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## **Negotiating an Automated Circulation System: The Librarian's Viewpoint**

I THINK THAT IT was my experience in a contracts course in law school that convinced me that I should not be a lawyer, but since then I've found that no librarian's work today is entirely free of legal problems. This is just one of the increasing complexities of librarianship that make it challenging and enjoyable.

I'm not sure that my courses in law school increased my ability to negotiate for a circulation system. That was confirmed to me when, in preparation for this speech today, I looked at the last contract that we negotiated. In rereading it only a matter of months later, many of the provisions in it seem naïve. In the final analysis, it comes down to the fact that no contract can offer absolute protection in all circumstances.

Let me start with a little history about why, when and how we undertook the automation of the circulation system at the Princeton University Library. In 1975 the library operated with a 2-card, manual circulation system that was not satisfactory. There were people in the front filing and retrieving cards by call number and people (four FTE) in the back room filing and retrieving another copy of that circulation card by patron's name in order to respond to queries from the Controller's Office about outstanding commitments by those leaving the university. As in many university libraries, there was also a pattern of very heavy demand on circulation during the ten or fifteen minutes before a class change. Approximately one-third or more of all circulations occurred in that slightly more than 10-minute period each hour. We were unable to put enough people

out front to take care of everyone and still provide optimum service. Another consideration was the need for better statistical data to aid in decisions on transferring materials to Princeton's storage library about three miles from the main building, selecting materials, and pinpointing locations for shelf reading.

I will digress momentarily to describe a project that was very important, but somewhat frustrating. Princeton's open stacks library has a high level of collection utilization, but has been choking on its own success. Random sampling demonstrated that about 132,000 of 2 million volumes were out of place on the shelves in the main library building. There seemed to be no way to commit enough staff to continue full shelf reading on a regular basis. This made it desirable to concentrate effort where there was greatest activity; however, the manual circulation system did not give an adequate indication of where that activity was. Elaborate samplings were taken several times, and it was discovered that in some areas the shelves were out of order at twenty times the average rate. This made it very important to determine where the activity was concentrated in order to put the necessary efforts into the appropriate areas. The rate at which the disorder occurred in the stacks had a high correlation to the circulation patterns; however, circulation patterns themselves change constantly throughout the academic calendar, depending on what readings are assigned.

In the fall of 1975 we began to examine the alternatives. The systems analyst, the circulation librarian and I made brief visits to about twenty libraries using seven different circulation systems. This was done to give us an idea of what was currently available and a sense of how those users felt about the companies that had supplied their hardware and software. We narrowed the field to three prospects: two existing systems and one in development. A somewhat larger committee was then appointed to conduct a more exhaustive evaluation of the three main prospects. That committee was chaired by a new staff member who had been involved in the installation of an automated circulation system at another major institution. Also included on the committee was the circulation librarian, the reserve librarian (because of the immediate need to extend the circulation system to the reserve book division where many of our circulation problems were), a representative from Technical Services, and the engineering librarian, who represented branch libraries because we were interested in the potential extension of the system outside the main building. Princeton has 4 branch libraries with circulations of over 50,000 a year; 3 of these have collections in excess of 100,000 volumes. There seemed to be a real potential for decentralizing the system.

The automation committee undertook a detailed evaluation, visiting various installations and talking with those who had experience with the

companies involved. The more places they went, the more conflicting were the reports they got — which prompted them to look even further. This points out the undesirability of seeking the opinion of only one library. In many cases those reports were based on misunderstandings of fact. The committee attempted to qualify the systems on the basis of their technical and functional attributes and recommended two systems. One vendor offered an established product. The other system, however, offered greater potential, not only in terms of making innovations in the statistical area, but also in the prospect of addressing our reserve requirements in a much shorter time frame. It was a calculated gamble in the case of the second vendor, as there would have to be a substantial time commitment by the library staff.

When the committee had made its recommendations, negotiation began with one of the two companies. We took, at that point, the more conservative posture because there was some opposition to automation. This decision was based on the meeting of the Library Council, discussion with the purchasing agent, and our legal counsel. Contract negotiation proved to be very complex. There were some points about which we felt strongly and yet could not get revised to meet our unique requirements. We therefore obtained a copy of a standard contract from the other vendor and began discussion of contract terms with them. The contract terms, drawn from various versions of the contracts of both of those companies, make up the major portion of this paper.

