COMPUTER ACQUISITION
FOR THE SMALL BUSINESS

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by
Cynthia L. Diehl

Thesis Director

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LEGAL RAMIFICATIONS

OF

A COMPUTER SYSTEM ACQUISITION

FOR THE SMALL BUSINESS

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COMPUTER ACQUISITION HANDBOOKS

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PART I:

LEGAL RAMIFICATIONS

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INTRODUCTION

It has been estimated that the computer market for small businesses is growing at an annual rate of 33 percent per year. It has also been indicated that the problems that the small business owners encounter with their computers has been growing proportionally.

In a study conducted among computer and small business experts in a metropolitan area on the West Coast, six of the most important problems were described as follows:

1. Lack of adequate user knowledge or training about computer systems; and a lack of adequate operational support.
2. Inadequate system evaluation and selection.
3. Failure to identify and evaluate programs with existing operations prior to purchasing a computer system.
4. Computer retailers do not understand business needs, and therefore may not recommend a cost-effective solution. Furthermore, the retail emphasis is on selling equipment, so that retailers may misrepresent system capabilities.
5. System misconfiguration and misapplication of computer resources.
6. Lack of knowledge of commercially available software suitable for business needs.[1]

This paper is intended to provide a basis on which the small business owner can avoid these problems, and confidently acquire a customized system.

OPTIONS FOR COMPUTERIZING A SMALL BUSINESS

Once a small business owner has decided that it would be cost efficient and productive to incorporate a micro-computer system into his business, he

has four basic approaches from which to choose. He could: 1) purchase a computer and create his own programs, 2) purchase a computer and any packaged programs, and install his own system, 3) contract with a manufacturer to install a fully functional system, or 4) employ a dealer or consultant to recommend, install, and/or develop programming for the system.

PURCHASE A COMPUTER AND CREATE CUSTOM PROGRAMS. This first approach is by far the least expensive, though also the least feasible. In most cases, the lack of technical know-how on the part of the businessperson usually results in either an underutilized system or a system that can not be expanded as the business grows. In to work, this method requires a total familiarity with a computing language, in addition to the time and avid interest in the task. Under normal circumstances, the time required for the limited results is not worth the investment for the small business owner.

PURCHASE A COMPUTER AND PACKAGED PROGRAMS. Installing a self-purchased computer and pre-packaged programs is also relatively inexpensive, and is the fastest method of installing a fairly complete system. If the owner wishes to install a system quickly, he will need to deal with computer retailers. If this is the option chosen, then "let the buyer beware!" A retailer's primary objective is to sell his merchandise, and he will often try to adapt his products to the needs of the customer rather than considering the needs of the customer first and then offering the system. Some additional set-backs involved with independent retailers include the inability to test the programming packages, dealers with little working
knowledge of the material they are selling, and a selection limited only to the well-advertised and dealer-protected merchandise. This latter practice can often reduce the product availability to only 10 percent.

CONTRACT WITH A MANUFACTURER. The third approach, contracting directly with the manufacturer, has historically been reserved for the larger businesses. Manufacturers are rarely concerned with installation contracts under $20,000. It has only been recently that a few of the major competitors have begun to deal with the small businessperson through distribution channels that they own control through what is called an "original equipment manufacturers agreement" or OEM. In this agreement a contract is signed between the manufacturer and an independent representative in which the representative agrees to add value to the manufacturer's product, usually through a few software packages in which they specialize, and in return the manufacturer provides hardware maintenance support. The manufacturer usually requires that the representative maintain a certain level of financial integrity and technical competence. If at any time the representative does not meet these standards, the manufacturer can sever the OEM agreement. As in dealing directly with the manufacturer, such an approach restricts the consumer from comparing various systems.[2]

In the case that the small businessperson decides to purchase computer hardware directly from the manufacturer or through a representative, chances are good that there will be little or no software from which to choose. If the programming capabilities are relatively common, then one

alternative is to study the various software packages available on the market through various channels, and to then purchase through a discount mail-order house. The more advisable approach, however, would be to purchase the software packages through a local retail operation where support would be more easily available.

If the business requires a highly customized program, then the best approach may be to have the manufacturer suggest a few software houses. Though there are a few software vendors that can communicate with non-technical clients, the majority of them will expect the customer to clearly define and sometimes even design the application.[3]

In either situation, if the original developer is reputable and has a stable background, he should support the software no matter where the program was purchased or what price was paid. It does lessen the chance of relief in the case of problems, however, as dealing with two vendors makes it easier for them to shift the responsibility of performance from one to the other. When purchasing a program on his own, the small businessperson should keep the following points in consideration:

1) Make sure that the programs purchased will run on the equipment purchased.

2) If the software is copy-protected, it may be impossible to make back-up copies.

3) There should be sufficient training materials for the employees that will be using the system.

4) Be sure the software developer will not be going out of business.

[3] Ibid., p. 3.
5) If the programs are written only in object code, it will not be possible to modify the program at a later date.[4]

EMPLOY A DEALER OR CONSULTANT. Due to the basic set-up of the majority of small businesses today, the most feasible approach appears to be to hire a consultant or independent dealer to recommend, install, and service a working system, designed to the small business owner's individual needs. This method requires the least amount of time on the part of the owner, with the most satisfactory results.

