COMPUTERIZING YOUR BUSINESS

Management and Planning Series

Computerizing Your Business replaces
How to Get Started with a Small Business Computer

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INTRODUCTION

The purpose of this publication is to help you forecast your computer needs, evaluate the alternatives, and select the right computer system for your business.

Micro- or personal computers (PCs) make it economically possible for small businesses to acquire electronic data processing equipment. With its business applications, a microcomputer system provides professional management planning and control capabilities that can help you reach your goals for growth and profit. To take advantage of this opportunity, you must use your best analysis and judgment when choosing a computer for your small business.

WHAT CAN COMPUTERIZATION DO FOR YOU?

To answer this question, you must have a clear understanding of your firm's long- and short-range goals, the advantages and disadvantages of all of the alternatives to a computer and, specifically, what you want to accomplish with a computer. Compare the best manual (noncomputerized) system you can develop with the computer system you hope to get. It may be possible to improve your existing manual system enough to accomplish your goals. In any event, one cannot automate a business without first creating and improving manual systems.

Business Applications

A computer's multiple capabilities can solve many business problems. Some of the most

common applications are keeping transaction records (such as a cash receipts journal, receivables ledger, and general journal) and preparing statements and reports (such as a balance sheet, income statement or inventory status report). Other equally important tasks include maintaining customer and lead lists, creating brochures and paying your staff.

A business that handles large volumes of detailed or repetitious information in short periods of time will benefit from computerization. A complete computer system can

1. Organize and store many similarly structured pieces of information (i.e., addresses including name, street, city, state and zip code).

2. Retrieve a single piece of information from many stored records (i.e., the address of John Smith).

3. Perform complicated mathematical computations quickly and accurately (i.e., the terms of a loan amortized over many years).

4. Print information quickly and accurately (i.e., a sales report).

5. Perform the same activity almost indefinitely, in precisely the same way each time (i.e., print a hundred copies of the same form letter).

6. Facilitate communications among individuals, departments and branches (i.e., quickly transmit messages and/or documents that require review or editing).

7. Link the office to many sources of data available through larger networks.

Improving Business Operations

Consider the following manual operations that can be streamlined by computerization.

! *Accounts Receivable* -- Even if properly organized and maintained, a large volume of active accounts can require many hours of posting sales and receipts and, especially, of preparing statements. Unfortunately, as the volume of information to be handled increases, the number of errors often also increases. Don't forget, too, that if your customer isn't billed on time, you'll wait longer to be paid.

! *Advertising* -- Using only manual systems, it is costly and complicated to have special sales programs directed toward particular customers. Manually prepared mass mailings are time consuming and expensive.

! *Inventory* -- A large number of items or high-volume turnover can cause major errors in tracking inventory. Errors in inventory control can result in lost sales and in the maintenance of unnecessarily high quantities of slow-moving products.

! *Payroll* -- Calculating and writing checks are tedious operations in payroll administration. It can also be difficult to effectively implement an employee incentive plan using manual procedures.

! *Planning* -- Manual systems or procedures make planning for the future time consuming and difficult. "What if" situations such as "If sales increase, to what extent will expenses increase?" are not easy to simulate with a manual system.

Computer Business Applications

Computers also can perform more complicated operations, such as the following:

! *Financial modeling* programs prepare and analyze financial statements.

! *Spreadsheet and accounting* programs compile statistics, plot trends and markets and do market analysis, modeling, graphs and forms. They can combine all these functions and can interchange and evaluate data from four programs simultaneously.

! *Word processing* programs produce typewritten documents and provide text editing functions. Many offer options such as a thesaurus, a speller, and punctuation and style checkers.

! *Desktop publishing* programs enable you to create good quality print materials on your computer.

! *Critical path analysis* programs divide large projects into smaller, more easily managed segments or steps. This helps to target goals and set dates for completion.

! *Legal programs* track cases and tap information from data bases.

! *Payroll system* programs keep all payroll records; calculate pay, benefits and taxes; and prepare paychecks.

! *File management* programs enable you to create and design forms, then store and retrieve the forms and the information on them.

The business applications for PCs are available in packaged software programs that enable you to interact with the computer through entering, manipulating and processing complex evaluations and computations of voluminous quantities of data.