We had two underlying concerns as we undertook contract negotiation. Our first concern was dependability. There were reports of failure to perform, unfulfilled promises of delivery and late delivery. We wanted dependability — to ensure it somehow through contract negotiations. The second concern was to avoid hidden costs. The budget was finite, almost inflexible, so there could be no surprises in terms of dollars and cents.

The first specific contract provision to concern us was the description. What exactly was to be included? The hardware portion is obviously the more specific. It itemizes a central processing unit, the terminal controller, certain terminals of specified numbers and types. However, this constitutes only about 40 percent of the value of the system. Of more importance is the software. What software packages are actually included? Care is needed here as this is a double-edged sword. If one gets too detailed in itemizing everything that one could think of, one is much more likely to be hurt by what one failed to request. Broad, general phrases are better in terms of future specific software requirements. We incorporated the standard descriptions that appeared in the promotional literature of the companies into the contract, by reference in one case and itemization in another.

The second concern was the matter of delivery date and liability for nondelivery or late delivery. After contacting about one-third of all the on-line circulation systems users in the country by telephone or in person during the course of our efforts, we found that delivery was such a widespread problem that it was necessary to include it. During the early negotiations we were very insistent on penalty clauses for late delivery and, in fact, did two versions of the contract with penalty clauses stipulating  $x$  hundreds of dollars per month for late delivery.

Our attitudes shifted during the negotiation process — away from concerns about delivery toward concerns about acceptance. Anyone can put the hardware on the loading dock and the software in your cabinet, but the real question is whether the operating circulation system can check books in and out satisfactorily and perform other operations of circulation. Thus, the acceptance clause became a much greater object of concern as we matured in the contract negotiation process.

A third concern was that of risk of loss or damage. When does the obligation or the liability transfer? Does it transfer at time of shipment? At time of receipt? This is perhaps of minor importance in working with most companies because of insurance provisions; nevertheless, we specified in the contract that liability be transferred to the library at time of delivery.

The next concern was that of site preparation. Whose responsibility is it? This is generally spelled out in a boiler plate which would be provided by a vendor. Site specifications are usually mentioned in a contract. In this particular case, we were naïve. We didn't pay much attention to this, because we had contacted a large number of institutions and asked how much installation costs had been. They very specifically ranged from \$3000 to \$5000, so we incorporated that into our planning and paid little more attention to it. Little did we realize that due to shortcomings of our 1948 building we could have either all heat or all cooling, but no mixing during the transition periods of the year. In the fall and spring, the temperature can be unbearable. Those circumstances can cause serious problems with the central processor. Moreover, the system could not be modified simply by putting in supplementary cooling facilities because local building codes prohibited window units. Site preparation costs subsequently totaled more than \$13,000. This, of course, violated our "no hidden or unexpected costs" concern with which we began negotiation. Were we to do it over again, we would not necessarily make this a matter of contract, but we would certainly arrange for an inspection and evaluation by the vendor and some fairly specific cost estimates by a local contractor to determine what would actually be involved in site preparation and installation.

The fifth concern was terms of payment. Contract provisions vary: one contract stipulated 30 percent payment at time of order, 50 percent more on delivery and 20 percent on acceptance. In other words, the vendor would have 80 percent of the money at the time of delivery. This provision offended us. We didn't want to pay for the system until it was working. While appreciating the cash flow requirements of the vendor, we didn't feel very businesslike in paying the 80 percent, which would not only cover the vendor's costs of hardware, but probably most of the software as well. After considerable negotiation with the vendors we were able to have this provision changed.

The next area was that of training. This may be very important if the system is a new one. The vendor may stipulate that training is available to six people for up to ten days preceding or following the installation. For a well-established system, such a training clause may be satisfactory. However, if the system is relatively new, it is highly unlikely that training could be performed in such a short time. Our concern was for a training clause that best reflected the particular nature of our installation.

Warranty was the next issue, and it proved to be a very difficult area. One vendor's contract read: "X warrants only that the system shall be free from defects in material and workmanship at the time of delivery and for a period of 30 days thereafter. X's liability under this warranty is limited to the repair and replacement FOB factory at X's option and expense of any defective or nonconforming product." A warranty on the parts and labor for thirty days on something as complex as an automated system was unsatisfactory, especially since the acceptance test would probably not even be conducted within the warranty period. We wanted a warranty that said that it was fit for the purpose, i.e., for circulating books. If it didn't circulate books we wanted the ability to make a claim under the warranty. That is not very easily done. In fact, we were unable to get a warranty of fitness for purpose from any vendor and found that the compromise solution was to modify the acceptance test. It seemed that the acceptance test would have to be the critical nucleus of the whole contract.

