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Negotiating for Computer Services: Must the Librarian Be Underdog?

NEGOTIATING FOR COMPUTER SERVICES is a subject that should not be all that controversial. After all, computer services in many forms have been used for a long time now. Further, I do not feel that the librarian must always be the underdog in negotiating for computer services. During the last several years, I have been involved in negotiating for computing services in various organizational arrangements at several different universities. These arrangements have included many different attempts to plan for, budget, manage, evaluate, upgrade and centralize/decentralize computing services, and each attempt had its own rationale. In reviewing the history of these different organizational strategies, it is clear that, although they are convincing individually, they do not form a cohesive group — and thus do not create an overall scheme for all users for all time.

In Illinois, the subject of computer services gained statewide concern in the mid-1970s, generating study and discussions. An outgrowth of this concern was an organization called the Illinois Educational Consortium for Computer Services (now the Illinois Educational Consortium), a not-for-profit corporation with membership composed of the systems of higher education in the state. It is an example of yet another form of organization dealing with computer services, and has its own set of problems.

Upon consideration of the many different forms of organizations and budgeting procedures, it becomes obvious that negotiating for computer services for libraries — or in fact for any large user — is a complicated process subject to a number of fairly technical discussions of the various

components of computer services. Based on these considerations, the following discussion is a list of the major problems present in negotiating for large systems support — whether for libraries or other users. This list developed from discussion at similar conferences over the past several years involving data processing personnel, planners and administrative personnel.

First, there is a lack of communication among the technical people in computing service negotiations. For example, the initial problem is that communications will often begin between a person in a service organization and a person representing a large user such as a library. They typically start talking at each other, each in his own technical jargon. This situation seems to result in a failure of each party to understand the objectives. This is the most pervasive problem in negotiating; there is a lack of an understandable conceptual model on which to build. In time these two people might learn each other's jargon, but the constant evolution of terminology makes this a continuing problem.

The second problem is the lack of understanding by each party as to mutual commitments, such as editing, data entry, accuracy, special requests, maintenance, scheduling, etc. This is somewhat akin to the jargon problem mentioned above; and although this situation is probably not endemic to negotiations in higher education, such vagueness seems especially evident when trying to negotiate for such new systems. Discussion of technical details in the absence of an operational framework can result in serious misunderstandings. For example, one person might leave a meeting thinking that he understands what has been committed, only to discover two weeks later that his vice-president was either not committed to those things or was committed only to part of them. If such confusion can exist within an organization, the confusion resulting from negotiations between organizations can be crippling. Again, this lack of a good set of mutual commitments between two organizations results from the absence of a conceptual model. This predicament can be avoided if both a conceptual model and an operational model are formulated before any planned technical details are discussed.

The third problem I have noticed is a lack of adaptability on the part of either organization. Even a good systems analysis group within a good data processing organization will sometimes approach a problem unduly biased by previous successes. It is as if they were saying: "We have a well-tested solution; how can it fit your problem?" On the other hand, the library — or any other user, such as financial affairs, admissions and records, etc. — can also be guilty of rigidity. Each party has its own way of looking at the problem, which it believes to be not only relevant, but the *only* way to approach the situation. If each party approaches a sup-

posedly mutual agreement with its own preconceived set of operational characteristics and jargon, and each does not commit the total problem to review, it is obvious why there are some bizarre negotiations,

The fourth problem is what I call self-serving analysis. I used to think — and probably still do to some extent — that by approaching a problem with an open mind and a willingness to devote the time required for a thorough investigation and analysis of the alternatives, a good cost-benefit model could be constructed, thus indicating the proper solution, whether it be submarine versus airplane or library automation versus some alternative. However, there are many possible judgments and interpretations involved, and there is difficulty in predicting the future. Some of the best systems have been realized because someone believed they could work, and in a sense made them happen. On the other hand, some systems that were well justified on a cost-benefit ratio became obsolete before they were completed. The wrong problem was being worked on, for the problem that was under design was the problem that existed — not the problem of the future. (The Department of Defense and the Army Corps of Engineers have shown that they can do the same thing, thus ending with an unsuitable weapons system or a misplaced dam.) Furthermore, there are several subpoints to consider under self-serving analysis: (1) marginal costing to attract the customer, (2) overstatement by the customer of cash substitution/replacement, and (3) overinfatuation with hardware by both sides.

In order to avoid becoming the underdog in negotiations, librarians must recognize the problem of marginal costing. Computer centers will often marginally cost a system in order to create a continuing need for new hardware. Moreover, in self-serving analysis, both parties have a tendency to overstate the substitution of cash for the new system. In my experience, very few computer systems installed in the educational environment have reduced cost, although they may have improved service. This is true even though many systems were sold or offered on the basis that implementing the system would result in savings of people and operating costs. The alternatives should have been analyzed or presented on other bases, including considerations of better services, long-term savings rather than short-term savings, etc.

The third part of self-serving analysis is infatuation with hardware. Often those who request data processing services and those who provide the service will tend to design a system around a piece of hardware, which necessitates developing a system to suit the hardware. It is rarely possible to dissociate oneself from existing hardware sufficiently to design a system and then find the hardware to produce it. One example of such a system, however, is the PLATO computer-aided instruction system that was designed and literally built here at the Urbana-Champaign campus. The

specifications for that computer system were described before the appropriate hardware existed, and the hardware was subsequently invented.