Not all computer retail dealers concern themselves merely with selling their product, as was mentioned earlier. More computer stores are expanding their services to include customization. Since dealers are usually authorized and supported by several manufacturers, they can offer extensive support. It should be kept in mind, however, that the dealer is in the business of selling his products, and no matter how objective he tries to be, it is impossible for them to offer bias-free advice. Additionally, salespersons do not have the time to learn everything about the systems that they promote. These are the main differences between the dealer and the consultant. The consultant survives by selling his service. He usually must work with dealers or manufacturers himself in order to provide the products for his customers, and for this reason, has fewer biases toward the various products. Where the dealer hides the price of his services in the products, the consultant usually provides the products for the actual price and then sells his services separately.

In dealing with a consultant, it is important to contractually establish the relationship. A consultant can be employed as an independent contractor or as an employee. As an independent contractor, the consultant is expected to achieve certain results; he is in total control of the methods he chooses to use. The small business owner has taxation obligations, but also has no ownership of any developed software. A great deal of the software available on the market has been developed in this manner. On the other hand, if the consultant is hired as an employee, the businessperson must pay the appropriate taxes, but can then control the manner in which the results are accomplished and claim a copyrighted ownership to the software. If the relationship is not specified in the contract, the IRS will usually attempt to prove an employee/employer relationship in order to gain more taxes.[5]

It is the responsibility of management to determine how much or how little a consultant will be utilized. Computer consultants can conduct a needs assessment and offer one fixed solution, though it is wiser if management were to preliminarily define their own needs and then make a decision based upon several alternatives presented by the consultant. Consultants are knowledgeable in relations with manufacturers. They can prepare bid proposals, evaluate the responses, and oversee the installation. They can train the business personnel, and monitor the equipment for any problems. But in the end, it is the responsibility of management, and not the consultant for any action taken.[6]


BID SPECIFICATIONS

As with any major purchase, it is advisable to find the most cost efficient and most compatible system to do the job. In today's society there are literally hundreds of computer models available, which, when coupled with all the available peripherals, creates an unlimited number of system combinations. This system availability can be a great advantage to the small business with an individual need, if the system can be defined. The best means for accomplishing this task when purchasing a micro-computer system is to prepare a list of system specifications and a "Request for Proposal" or RFP.

A carefully prepared RFP suggests to the vendor that you are a serious customer prospect. It's purpose is to communicate system requirements to prospective vendors, thus providing a basis for comparing and evaluating vendors and their systems, and creating a framework for the selection of a system as well as initiating a contract negotiation. It is important that the RFP be prepared with a great deal of care, as a definite set of requests will make it relatively easy to compare and evaluate vendors, though it is equally important that the RFP does not overwhelm the vendor with details. The RFP should reduce any uncertainty on the part of the vendor while at the same time encouraging him to quote a more accurate and lower price.[7]

It has been suggested that a group decision process called the Delphi technique can be used to determine a small business' informational needs. In this approach, a project director is selected to conduct the research. In the case of a small business this may be an outside consultant. A panel

of individuals with specialized responsibilities is then gathered. These experts anonymously respond to questionnaires developed by the project director. The responses to each questionnaire are carefully analyzed and then compiled into a follow-up questionnaire to which the experts again respond. This process is continued until some consensus is reached as to the needs of the business.[8]

A good RFP should include the following components:

(1) Identification of the requestor's business, including a requirements analysis for present and future use.

(2) The preferred method of procurement (buy, rent, or lease).

(3) The date the bids are due, as well as the date the decision is expected to be made.

(4) Statements that request that the vendor include the following information:

   (a) A break-down and itemization of the individual hardware and software components of the system.

   (b) An anticipated delivery and installation timetable.

   (c) The costs of the various services required, such as pre-testing and demonstration of the equipment, training and documentation, installation, and maintenance and repair.

   (d) An agreement that the vendor will provide full manufacturer's warranty.

   (e) Financing terms

   (f) Availability of back-up equipment in the case of failure.

   (g) Agreements on the penalties the vendor will assume if the contract is not kept.

   (h) Experience and competence

(i) References of other customers[9]

Once the RFP has been designed, it should be sent to a select number of vendors with a cover letter requesting their response. In some instances it may even be feasible to send an RFP to various consultants. The larger manufacturers rarely will deal directly with the small businessperson, though if they operate their own retail outlet, they may forward the RFP. In most instances it is best to request bids from specialty dealers and consultants which are in the local area and who have been in business long enough to show some permanence. Not all of the RFPs will be returned, though there will be enough to begin the search for the appropriate vendor and the specific system.

EVALUATING THE RFPs AND CHOOSING A VENDOR

The first step in evaluating RFPs is much like that of evaluating job resumes. They should be evaluated for quality, completeness, accuracy, and relevance to the needed requirements. From this evaluation, the proposals should be narrowed down to between three and five, contacting the chosen vendors and requesting any additional information or clarification, in an attempt to make the proposals as uniform as possible.

From here, the process should be further broken down into three criterion: the cost, performance, and vendor services and reputation. As with any evaluation, it is best to evaluate qualitatively as well as quantitatively.


