Implementing a Second System: 
Some New Concerns

IMPLEMENTING a second automated system (one from a different vendor than your original system) requires an entirely new set of planning tools. The planning is similar to that for the first system, but tends to be even more complex.

Some areas of concern with the first system, such as staff and public acceptance of automation, should not need to be considered with the second system. The library has already created an environment for the computer and installed electricity and cabling for the terminals.

Most second systems add many more terminals, however, especially for the public access catalog, and these additional terminals will need electricity and cabling, often in the center of the library where they are most difficult to install.

Let’s start with the data

Although the library may not have been able to use all of the equipment from the first system, the library certainly does intend to use the data. This can be a very serious problem. The matter of the software license and the vendor’s proprietary information make it imperative that you get your data off the original system—you have a right to that data. (Many older contracts do not address ownership of the data at all.)

Some of the data can be removed using standard utilities, particularly for MARC bibliographic records. Most systems do not yet handle holdings using standards, and the standards for patron records are currently in development.

The library may have a particular problem if it has had a turnkey system from a vendor who performed well. The library, then, has not had to develop the necessary skills to work with the software directly. After all, that’s why most libraries purchase turnkey systems in the first place. In this sense, the better your current vendor is, the harder it may be for you to convert to a new system.

The issue of proprietary software licenses is a very serious one. This is the product that the vendor has to sell, the heart of the vendor’s business. Unless the vendor has gone or is going out of business entirely, the vendor will be very concerned about the way in which you obtain the data from the system to move it to the new system.

Be careful. Make sure that you take all of the right steps and document them. You may have to involve your attorney in the process to ensure that you do not leave yourself vulnerable to a lawsuit. There haven’t been any lawsuits in this area yet, but there have been several instances where they have been close.

Seeking cooperative conversion

If you do all the right things, it is more likely that your current vendor will cooperate, or at least not interfere, with the conversion. Try not to leave your current vendor angry. Be honest and open about the procurement process for the new system.

Do not broadcast your discontent with your current vendor. Remember, you need your current vendor, not only for assistance in removing your data from the original system, but also to keep the system operational until the day the plug is pulled.

Vendor dissatisfaction

The first libraries to change systems to that of another vendor did so because of major dissatisfaction with their current vendor. These were libraries that were experiencing severe problems with their systems. In many cases the libraries had a very low confidence level regarding the contents of their system files, especially the transaction files.

When asked about their response when a patron questioned the information in the system, the libraries admitted that they always believed the patron. These libraries, then, were willing to leave the transaction and delinquency files behind when moving to the new system since the value of these files was not worth the effort of trying to move them.

But today, as libraries move to new vendor systems with higher levels of confidence in the accuracy of their files, they wish, and should expect, to move parts of these files to the new system.

However, because each vendor handles these files in a unique manner, these files and their contents may be the hardest to transfer. Some information will probably be lost during the transfer, most frequently in the area of delinquencies and linkages to patron and item files.

Libraries should be aware of these potential problems and anticipate them. It may be necessary to print all final notices and bills before switching to the new system to ensure that a permanent record is available when information is lost during the transition.

Migrating wild data

Statistics and year-to-date information may also be lost. It may be necessary to begin accumulations again with the new system. Even if the old values are transferred to the new system, they may not be placed in a field that can be incremented so as to continue updating statistics.

In many ways this may be similar to the discrepancies in statistics that occurred when moving from a manual system to the first automated system.

It is vital that extreme care be taken in migrating the data from one system to another. Extensive testing should be done before any transfer takes place, especially if your new vendor has never migrated a library from your first vendor’s system. You may have to have custom program-

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The rigorous database testing

The rigorous testing becomes the library's task. Use a valid test file, one that will allow you to examine many different types of records and many different areas of potential error. A valid test tape is not one that contains the first 200 or 500 or even 1000 records from the file.

Records at the beginning and end of files are notoriously prone to anomalies, and they may represent records of one type or records entered during a specific time period, not the full range of records contained in your file.