The next concern was that of limitation of liability. One version of a vendor's contract stipulated that their liability did not exceed the total amount paid to the company. We felt that if a problem arose due to faulty installation or equipment and as a result someone were seriously harmed, a multimillion dollar suit could result, and we did not want to be in a situation where the vendor's liability was limited to the amount of the payment we had made. Renegotiation removed the limitation, but we were unable to avoid a series of restricting clauses concerning the circumstances under which there would be liability. There was also a one-year limitation clause in almost every contract we saw, so that legal recourse was avail-

able for only one year after purchase. We refused to accept that one-year restriction and were successful in renegotiating the contract.

Virtually every vendor-written contract begins with a fairly standard boiler plate. If one expresses concern about specific clauses, the response usually is, "Well, just about everybody who does business with us signs this contract." This is not merely salesmanship; the vast majority of librarians we spoke to had accepted the standard contract submitted by the company without effort at extensive, serious review.

The next item was the matter of acceptance. There were different versions of the acceptance test. One that initially looked very appealing called for a demonstration of the system at a time to be determined by the vendor, but within a certain number of specified days after installation. It listed a series of twenty-seven steps that would be demonstrated only once. If the system went through the twenty-seven steps successfully, it would be considered acceptable. Because the list was fairly exhaustive, including almost every conceivable function a circulation system could perform, we were duly impressed. However, another institution's acceptance document made us realize that our real concern was continuity of performance. Thus, we sought instead to negotiate a provision that the system perform as spelled out in the contract appendix for a period of thirty consecutive days at a level of 90 percent efficiency. If a single terminal were out or a single function were not performed satisfactorily, it would constitute down time and if that aggregated to more than 10 percent, the system would not be acceptable. Failing the first 30 days, a second 30-day period would ensue, then another; after 120 days we would have the option of either requesting a replacement of the system or having the system removed. Also, payment was made contingent upon acceptance. The matter of acceptance is particularly critical if the vendor has in the past made prompt delivery but has failed to have the system operational within a reasonable period of time after delivery, or if the vendor is new and has no history of performance.

If we were to enter contract negotiations again, we would commit much more attention to the acceptance clause. In every version of the contract of every company with which we talked, we failed to differentiate adequately between satisfactory and unsatisfactory performance of a function. That a system will register a patron or check in a book is not necessarily meaningful if the function is performed very, very slowly. Many of you are acquainted with OCLC and know the problems of response time. Frankly, our contract contained no protection against this problem.

Maintenance was the next issue addressed. The maintenance fee is generally waived for the first year after installation. Although prepared to pay for this in subsequent years, we wanted assurance that mainte-

nance costs would not get out of hand. Maintenance costs \$15,000-20,000 per year on a sophisticated system and we wanted to prevent those costs from rising very dramatically. We attempted to protect ourselves by including an escalator clause that set limitations on price increases.

The next issue was the ability to utilize new releases. There is, of course, a serious economic pressure to standardize. A vendor installing a number of systems will increasingly seek to standardize that system so that development costs can be borne by a larger number of users. If our system became more and more standardized after installation, we wanted to be able to utilize the new releases. That "utilizability" clause was very important to us because we had encountered libraries that had installed early versions of a system and then had considerable difficulty adapting to the standardized system that subsequently developed.

Our next concern was that of escrow of software. What if the vendor went bankrupt or dropped production? One extremely small vendor might cease doing business — and then? Another, very large company might nonetheless decide to drop the line because of poor return on investment. We wanted to be assured that under those circumstances we would have access to the software and be able to continue the development of the system on our own. An escrow agreement became an important element of the contracts negotiated with two firms.

The next item of concern was the right of resale. One contract specified that we had no right of resale. We wondered what their reasons were. Why did they take that position? This is a very important question to ask in the negotiating process. The underlying concern was that the vendor did not want the software to fall into the hands of a competitor. We solved that problem by having the vendor grant right of resale of hardware to anyone and limit right of resale of the software to those not engaged in the business of selling or servicing automated circulation systems.