COST EVALUATION. Three quantitative methods appropriate for cost evaluation include (1) comparative analysis charts, (2) weighted data, and (3) cost-to-performance ratios.[10] In the comparative analysis chart, an itemized list of components is listed down the left side, while the various vendors are entered in column headings across the top of the chart. The analysis chart should include the following items:

COMPUTER SYSTEM COSTS:
- Hardware (computer, display, printer, memory devices, miscellaneous peripherals, and the cables and connectors)
- Software (standardized packages and charges for customization)

ONE-TIME CONVERSION COSTS:
- Site Modifications (electrical outlets, environmental controls, furniture, and security)
- Training Costs
- Data Conversion (files, and procedures)
- Miscellaneous Costs (transportation, lost time, attorney and professional's fees)

RECURRING COSTS:
- Maintenance Costs (service contract and software updating)
- Staffing Costs
- Supplies (paper, ribbon, disks and business forms)
- Space Charges (electricity)

Assigning weights to various aspects of the proposal could also be used for comparison. Assuming that the customized program would be preferred


over standard unmodified packages, the former could be given a value higher than the latter.

By combining various types of information found in the proposals, cost-to-performance ratios could be analyzed. For example, the cost per minute of execution could be calculated, or the cost of storing one character, or printing one line. These calculations can be quite complicated, and it is rare for a first-time computer customer to use such intricate methods to choose a system.

PERFORMANCE EVALUATION. The most popular sales technique among computer salesmen is the system demonstration. It is so popular because of its overwhelming success in impressing the customer. As a potential computer purchaser the small business owner should be very careful during the demonstration. Almost every computer system has some feature or combination of features which set it apart from the others. The vendor will most likely concentrate on these traits in order to hook the customer on the system. While it is important to understand the best features, it is also very important to listen to what the salesperson is not saying. No matter how appealing some features may seem, the system could be useless if it is missing a feature vital to the business. The small business owner should be prepared to ask for demonstrations of those capabilities that are relevant to him. He should also take notes on the claims given by the vendor in order to incorporate them into the contract at a later time.

Demonstrations are structured to make the workings of the system appear as simple as possible. Oftentimes, the salesperson will narrate while a special demonstrator will work with the system. This helps to distract the customer from any difficult sequences necessary to operate the system. The
customer should be extremely wary of any difficulties in the demonstration, as the system will never work as well in an actual work environment.[12]

The most highly recommended method for validating performance is to produce live demonstrations under actual operating conditions, more commonly known as "benchmarking." In this test, the consumer provides a set of real data from his own business, and runs it on the various vendor's systems, checking for execution time and efficiency. Vendor's will often supply upon request benchmark evidence that compares their product with that of the competition.[13]

VENDOR/SERVICE EVALUATION. When it actually comes down to accepting a RFQ, price is usually the least important factor in selecting a vendor. When a small business purchases a computer system that will handle a great deal of the company's paperwork, records, and business transactions, the stakes become high, making the vendor the most important decision. Most vendors remain a vital asset to the company long after the system is installed and working by providing a maintenance and service contract or by providing back-up equipment in the case of failure.

The two main factors to consider when evaluating the vendor are financial stability and customer satisfaction. It is important to know how long the vendor has been in business, whether it is his main livelihood or a second job. Both of these considerations indicate the likelihood of stability of operation, a necessity for the small business. If the vendor is a small operation, financial statements and a talk with the banker would


show financial stability. In the case of a subsidiary or franchise of a larger company, the businessperson may feel better if the parent company were to sign a statement supporting the commitments made.

The best source of information about a vendor's experience and competence is through his previous customers. In order to be as accurate as possible, it is necessary to get a complete list of local customers. Some vendors will provide such a list and point out a few dissatisfied customers. This vendor would be a better investment than the vendor who provides a "complete" list that leaves them out. The best way to assure a complete listing is to ask early in the sales process for an estimate of clients. Most vendors will give as high a number as possible in order to make a good impression. Later, when the business owner asks for a reference listing, the numbers should be compared. If there are fewer references than clients, the vendor should be asked for an explanation.[14]

When calling previous clients, the businessperson may want to narrow the field to those clients with similar businesses and similar needs. He should be sure to identify himself, and assure the client that he is not a salesperson. While most clients will be happy to talk, they are not as willing to point out the negative aspects of their system. Businessmen tend to have a high level of pride in their ability to make a good decision, and therefore, will not willingly admit that they are unhappy with their decision. The following questions may help in determining the vendor's capabilities:

* Background on the client (type of business, size, sales volume, etc.)

* Configuration of the computer system, how long they have been using it, and for what purposes

[14] Hilliard, p. 41,
* Necessary modifications needed for customization and how long it took
* How the training was handled
* Problems encountered in the first few weeks and how they were handled
* Special site modifications necessary
* Pricing and additional costs
* If the system has met the expectations of the company, and if not, what would the respondent like the system to do
* Worst negative point of the system
* Overall relationship with the vendor
* Whether or not the respondent would make the same decision again[15]

In addition to choosing a vendor, it is also necessary to analyze the system manufacturer. In the situation of a small business, it is extremely vital that hardware be purchased from leading manufacturers, and not necessarily the least expensive. The more computer systems that a company has installed throughout the world, the greater hedge there is against obsolescence. In addition to the increased security, the large consumer demand generates a "cottage industry" of smaller companies competing for the business of those people who support a manufacturer.[16]

