have been prevented.

### *Technical Services Division Help Desk*

The Technical Services Division (TSD) at the University of Maryland Libraries is a large and complex operation, with more than 80 staff members organized in four departments: Acquisitions, Cataloging, Catalog Management, and Preservation [4]. It was often confusing and frustrating for staff in other parts of the system to know whom to contact when they had problems to report. A problem with a serial volume, for example, could have originated in any of the four departments, since all are involved in processing serials. Despite our best efforts to provide all library service units with lists of Technical Services contact people, the person with a problem piece in hand was not always able to determine where a particular problem should be directed; the person would often simply send it to whomever in Technical Services Division they happened to know personally, and hope for the best. Problems were usually corrected successfully but no management information was recorded, and no systematic effort was made to identify patterns of error or to modify work processes to reduce errors.

In April 1997, the TSD Help Desk was established with three main objectives:

- To provide one point of contact for customers to report processing problems and errors
- To provide a timely response to reports from customers
- To provide information to the division managers for use in addressing and resolving the sources of errors in divisional work processes.

The TSD Help Desk Team was formed with four members, one from each department in Technical Services Division. The team developed a one-page form for customers to use in reporting errors (Figure 1). The form asks the person submitting the report to give their name, department and phone number, and to identify the problem by checking off a description from a list of typical problems. Space is also provided to write in a brief description or question. The form asks if the person sending the report wants to be contacted, with an option to check off "please call me back" if more information about how the problem is being handled is desired. The form also has an area where information can be recorded about who solved the problem and how the problem was solved, for internal use by the Technical Services Division. In addition to the paper form, an e-mail address was established for reporting problems via the Internet. All members of the TSD Help Desk Team and all TSD department heads receive any e-mail sent to this address.

To simplify the process of reporting problems for customers, one member of the TSD Help Desk

**Figure 1. TSD Help Desk Report Form**

*WHO IS REPORTING THE PROBLEM?*

Your Name	Your Department	Your Phone Number	Today's Date

*Please provide any important details about the piece and the record involved:*

Author:	Title:
Publisher:	Publication Date:
Branch:	Location:
Call# on Piece:	Call# in Carl/VICTOR:
Barcode on Piece:	Barcode in Carl/VICTOR:
Height in centimeters:	Pagination:

*WHAT IS THE PROBLEM?*

*Please type or check if your problem conforms to any of the following Quick Fix Categories:*

Barcodes do not match: _____	Barcode missing: _____	other ( _____ ):	_____
Call#'s do not match: _____	Call# missing: _____	other ( _____ ):	_____
Piece needs repairs: _____	Media code error: _____	other ( _____ ):	_____
Branch error: _____	Location error: _____	other ( _____ ):	_____

*Please describe briefly the nature of this problem, how you discovered it, and state here any questions you have:*

*Please check here if you have already fixed the call# on the spine label: \_\_\_\_\_*

*Please check here if you have mailed the piece(s) to the TSD Help Desk: \_\_\_\_\_*

*The TSD Help Desk Team will contact you so that you know your report form has been received. Do you need more information about how this particular problem is being solved? (Please check one)*

<i>No, just go ahead and fix it: _____</i>	<i>Yes, please call me back: _____</i>
--	--

*WHO SOLVED THE PROBLEM?*

Your Name	Your Department	Your Phone Number	Today's Date

*HOW WAS THE PROBLEM SOLVED?*

<i>Describe the problem:</i>	<i>Describe the solution:</i>
------------------------------	-------------------------------

Figure 2. TSD Help Desk Log

Date	Branch	Problem	Acq	Cat	CatM	Pres	Annotations	Resolved
1/29	EPSL Circ	Location doesn't match in summary & item holdings			√			
1/28	EPSL Ref	item linked to wrong bibliographic record		√				
2/3	Pres.	item record: wrong year			√			
2/2	Art	item routed to wrong branch			√			
2/3	Archives	correction to authority record		√				
2/3	McK Service Plus	PromptCat bibliographic record without holdings	√					
2/1	Chem	typo in title on binding				√		
2/4	EPSL Ref	Branch/location error		√				
2/7	McK Period.	item added to wrong bibliographic record			√			
2/6	Art	call number error (missing decimal point)		√				

Team was designated to receive, log, and route all Help Desk reports. Incoming reports are logged daily. The name of the department sending the report and a brief description of the problem are recorded (Figure 2). The Help Desk contact person determines which department the report should be routed to for correction, and notes in the log where the problem is being sent. A photocopy of the report is made and retained by the contact person, arranged by the unit reporting the problem. The original report is sent to the Help Desk Team member in the appropriate department. When the problem is resolved, the actions taken to correct it are noted on the form. The form is then returned to the Help Desk contact person, who updates the log to show that the problem has been resolved. The log is cumulated monthly, and copies are delivered to each Technical Services department head each month. Department heads are expected to review the log, looking in particular for frequently

occurring problems or patterns of error. When patterns can be identified, department supervisors address workflows where problems occurred.

### *What Was Learned*

Several examples illustrate how the Help Desk enabled each department in Technical Services to identify and refine work processes to reduce error. One type of problem that was regularly reported to the Acquisitions Department was errors in serial check-in; for example, a new issue was checked in on the wrong serial record. Staff in several different units in Acquisitions, reporting to different supervisors, all perform serial check-in. To assure greater uniformity in training for and revision of serial check-in, a Serials Check-In Team was formed. Now the Serials Unit supervisor trains all staff in Acquisitions who perform serial check-in. That supervisor has also been assigned the responsibility of revising each person's check-in work, and for evaluating the serial check-in portion of the person's work in the annual performance appraisal. Though occasional carelessness or human error can not be completely eliminated, uniform training and revision reduces errors, and helps promptly correct any errors that occur.