This type of discussion was at the heart of all the changes mentioned. In fact, my own view of the contract now is that it is the record of a series of discussions and agreements that have been reached. In the final analysis, one must have faith in the other party because there is no way to anticipate every conceivable circumstance against which one might wish to be protected. A very tightly drawn contract can work against, as well as for, the parties, because it limits what one can get as well as setting a limit to what one may have to give. For that reason it is important to maintain a feeling of confidence and trust throughout the negotiating process. Any feeling that the vendor is not trustworthy or reliable is a good reason to get out of that negotiation. Sticking with it and thinking that the boiler plate in the contract will somehow provide protection is a mistake.

My last comment is made on the basis of admittedly very limited experience: one really has to know what one wants before going into nego-

tiations. There has to be a great deal of homework. This is best done by visiting a lot of libraries, talking with many librarians, and finding out what problems they had. This should help both to avoid repeating those problems and in working with the vendor when and if problems do arise.

## QUESTION AND ANSWER PERIOD

*What role do attorneys play?*

All three companies with whom we discussed contract terms presented us, at one point or another, with a fairly standard document which had obviously been prepared by an attorney. We reacted to it from the standpoint of its functional aspects — how it dealt with our specific requirements. We then submitted these reactions to our attorney, explained what we wanted to accomplish, and asked if the contract terms really reflected our needs and how we should state some of our requirements that were missing. The attorney phrased the appropriate legal language which we passed on to the vendor. They in turn referred it to their attorneys.

One difficulty we ran into was that after quickly reaching an understanding between the top people in the vendor's company and the top people in the university, both would refer the idea of that agreement to their respective attorneys; but when it came back in legal language, we all felt somehow that we were being more restricted than we had intended. It seemed that legal counsel on both sides was far more conservative and protective of their party's interests than the parties themselves seemed to want. It was difficult enough understanding the legal position of our attorney, much less that of the attorney for the vendor. In a few cases we actually had to request our attorney to leave out the verbiage, and keep the concept simple. This is not, however, an indictment of all attorneys. In this case, the attorney's problems were very much a reflection of his own inexperience in dealing with this particular kind of contract. Our attorney attempted to protect not only us but himself as well by putting in a great deal of additional language. I've wondered since then if it would have been better to seek assistance from someone who had a reputation for knowing the ins and outs of electronics contracts and automated systems contracts. However, as our attorney became educated, we also became educated and those problems began to disappear.

*How experienced were the vendors?*

To my knowledge, one vendor had already negotiated more than 100 contracts for an automated circulation system before ours. For the other vendor, our contract was probably their first, or one of the very first.

*Were you concerned about the broad general terms of the contract you finally signed?*

The vendors were already speaking in very broad terms because they didn't have a system already packaged and ready for delivery. It made one want to be more careful in the contract. On the other hand, this also left open the possibility of resolving some of the problems we had seen in existing systems, which was an exciting prospect. There was also the hope that we might formulate some innovative solutions. As a result of the negotiations back and forth, trust developed and we were prepared to take risks on the side of greater generality. Some of our very specifically phrased demands began to disappear. For example, the penalty clauses were removed in the late stages of the negotiation. Both of us wanted to install a good working system — the vendor wanted it because it had a reputation at stake in terms of future contracts with libraries, and we wanted it because we had a reputation at stake in terms of our student body and faculty.

*What did you do when you reached an impasse?*

We reached impasse with both of the vendors with whom we dealt. Usually those situations were resolved by changing the cast of characters. An impasse is a product of the people involved, as well as of the organizations. By sending in a different individual who would approach the problem from a slightly different perspective, it was possible to resolve matters. Even where we didn't actually get our way, we did at least get an understanding of what the other was trying to protect. There's obviously a risk for the library, but there's also a risk for the vendor. It is, of course, the understanding of the respective risks that makes it possible to reach a compromise.

*What kind of escrow agreement was developed?*

The following excerpts will give an idea: "X shall deposit in escrow, in a depository located in the state of New Jersey, a copy of the current version of all software, proprietary or otherwise, which are essential to support the system. Software deposited by X in compliance with this provision are listed in paragraph G below. Upon the moment of deposit with the escrow depository, the purchaser shall have a nontransferable nonexclusive license to use the software deposited in connection with the system associated with this contract." A definition of software appeared in the next paragraph, and in the following paragraph the circumstances in which there would be access to the software were spelled out. Such circumstances include insolvency, bankruptcy of the supplier, phasing-out of production and/or sale of the system, inability to provide maintenance services for the system, or inability to develop software improvements

which keep abreast of technological advances in the library systems industry. Immediately upon the occurrence of any of the foregoing, full right of access to the materials deposited in escrow shall belong to the purchaser. Escrow is basically the designation of a place (i.e., a bank), the spelling out of what shall be there, and the statement of circumstances under which access by the purchaser shall be valid.