The fifth problem is the unintelligible budget; this is probably a familiar concept, and many participants at this clinic may even be good at constructing one. It is part of the self-serving analysis, but should be considered as a separate component in view of the confusion it can add to an already ambiguous situation in trying to determine commitments for resources. Consider one element of the unintelligible budget: "funny money." The term means, among other things, money that can be spent only for a specific purpose. Marginal cost accounting is another budget problem. It involves budget projections based on estimated costs per fiscal year. Often, budgets for new systems are prepared in the spring — seemingly making for less cost. This type of budgeting, however, creates piecemeal programs — a third part of the unintelligible budget. It is certainly not in anyone's best interest to have vague understandings, funny money, incomprehensible budgets, etc. The necessity of dealing with general assemblies makes analytical and complete plans — with all commitments and no funny money — seemingly impossible. Thus, long-range commitments are difficult, and budgets are established which cover perhaps only one-third the cost for the immediate future.

The final problem concerns the arguments among the technicians. This often turns into an entire series of subarguments. There are three points to be made in this regard. A familiar controversy concerns the merits of the minisystem or the stand-alone system versus those of the large consolidated center. Arguments about this are often the self-serving arguments of technicians and not necessarily based on the realities of the hardware or support system. A second controversial point is the software — whether it should be "home-grown" or purchased. There are few examples of successful transplants of rather large systems from one place to another. (One such example, however, may be the University of Illinois's use of the library system developed at Ohio State.) This argument about home-grown versus purchased software is one of the factors impeding successful negotiation. Finally, there is the definition of "the system" — a term which has been overused. But what can be substituted for it — "the campus," "the university," "the state," "the world"? It isn't just a problem of library systems, but of financial and other systems as well. Discussion of the system at any level always involves discussion of size. Consider consolidation in terms of economy: if consolidation occurs at the campus level, for example, that is economy; if it occurs at a higher level, that is diseconomy. Each "system" feels that way.

Following are a few suggestions for negotiating. All things considered, I do not think librarians need be the "underdog" in negotiation. Historically, users of a consolidated or centralized facility have been the under-

dog to some extent, but for reasons given earlier, the two negotiating parties ought to be on equal terms.

Each side should try from the beginning to avoid the philosophic argument over central services versus autonomy and to examine with an open mind the alternatives in terms of the conceptual model. There may be models which have not yet been tried, such as branch computer centers. Such a center might resemble a branch library in that it would be self-contained for hardware and software, and maintain a management relationship to the central organization as an item of its budget. Both sides should concur that the purpose is not to debate autonomy versus centralization, but to construct a conceptual model of needs and to explore alternatives. For instance, economies of so-called minicomputer systems are much better than people realize. Many people — particularly in the data processing world — don't want to investigate them. Thus, negotiation should begin not with philosophic argument but with a conceptual model.

Second, new relations between libraries and computer centers should be considered. Both parties, however, should be aware of the pitfall of protecting self-interests and should seek to avoid it.

A third suggestion is to discuss issues at the policy level before the proposals become technical in nature. The central importance of a library to a university, for example, mandates an understanding on the part of the highest level of the administration of the technology of libraries and its possibilities, the library's budget, etc. — and to have a grasp on the future implications as well as the present status of these aspects. It would be helpful to obtain policy understanding, i.e., an agreed-upon set of conceptual objectives, before entering into negotiation for technical systems.

Fourth, it is in the best interests of both the user and the supplier of data processing services to prepare realistic budgets and time limits. One of the most consistent and long-term problems has been the attempt to do all or some of the things described above (e.g., oversell, underestimate cost, underestimate time frame, or overestimate substitutions) in the name of profit. The result is disenchantment, disillusionment and a desire to give up. There may be a trend among presidents, deans and top administrators in higher education today to understand and accept a slower growth curve of new activity, whether for library support systems or academic programs. Today, many new situations limit the growth we had come to regard as normal. This is not necessarily negative, but may encourage a growing "businesslike" attitude in terms of greater constraint, systematic approach, longer-term outlook, and less overstatement. Therefore, preparation of realistic budgets and time frames is important to both organizations.

Finally, the concept of an internally developed contract is important because it supports all of the above objectives. It will minimize problems outlined here and can be a means of incorporating some of these suggestions into actual negotiations. A contract should result from a conceptual model, an operational model and a full budget incorporating everything in an understandable and readable manner. With such a contract, the administration of each party can determine what is to be delivered and when it is to be delivered on the basis of stated budget projections, costs and services required. Such a process will help to ensure each party's satisfaction from the agreement.

In conclusion, it should be remembered that the librarian (or any customer) should not consider himself the underdog in negotiations, nor should he believe that a group of systems analysts can define needs, or that the appearance of a new piece of hardware or software demands its immediate acquisition. Instead, librarians should continue to monitor and evolve needs, with a view to the future as well as to the present. Consideration of these needs from the viewpoint of others, e.g., the computer center, the budget, the state, should also be given. There is no reason to be intimidated — but each party should remember to get the full plan approved.