Through review of the Help Desk logs, the Cataloging Department found that a significant number of reported problems were being detected by the online system loader program. These errors were appearing on the daily loader reports, but were not receiving timely attention or correction. By improving the procedure for processing the daily loader reports, errors that had already been detected could be resolved before the materials reached the users.

Another frequently reported error—mismatches between the call number and/or location on the spine label and the call number and/or location in the online catalog—was often the result of errors in transcription or poor handwriting on the title page. Spine labels were being typed from the information written by hand on the title page. The division changed from this manual labeling process to producing spine labels from the online system, eliminating many opportunities for errors in transcription. In addition, staff no longer need to write call number or location information on the title page, saving time in processing.

The Catalog Management Department found that many of the errors reported on the logs were in serial microfilm added volumes being processed by student assistants in the department. This led the unit supervisor to identify the need for more detailed procedures for the students to follow in doing their work. A better student training plan and closer supervision of the students' work also helped reduce this type of error in the department.

Retraining of student employees also addressed another type of problem frequently reported to the Preservation Department: materials being delivered to the wrong library locations. In addition to retraining, unit supervisors made it part of the work process to review the sorting shelves before materials were packed for delivery to library locations—a small improvement that saved time and aggravation for the department's customers.

### *Customer Response to the TSD Help Desk*

The TSD Help Desk has been very well received by our external customers. When they wish to report a problem or ask a question, they need no longer attempt to figure out the problem before they send it to someone for correction. All they need is one form, and one address to send it to: TSD Help Desk. If our customers check off the item on the report form that says "Please call me," they get a prompt response (within a day of receipt of the form). Since incoming problems are quickly triaged and sorted out by department, they are more likely to get back into the hands of a staff member who understands the problem and can resolve it quickly. The log maintained by the Help

Desk contact person helps track any problem that lingers too long without being resolved. Even departments within the Technical Services Division use the form and send it to the TSD Help Desk. They recognize that if patterns of problems in interdepartmental workflow show up in the log distributed to the TSD department heads, attention will be paid and effort directed toward addressing the problem.

### *Next Steps*

The experiment with the TSD Help Desk is considered a success, and it will be continued with some changes. Incoming reports will be logged in, and department supervisors will be provided information to help them direct their effort toward improving processes and reducing error; in particular, reducing problems identified as important by customers. Using database management software to log problem reports online, rather than on paper, is obviously necessary; this will facilitate the production of monthly reports, pattern analysis of error reports over longer periods of time, and generation of statistical counts of the errors reported. The establishment of a Help Desk Unit in the Catalog Management Department is also planned. While continuing to route problems to their source for correction, it is most important to do this with errors in recently completed work to assure that current procedures and training are accurate and effective. With additional Help Desk staff, errors older than six months or a year could be received and logged, but then corrected by Help Desk Unit staff and not routed back to other TSD departments. The Help Desk report form will be added to our TSD web site, both as a printable form to be completed and sent in as usual, and as a Web-based form that customers could fill out online. Currently, we do not receive very many reports over the Internet. However, as customers are becoming familiar with the Web-based online catalog and its capability for e-mailing records, it has become easier for customers to report problems as they find them.

## SUMMARY OF BENEFITS

The following summarizes the benefits of what is being done to automate cataloging processes and provide quality control:

- Bibliographic records are available in our OPAC sooner.
- Library materials are processed more quickly.
- The holdings symbol is set on OCLC immediately. This is important to patrons who use OCLC's FirstSearch and identify holdings via WorldCat. It also supports the University of Maryland's role as a major lender of U.S. government documents and other library materials to Maryland residents.
- Customers are provided with one point of contact to report processing problems and errors.
- Division managers get timely information for addressing and resolving the sources of errors in divisional work processes.
- Staff resources can be redirected to other cataloging and processing priorities.

The library has compiled a list of uncataloged collections, which currently consists of more than 2 million items [5]. Cataloging staff must be used to provide bibliographic access to these materials, many of which are unique. With more cataloging of routine materials accomplished through automated cataloging processes, there are definite implications for the skills that staff will need to process these more challenging materials. Retraining of personnel and redirection of staff



resources will help meet the goal of expanding the universe of bibliographic records available to other libraries.

Delivering quality in technical services requires that we strive to meet what often seem to be competing expectations from our customers: rapid availability of library materials as well as detailed and accurate cataloging and processing of those materials. Automated processes for upgrading and maintaining catalog records, in addition to systems (such as the TSD Help Desk) for identifying and reducing errors in processing, are methods of addressing the issues of quality assurance that arise when automated cataloging processes are implemented. The University of Maryland Libraries Technical Services Division is using all of these approaches to more successfully meet customers' expectations for quality in technical services processing.

## REFERENCES

1. Diedrichs, Carol Pitts. "Using Automation in Technical Services to Foster Innovation," *The Journal of Academic Librarianship*, 24 (1998), 113–120.
2. Harmon, Joseph C. "The Death of Quality Cataloging: Does It Make a Difference to Library Users?" *The Journal of Academic Librarianship*, 22 (1996), 306–307.
3. Rider, Mary M., and Marsha Hamilton. "PromptCat Issues for Acquisitions: Quality Review, Cost Analysis and Workflow Implications," *Library Acquisitions: Practice & Theory*, 20 (1996), 9–21.
4. University of Maryland Libraries Technical Services Division home page: <http://www.lib.umd.edu/UMCP/TSD/tsd.html>.
5. UM Libraries Uncataloged Collections List: <http://www.lib.umd.edu/UMCP/TSD/CATDEPT/uncatlist.html>.