NEGOTIATING THE CONTRACT

THE VALUE OF A CONTRACT. According to Volz and Mumford (1984), "the computer companies serving the American market clearly appreciate the finer


points of drafting the standard form contract. These form contracts put
virtually all of the risk of a failed computer procurement on the computer
user....Managers purchasing a computer system should understand that by
signing the vendor's form contract without modification, they may well be
entrusting the heart of their business operation to an outsider that will
admit to little or no liability if the new computer system fails."[17]

In a feature report by Datapro, a similar distrust is expressed:

Computer vendors negotiate contracts for a living. Their marketing effort is designed to make contract
signing easy and seemingly anticlimactic to the user -- a mere formality. But computer contracts are not pro-user
documents. All too often they carefully disclaim everything the vendor has told you, shown you, or even
written to you about how the system will perform the job you want done. If you analyze the vendor's standard
computer contract, you may find that it is extremely one-sided, and therefore potentially dangerous, legal
document.[18]

While a vendor may customize a computer system for the small business, they will not always treat the contract the same. A system with very
unique features, if not negotiated, will often be bound with a standard
form contract. Not only are contracts usually standardized, but they are
often written to "(1) to exclude from the contract all promises and
representations previously made, (2) to disclaim most warranties, and (3)
to narrowly limit the scope of remedies available upon breach of contract
by the manufacturer."[19]

[17] Kuratko, pp. 11-12. Taken from William H. Volz and Larry G.
Mumford, "Disclaiming Computer Warranties," Proceedings of the Tri-State

[18] Datapro, Feature Report, How to Negotiate Computer Contracts,

Datamation, August 1980, p. 115.
The picture is not always so bleak. In an era when the small business accounts for the majority of computer system sales, the need for an agreeable business relationship has made better contract negotiations mutually beneficial. While it is true that one of the purposes of a contract is as a defensive tool in the case of a breached agreement, the real value lies in the negotiations. In discussing an agreement both parties get an opportunity to clearly state their expectations and requirements. If the contract is properly and completely negotiated, then there should be no reason for a future dispute to arise.

THE UNIVERSAL COMMERCIAL CODE. Since the majority of computer systems are in a price range over $500, computer acquisition transactions fall under the scope of the Uniform Commercial Code, Section 2-201(1) of which states:

"...a contract for the sale of goods for the price of $500 or more is not enforceable by way of action or defense unless" the party against whom enforcement is sought has signed some writing "sufficient to indicate" that a contract for sale has been made between the parties.[20]

The only relief a businessperson might have to this clause would be if only part of the sales agreement were put in writing. This type of an agreement is known as a "partially integrated agreement." According to what is known as the "parol evidence rule," such an agreement "may not be contradicted in any way, but may be supplemented by evidence of prior negotiations or agreements, oral or written." This is not the situation, however, in the case of a "completely integrated agreement" in which the

writing is regarded "by both parties as being a complete and exclusive statement of all the terms of the agreement." A court will not even accept supplementary evidence in this situation. For these reasons, it is therefore of the utmost importance that the small business owner be aware of the basic elements of the acquisition contract, as well as the importance of negotiations.[21]

The UCC also defines two very important terms that the small businessperson should try to include in the acquisition contract (and that are usually omitted from the standard contract). These terms are "fitness" and "merchantability." Under the Universal Commercial Code, "merchantability" implies that the purchased goods must meet a minimum standard of serviceability; that is, they must function as the normal consumer would expect. "Fitness" is also defined according to the UCC, and applies in situations where the buyer must rely on the seller's expertise to acquire a suitable product. In the special case of intangibles, such as computer software, a special clause must be included to specify that it will be treated as a tangible in order that the UCC protections can apply.[22]

PREPARING FOR NEGOTIATIONS. Before sitting down with the vendor, it is important to gather background information on the vendor. By being aware of his past weaknesses in dealing with other customers, the businessperson can better prepare a contract in his own best interests. In the case of a highly customized system it is also advisable to have a team of advisors at

[21] Ibid., p 305.

least as large as that of the vendor. Suggested team members include a lawyer, the company's consultant (if there is one), and any members of the organization who have business or computer expertise.[23]

If the acquisition is a small one, it is sometimes mutually beneficial to write an addendum to the contract with the special terms that are necessary. The addendum is legally binding upon both parties, and is considered part of the standard contract. Oftentimes a sales representative may attempt to accommodate your specific requests in either a "side agreement" or a "letter of understanding," emphasizing that it binds the vendor. Legally this is not the case. If such a document were presented in court, the vendor could easily reject the salesperson's authority to sign such a contractual document.[24]

If an RFP was used to choose a vendor, it is usually a very good idea to start with the detailed specifications when negotiating a contract, since the most important aspect of the deal is to get the system that suits your specific needs.

**CONTRACT TERMS**

Points that should be included in the contract, and that are mentioned here, include price, terms of payment, risk of loss, transfer of title, acceptance, software licenses, training, hardware and software maintenance, site preparation and warranties.