*Why didn't you specify that acceptance would be subject to your being satisfied?*

Frankly, we thought there might be circumstances where certain vendors might want our account badly enough to write in such a clause. However, we had mixed feelings about that kind of requirement. We doubted whether such a provision would hold up in court, because the court would somehow have to determine the reasonableness of the standard of satisfaction. We sought rather to have a provision that spelled out to both parties at what point the system would be considered successful. The contract is really nothing more than a summary of mutual agreements.

Since there are many parties involved, both during negotiation and times later when problems may arise, common understanding must exist among the circulation librarian, reserve librarian, systems analyst, head librarian, university purchasing agency and several others on the staff. Simply to request satisfaction creates difficulties in pinpointing *whose* satisfaction. If at any one time our people had been polled, very different attitudes about the degree of our success would surface. The provisions in the acceptance test are depersonalized and therefore less subject to in-house disagreement.

*Did you spend a lot of time on the maintenance agreement?*

The contract contains a maintenance clause that has a standard maintenance agreement associated with it. We did not commit the same amount of care to review of the standard maintenance agreement that we did to the main contract, primarily because we didn't object to any of the maintenance contracts submitted by the vendors.

*You'll have to live with the maintenance agreement for several years. Why do you feel you came out okay?*

The point is very well taken; it is a poor reflection on us for not having put much emphasis on the maintenance agreement. However, it is a positive reflection on the vendor with whom we ultimately signed that the standard maintenance agreement (which was actually developed for another product of the same company), is clear and comprehensive. It has obviously withstood several years of revision in a way that the circulation system contract has not.

*How long did the entire process take?*

In October or November 1975 we began to investigate our alternatives and it only took about a month to narrow seven systems to three. It then took the committee three or four months to make its recommendation. Contract negotiations with two companies lasted approximately four months. The contract terms which took the most time were payment, warranty, acceptance, the utilizability of new releases, escrow of software and the right of resale. Those particular items were the only ones which required more than one exchange. It was primarily the reconciliation of the verbal agreement with the actual documents that constituted the most time-consuming element. After the contracts were drawn, it took several months for delivery. Thus, it was a little over one year.

*You're fortunate in not having a state purchasing office, aren't you?*

That is true; our situation is unusual in that we are a private institution and, therefore, have very few bidding requirements imposed on us. We do, however, have close supervision by a campus purchasing agent who makes certain that the university's interests are well served. We must demonstrate that we have investigated the alternatives and explain why we have chosen a certain alternative. We had several sessions during which we presented justification to the purchasing agent that, even though it was the library's money, the university's interests were properly served. Had we been using general university funds, the constraints would have been much greater.

*How were you yourself involved?*

I was involved at three times. The first was at the very beginning, in pinpointing the seven systems and narrowing them to three. This happened simply because I was the only one who had then had prior experience with automated circulation systems. The second stage of my involvement was when the committee made a recommendation to the Library Council, the chief policy-making body of the library. Because the recommendation was a conditional one, there had to be several meetings in order to get an understanding of the caveats involved. After all of the functional and technical requirements had been substantially resolved and it came to questions of warranty, payment, acceptance, utilizability and escrow of software, I then became the chief spokesperson for the university. Although this was the role of the purchasing agent, it seemed more important to have someone who had the best combination of knowledge of the system as well as the university's purchasing requirements.

*What has actually been installed?*

The system has been installed in the Circulation Division of Firestone Library and is scheduled to be installed in the Reserve Book Divi-

sion during the next few weeks. We are behind the projected schedule for three reasons: slow delivery of components from subcontractors, problems with site preparation (primarily the air conditioning), and some difficulties in the performance of the system which only recently was traced to a hardware failure.

At this point, I'm not the least bit concerned about the system passing a test on a particular day; however, I'm very much concerned with it performing well over a long period of time. The acceptance test will probably occur this summer, which will be within six months of the arrival of the first components on our loading dock.