The custom programming and testing may be complicated because your data may not look as you thought it would or as you described it to your vendor. (Always have records that contain values other than those you specified moved to an exception list so that you can review them. Sometimes they are errors, but they sometimes represent values that you forgot to describe to your vendor.)

Just getting the data off of the original system may be difficult since the production of tapes may have a significant impact on current system use. The process may slow already poor response time dramatically or, worse, require that the system be unavailable for normal use during the period when the tape is being produced.

Bibliographic upgrades

For many libraries, the move to their second system will also be the time when their bibliographic files are upgraded. The bibliographic file may contain short records, either entered individually or stripped of "nonsential" information when initially loaded or brought over from a bibliographic utility. The library may actually have a full MARC database, perhaps used for microform catalog production, but it isn't part of the first automated system.

The full MARC bibliographic file from one source will have to be merged with the brief bibliographic records and holdings information from the online system. Severe difficulties, high costs, and seemingly endless editing result when there is no definitive element, such as a Library of Congress or ISBN number, which occurs in both files.

In those cases the matching and merging of the files must be done using author and/or title fields. But most libraries that have created brief records are also likely to have used short entries or abbreviations in the author or title field, making an exact match unlikely. Every database of a certain age has its own peculiarities; it is vital that the library know them.

Getting a cleaning staff

A decision needs to be made as to which party will do the merge and/or cleanup work on the bibliographic and holdings files. It can be the new vendor, the new vendor's subcontractor, or a vendor that specializes in database work under a separate contract. The true cleanup work, that which is left after the computer has done all that should prudently be done, must usually be done by the library. The cleanup work is usually done after the new system is operational, allowing the library to proceed with activity on the new system even though all of the data have not transferred in an ideal form.

This is particularly true when a brief record database and a full MARC database are merged. Each of these computer merges will result in orphans, records from one database that do not match those in the other database. In most cases the unmatched records are simply transferred to the new system, leaving the manual correction work until later. It is still possible to circulate all materials since the item information is still attached to a brief record. The full MARC record may be indexed and searched, but it will not display any holdings.

If there are many full MARC records without holdings, the library may wish to delay implementation of public use of the online catalog until these records are either merged with brief records or are deleted from the database. (In some cases the library has not been as rigorous in deleting titles from its MARC database as it has been in deleting from the online system, especially if the MARC database has not been actively used for catalog production, resulting in MARC records in the database that represent titles long gone.)

This may also be the time when the library begins to address the issue of authority control, especially if the library is implementing an OPAC for the first time. The timing of the authority work should be considered in the general migration schedule. Although the library is eager to provide enhanced access for patrons, for many libraries it may be better to wait until the new system is stable before attempting major authority work on the database.

And then there were barcodes

When transferring holdings and patron files, libraries are also correctly concerned about the issue of their existing barcode labels. Having labeled all of the materials and issued new patron cards, the library is not eager to begin the process again.

The good news is that it is rare for a library to be required to relabel, especially if the library has been using a fairly common automated system; the bad news is that the new system may not work as well with the current labels. The vendor may have to write special software to accommodate the "foreign" barcode; this software may not perform the necessary check-digit calculations for the current labels.

The current labels may not work on all of the new system's peripheral devices, such as backup or inventory devices. There is also always the possibility that your custom software will be "lost" in the vendor's next release and will have to be rewritten.

The character of OCRs

Libraries with OCR labels face a difficult decision regarding relabeling. Although the new vendor system can read the OCR labels, the library is using a type of label that is becoming less common in the library marketplace. OCR label readers are more expensive and many libraries report high levels of maintenance difficulty.

The use of OCR labels also precludes resource sharing using the original label since other libraries cannot read the OCR labels. Patrons will need to carry multiple library cards, or at least have two labels on one card to enable each cooperating library to read the labels.

Although the transition can be difficult, the functionality of the library's new system should assist in maintaining a high-quality database, one that adheres to library standards and that will enhance the use of the collection.