PRICE. Perhaps the most important element to the small businessperson is the total price of the system. Though if he insists on negotiating according to the lowest price possible, he will most likely become the victim of unfortunate side effects. Given the pressure, a vendor may concede to price restrictions by providing less than is necessary. As the motto goes: "Close the sale; you can always sell them more memory or disk space down the road."[25] Though if the vendor insists that the deal he is giving you is "the best he'd ever give anyone," attempt to have that statement included in the contract as insurance against discrimination. Also avoid any agreement to pay for "time and materials," as such a phrase can often lead to dishonesty. This is especially true for the price software, which, from the purchasers viewpoint, should be bought on a fixed-price basis.[26]

While it is unlikely that any significant price concession can be made, a vendor will often bundle items that would cost a businessperson greatly if he were to pay the list price. Such vendor services are often called "soft dollars," because the vendor can negotiate them without a direct impact on the total cost. Such services include training, evaluation time, conversion of systems, and test time at a manufacturer's center.[27]

TERMS OF PAYMENT. The businessperson has three basic payment options when acquiring a computer system: renting, leasing, and buying.

In a time when computers are being outdated every moment of ownership, the options for renting are rare and narrowly defined. When a businessperson rents a computer, he must realize the trade-offs involved. Due to the very nature of the product, the lessor is in a high risk position. Upon initial purchase a computer usually loses 40% of its value, and is almost impossible to resell due to obsolescence. Despite these factors, the lessor is usually required to take a system back within short notice (usually within 60 days), and then must find another customer. Additionally, the lessee has no power to transfer the system to a third party or even to another location. Because of the difficulty involved, rental payments are very high. On the beneficial side, a great deal of the liability of ownership is reduced. As a lessee, the businessperson is not subjected to the risk of loss, though he may be required to provide for certain insurance provisions. Maintenance costs are usually included in the rental payments, with better service due to the ownership. In most cases the renting option should only be used in situations where there is a high need for only a short time period.

The leasing option differs from renting in that the lessee is usually bound to a long-term contract, allowing the lessor to recover all of his costs plus some profit. Most computer leases include an option to buy at the end of the period. If this is the case, the original contract should include clauses specifying what payments apply to the purchase, as well as the price that will be paid. Either a price is established in the contract, or it is stated that the current market value at the end of the lease period will be used. Due to the rapidly falling computer prices, it is most beneficial to the lessee to choose the market value approach.[28]

Leasing also has its advantages and disadvantages. Sometimes monthly lease payments are lower than loan payments. However, there is usually no flexibility for unusual situations. The businessperson should be aware of what is called a "hell or high water" clause. This clause basically states that payments must be made regardless of any situations. An example of this type of clause, which has been upheld by a court, follows:

lessee agrees that its obligations are absolute, and shall continue in full force and effect, regardless of any disability of the lessee to use the equipment because of War, Act of God, government regulation, strike, loss or damage, obsolescence, breach of contract or warranty, failure of or delay in delivery, missed delivery or any other cause, and that its obligations shall not abate due to any claim or set-off against Lessor.[29]

The most popular method of payment is to purchase the computer. If a loan is necessary, the businessperson may have difficulty using the computer as collateral. Most banks realize the dramatic devaluation of computers, and will require a short loan-payment period. Typical contract terms specify that 10-20 percent of the overall contract price be paid as a down payment. Subsequent installments are usually paid according to the completion of various steps in the contract schedule. The small businessperson should remember keep at least 30 percent of the payment until about 60 days after the completion of the installation as insurance against any deficiencies.[30]


A summary table of the advantages and disadvantages of the three payment methods follows:[31]

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RENT</th>
<th>LEASE</th>
<th>BUY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership (who owns it)</td>
<td>Vendor</td>
<td>Vendor or third party but may revert to you at end of lease period</td>
<td>You</td>
</tr>
<tr>
<td>Term</td>
<td>Month-to-month</td>
<td>1-5 years</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Relative expense</td>
<td>Highest</td>
<td>Moderate</td>
<td>Highest</td>
</tr>
<tr>
<td>Returnability period</td>
<td>60 days (written notice)</td>
<td>End of lease or with cancellation charge</td>
<td>N/A</td>
</tr>
<tr>
<td>Usual accounting treatment</td>
<td>Expense</td>
<td>Mixed</td>
<td>Capital expenditure: investment tax and depreciation available</td>
</tr>
<tr>
<td>Major disadvantage</td>
<td>Cost</td>
<td>Locked in to lease period</td>
<td>Little recourse to supplier</td>
</tr>
</tbody>
</table>

**RISK OF LOSS.** No matter what method the small businessperson chooses to use in acquiring a computer system, at some point in time it will need to be shipped. The end customer historically feels the financial burden of any loss due to shipping. If the contract is silent on who bears the risk of loss, and there was no insurance purchased, the loss can be extreme. In the mail order situation, the manufacturer usually specifies in the contract that the user bears the responsibility for the merchandise as soon as it leaves the factory. All the businessperson need to do is to be sure to adequately insure the system.

From the standpoint of an inexperienced computer user, it is advantageous to specify in the contract that the vendor is responsible for any loss up until installation, even though the cost of insurance will be transferred to the customer. The reasons for this advantage are threefold. First, if the vendor forgets to insure the merchandise, he is totally responsible for funding the loss. Second, it is often difficult for a novice user to know the proper details necessary to get full coverage; and lastly, if something does happen during shipping, the vendor will often have more experience and leverage in dealing with the insurance company.

It should be mentioned that the risk of loss does not always occur simply because of damage during shipping. In some instances a delay in delivery can create a terrible loss for the company expecting the equipment. If this is the case it is advisable to include a clause specifying that the contract can be terminated if there is no delivery within a certain grace period. Legally, however, the vendor has not breached the contract if the system arrives late, as long as it arrives within a "reasonable time" of the specified delivery date. Unfortunately only a court can judge "reasonable time."[32]

TRANSFER OF TITLE. Until the small businessperson has title to his system, he can not resell the equipment, borrow on the system, or even protect it from the vendor's creditors. Most vendor contracts specify that they retain the components until they are paid in full. Some, however, imply that they retain title until all debts are paid in full. It is the latter clause of which the customer must be aware, to insure that has each component is paid for, the title is transferred.

In some vendor cases, even though there has been a transfer in title, the vendor will maintain what is called a "security interest." A holder of security interest has first claim upon the property covered in the case of the businessperson's bankruptcy. In the unethical situations, a vendor will sometimes attempt to keep this interest even after the merchandise has been paid if full, as long as there is any payment owed. This would include such periodic payments as hardware maintenance payments.[33]

ACCEPTANCE. Until the customer has legally "accepted" the computer components as conforming to the contract, he able to reject any system which does not meet the specifications established in the contract. Unfortunately, most vendors write into the contract that once the hardware has been installed and diagnostically tested without fault, it has been accepted. Once acceptance has taken place, there is no relief for any problems that may show up later in use. Also, since most hardware is installed before the software has been completed, this is no guarantee that the completed system will be acceptable. By the same token, if the hardware and software have separate contracts, the small business owner may find himself the owner of a hardware setup that met the contractual terms, but that is worthless without the software that did not meet the requirements. The best protective approach for the small businessperson to take is to make sure that acceptance does not occur until the total system has been shown to meet the specifications described in the contract.[34]


[34] Mylott, pp. 226-29.
SOFTWARE LICENSES. Whether the software that is being contracted for is an established package or has been custom-designed, it should come with a license. Without a license, the owner has no legal authority to use the software, and could find himself, at some future point in time, with a substantial damage fine and no software. For the small businessperson this would be enough to destroy a well-established business, especially if the majority of his customer data can only be accessed with the lost program.

As important as having the license, is knowing what provisions the license contains. The most common one restricts the user from distributing illegal copies. Some licenses contain more unreasonable terms, however, such as not allowing the businessperson to move his operations or to update or change computer hardware.[35]

TRAINING. According to a Price Waterhouse study, "more than 90% of small computers are bought to increase productivity and reduce labor."

However, a report from the National Conference on People, Organizations and Office Technology show that "75% of all computer installations studied are in trouble, primarily because of inadequate training."[36] Computers merely are a tool by which a business can improve productivity. If the business can not use the computer, then it was a wasted investment.

Proper training can help to improve productivity. The small businessperson has only two options, in varying degrees, by which to be immediately trained. He can either train himself by reading manuals and using self-paced training aids, or he can be trained by a consultant or


retail outlet. Most businesses do not rely on any one technique, but rather incorporate several approaches.

The self-training approach is the cheapest per hour, yet it takes more time and leads to more frustrations. There are many self-paced programs available in the forms of books, tutorial disks, audio tape cassettes, and videotapes. These programs can be purchased for home use, or can sometimes be used at a retail outlet for a price. Self-paced programs are good for the new user. They allow an individual to work at his own pace, repeating difficult sections and skimming past others. These programs are designed for mass instruction and do not offer customized service. Unfortunately, although retail salesman may be available, they are rarely knowledgeable about particular software packages. If a customer has a question, and can effectively communicate his problem, most manufacturer's provide a toll free phone number for a month or two following the purchase.[37]

Classes are the most cost efficient method of training. If the hardware was purchased through a retail outlet, the customer is usually entitled to a free introductory class. If the customer needs instruction for a major package, retail outlets will sometimes hold classes for one to four days in the price range of $150-$500, depending on the subject. More customized training is available from various sources for a negotiable price in the range of $40 to $85 per hour.[38]

Continuing education can be received through business schools and colleges, seminars, user groups, and books and magazines.

[37] Ibid., pp. 28-30.

[38] Ibid., pp. 30.
In addition to specifying the method of training, the contract should also specify who will receive the training, how long will the training take, when the training will be given, who will give the course, and where the training will take place (suppliers facility, on site, educational institution).[39]

**HARDWARE MAINTENANCE.** When a computer system is first installed, the small business owner may only put it to limited use. As he becomes more accustomed to the available possibilities, however, he will begin to rely heavily upon it for his every need. At this point in time it becomes true that a computer system that does not work is worse than no computer system at all. For a business that relies heavily on their system, an extended repair time could be devastating. For this reason, when negotiating for a maintenance contract, the businessperson should concentrate more on the service and less on the price.

The small businessperson should try to build into the acquisition contract a service contract that will last for as long as the computer system will be in use. Realistically service contracts are renewable on a yearly basis, and should not begin until the original warranty has run out. Though it is improbable to negotiate a constant fee, it is a good idea to try to include a ceiling on the periodic price increases.

When contracting for hardware service, there are two levels of service available. Service can either be performed at the place of business or it can be performed at a repair center. An annual contract for site repair with the vendor usually costs 10-12 percent of the purchase price. If the vendor can not fix the system immediately, as is often the case with dealers, an alternate hardware system should be provided while the original

is being repaired. This provision should still be mentioned in the contract.

In the many of the situations, the system must eventually be returned to the manufacturer for repair. Oftentimes a dealer can provide this service more efficiently since they have a better communication line, and a better idea of the necessary work that needs done. If the businessperson can identify the problem on his own, he can bypass the dealer and the repair costs by ordering the necessary parts himself. Many parts are easy to replace and take only a day or two to ship. Identifying the problem seems to be the biggest difficulty with this option. Sometimes the small business owner can describe the problem to a manufacturer's representative over the phone adequately enough to have the problem diagnosed. More recently, however, it is becoming possible to accurately diagnose problems by connecting the business's computer with the manufacturer through a phone modem.[40]

If the businessperson feels that a service contract is necessary to his business, he may choose to contract with a third-party service organization. Such an approach usually costs 15 to 20 percent of the original purchase, but offers a quicker response time. The TRW Customer Service Division and SORBUS Division of MAI have acquired excellent reputations for service. TRW has 2800 employees and 200 locations nationwide and has an average response time of four hours. SORBUS has 1200 employees at 160 locations and has a two-hour response time. Both

organizations base their rates on the mean time between failure (MTBF) rates of the equipment.[41]

As service costs continue to rise while computer equipment decreasing yearly, even the small business operation may find it more feasible to purchase a back-up computer system or printer. In this case there is no need for an annual service contract since the hardware can be fixed at the dealer's convenience. The main difficulty with this approach, especially in the case of back-up printers, is that the business sometimes finds a need for the equipment, thus eliminating the back-up feature.

SOFTWARE MAINTENANCE. While there is usually less technical difficulty with software, there is still a need to structure a service agreement. While hardware can often be fixed by someone other than the vendor, the case is not the same with software. Only in the rare situations when it is possible to purchase the source coding along with the program, is it possible to hire a different programmer. If the software is a custom-program it is vitally important to include a provision that allows for error corrections as they occur. In either case, whether a custom-program or packaged software, alterations or updated versions should be dealt with in the contract.[42]

SITE PREPARATION. Especially in the larger system set-ups it is sometimes necessary that the contract specify any necessary site preparations that may be required before installation. This is a clause

[41] Wilcox, pp. 159-60.

more for the protection of the vendor than the small businessperson, and is not an unreasonable request. Such requests may include temperature, humidity, and power controls, both for regular and emergency situations, as well as air space requirements for around the hardware.[43]

WARRANTIES. While the length of the warranty is very important, the business owner should also consider the warranty terms that accompany a contract. Most vendors will try to include a clause that will exempt them from consequential damages that may occur from their failure to fulfill the terms of the contract. Then, if something does go wrong with the system, the vendor will oftentimes require that a system be mailed, at the customer's expense, back to the manufacturer. While this may be the only way to get the system fixed, it is much better to be able to negotiate an on-site repair under the conditions mentioned in the maintenance section.[44]

LEGAL COUNSEL

As has been shown in this paper, there are a great deal of legalities that can be involved in a computer system acquisition. This paper was not meant to give the small business owner a background in dealing with the legal issues, but rather to point out the necessity of including legal help in the process. The lawyer is an invaluable tool throughout the computer acquisition process. He is the problem-solver that can research certain issues and recommend solutions. He is the impartial negotiator that can


objectively protect the business owner's interests. And if necessary, he is the litigator that can continue to protect the business in court.

The study of law, like the field of computers, is a very dynamic area. Every day each of the fields is changing, often so fast that contradictions arise. It is for these reasons, that it would be to the businessperson's best advantage to find a lawyer with a specialization, or at least a working experience of computer law. Regardless of his outstanding credentials, the lawyer is still just a guide, and should be treated as such. He can offer an option, but the responsibility for the final decision must be left in the hands of the business owner.

CONCLUDING REMARDS.

In order to keep up in an ever increasing competitive environment, the small business is almost being pressurized into computerization. The small businessperson is unique in that he must be competent in many areas to maintain his position. Unfortunately he can not be an expert in every field, and unless his business is in computers, chances are that someone will make it their business to sell him a computer system.

As with any important decision, the businessperson must be careful of the "experts" in the field, but by the same token he should not avoid some outside help. In order to guarantee the quality of details that is necessary for the uniqueness in most of the smaller organizations, the construction of the contract should be given special attention. The more time that is spent outlining the details of the system, the smoother the transaction will take place. It is even probable that extra time spent in negotiations will save more time later.
Contract negotiations are not meant to be the source of conflicts, but rather the means to prevent possible misunderstandings. In fact, it is to the best interests of both parties to maintain a good working relationship. The business owner will benefit from a reliable and fair computer advisor and service contact, and the vendor will add another loyal customer to his list. If both parties keep these benefits in mind, then there is no reason for a contract to be taken to court, and every reason for both to find an increase in their productivity.
### SOFTWARE DEMONSTRATION CHECKLIST
FOR DESKTOP MICROS

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Salesperson</th>
<th>Date</th>
<th>Points</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

#### Functionality
- Ability to produce desired information
- Contains desired features
- Response time for data entry and retrieval

#### Ease of use
- Menus
- Help function
- Easy to learn
- Screen formats easy to use
- Clarity and helpfulness of error messages

#### Documentation
- Index completeness
- Examples
- Clarity
- Comprehensiveness

(1) Point scale = 0 to 5; 0 = poor, 5 = excellent.
(2) Hardware on which application is demonstrated must be the same as that recommended.

---

User oriented

Description of error messages

Glossary

HARDWARE DEMONSTRATION CHECKLIST
FOR DESKTOP MICROS

Vendor ___________________ Salesperson ___________________ Date __________

Microprocessor (Mfg/Model) _______ Eight bit _______ Sixteen bit _______

Vendor
Friendliness

Knowledge of the hardware

Support availability:
   Maintenance
   Training
   Proximity to you

CRT and Keyboard
   80 columns
   24 rows
   Character resolution
   Type-ahead feature
   Detachable keyboard
   Separate numeric keypad
   Graphics
   Upper- and lowercase characters

Points
(1)

(1) Point scale = 0 to 5; 0 = poor; 5 = excellent.
(2) Hardware on which applications are demonstrated must be the same as
    that recommended.
<table>
<thead>
<tr>
<th>Printer</th>
<th>Speed:</th>
<th>Manufacturer and Model</th>
<th>Characters per second</th>
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<tbody>
<tr>
<td></td>
<td>Letter quality</td>
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<td></td>
<td>Dot matrix</td>
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<td></td>
<td>Carriage width</td>
<td>80</td>
<td>132</td>
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<td></td>
<td>Multiple copies</td>
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<td></td>
<td>Proportional spacing</td>
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<td></td>
<td>Graphics</td>
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<td>Tractor feed</td>
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<tr>
<td></td>
<td>Automatic paper feed</td>
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</table>

**Storage Volumes and Expandability**

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>Main memory</td>
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<tr>
<td>Floppy disk drives:</td>
<td>Number</td>
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<tr>
<td>Backup</td>
<td>Ease of use</td>
</tr>
<tr>
<td>Documentation</td>
<td>Index completeness</td>
</tr>
</tbody>
</table>
VENDOR PRICE QUOTATION

1. HARDWARE
List all equipment and system hardware components (i.e., CPU, peripherals, cables, etc.) required for the application software.

<table>
<thead>
<tr>
<th>Description</th>
<th>Manufacturer</th>
<th>Model/Part</th>
<th>Capacity</th>
<th>Warranty period</th>
<th>Price for configuration</th>
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<tbody>
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</table>

Total hardware price

2. SYSTEM SOFTWARE
List all the system software for the configuration, including utilities, operating systems, etc.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description name, version, and release date</th>
<th>Warranty period</th>
<th>Price</th>
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</table>

Total system software price

3. APPLICATION SOFTWARE
List all application software.

<table>
<thead>
<tr>
<th>Package name and version</th>
<th>Software developer</th>
<th>Warranty period</th>
<th>Price</th>
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</table>

Total application software price
4. SUPPLIES AND OTHER COSTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Price</th>
<th>Price</th>
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5. TOTAL PRICE

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Optional</th>
<th>Minimum</th>
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</thead>
<tbody>
<tr>
<td>Total of 1 to 4 above</td>
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<tr>
<td>Discount</td>
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<tr>
<td>Subtotal</td>
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<td></td>
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<tr>
<td>Sales tax</td>
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<td></td>
</tr>
<tr>
<td>Total net price</td>
<td></td>
<td></td>
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</tbody>
</table>

Optional maintenance arrangements (describe, including period and cost):

Date through which price quotations above are fixed:

Company Name

By ____________________________

Authorized signature

Title _________________________

Date _________________________
APPENDIX B

SAMPLE COMPUTER INSTALLATION CONTRACT[46]

---

**Computer Associates, Inc.**

**AGREEMENT FOR PURCHASE OF**

**COMPUTER HARDWARE**

This agreement dated as of the __________ day of __________ 19________ between Computer Associates, Inc., seller, a Rhode Island Corporation, with its principal place of business at 2180 Mendon Road, Cumberland, Rhode Island, and

**A.P. COMPANY USA**

*(purchaser)*

Seller agrees to sell and purchaser agrees to purchase computer equipment as listed below, hereinafter referred to as equipment:

<table>
<thead>
<tr>
<th>Stock Number</th>
<th>Model Description</th>
<th>Qty</th>
<th>Unit Price</th>
<th>Purchase Price</th>
</tr>
</thead>
</table>

   **Hardware Purchase Price**

   **Deposit**

   **Sales Tax**

   **Freight & Handling**

   **Balance Due (On Delivery)**

   **Deposit Received on**

   **Deposit Amount $**

   **By** Computer Associates, Inc.

   **Balance Received on**

   **By** Computer Associates, Inc.

   **Accepted by** COMPUTER ASSOCIATES INCORPORATED

   **Accepted By**

   **By**

   **Firm's Corporate Name**

   **Typed Name**

   **Date**

   **The terms and conditions on reverse are incorporated in and made a part of this agreement.**

---