Realistic Expectations

After analyzing your application needs, consider (1) the investment decision (pay-back period, depreciation, tax impact, etc.) and (2) the potential increase in your management capability.

There are, however, some things you should not expect your computer to do.

! Don't expect a computer to clean up a mess in the office. The mess must be organized before you can attempt to computerize, or you will wind up with a computerized mess.

! Don't install a computer because you don't have the right people to do the jobs in your organization. Initially, at least, the computer will make more, not fewer, demands on your organization.

! Don't install a computer with the idea that any information you want will be instantly available. Computers require structured, formal processing that may not produce some information as fast as an informal system could.

! Don't expect the installation of a computer to help define the jobs that must be done. The computer is a tool to get those jobs done, but the jobs must first be well-defined.

! Don't expect computer installation to occur like magic. Computer selection and installation will be successful only through methodical work.

! Don't expect any computer system to exactly fit your present methods of completing jobs. If you are not willing to listen to new ideas for solving problems, you will not be able to install a computer successfully or at a reasonable cost.

! Don't acquire a computer to generate information you will not use. Growing companies may benefit from structured management information systems, but many owner-managers of small companies already have their fingers on the pulse of their businesses and do not need a formal, electronic system.

SELECTING A SUITABLE COMPUTER SYSTEM

Two options for your own in-house computer system are the minicomputer and the microcomputer.

A Minicomputer is a general purpose computer that links a number of dumb terminals, i.e., display units that can only function if connected to the minicomputer. It can be programmed to do a variety of tasks and is generally designed so data can be inputted directly into the system. For example, data on a sales order are put into the computer at the same time the order is written. A minicomputer can be operated by users who don't have special computer knowledge. Minicomputers cost ten or more times as much as micro (or personal) computers; sophisticated systems may cost well over a hundred times more. The computer power/cost ratio is relative, however, and may be readily justified by the application required. Don't forget to include monthly costs for system administration and maintenance of both hardware and software.

Minicomputer costs are decreasing rapidly, so inquire for the latest estimates.

The microcomputer or personal computer is a household word, if not quite yet a universal household item. It can operate independently of a network, is relatively inexpensive, and is compact enough to sit on a desk. These computers run programs that do an astonishing variety of tasks and can be operated without special computer knowledge. Microcomputers can satisfy the needs of many small business owners. They usually handle one task at a time, although some may have modest capabilities for multitasking and multiuser applications (more than one program and terminal at one time). Personal computers are easily affordable by virtually any business, although prices may vary widely depending upon the manufacturer. There are supermicros equipped with multitasking operating systems and networking capabilities. These may cost five times as much as a personal computer, or more, but they can be used by multidepartmented companies, sharing and using the same data on a daily basis.

CHOOSING THE RIGHT COMPUTER

To computerize your business you will have to choose the right programs, select the right equipment and implement the various applications. This involves training personnel, establishing and maintaining security procedures, and maintaining equipment, supplies and day-to-day operations. If you follow a well-laid plan and make well-informed choices, your computer system should provide the information and control intended.

Computer Components

Table 1 lists the main computer components.

Table 1 Main Computer Components

Component	Function
Hardware Central processing unit (CPU)	The CPU performs logic calculations, manages the flow of data within the computer and executes the program instructions. CPUs are either XT (8088), AT (80286) or 80386. The AT is a good choice for businesses looking to link their PCs in a LAN (local area network).
Main memory	Memory is measured in the "K" you'll often hear mentioned -- for example, 32K (or 32 x 1,024 bits). It is simply a storage area readily accessible to the CPU.
Mass storage	This storage is simply permanent. There are a number of mass storage devices available, such as disk, diskette and magnetic tape.

Input device(s)	These units are used to enter data into the system for processing. One type of input device is a keyboard. Scanners are a new way to input data.
Output device(s)	These display the data. The most common output device is a printer.
Software	
Operating system software	This is software that tells the hardware how to run. MS-DOS is a common operating system for PCs.
Applications programs	These are programs written to perform a particular function such as word processing accounts receivable payroll or inventory control applications.
Compilers and interpreters	This type of special software translates programs into machine language that the CPU can compute. As a user of PCs you won't be required to work much with this type of software.

CHOOSING THE RIGHT PROGRAMS (SOFTWARE)

A program, usually referred to as software, is a set of instructions that tells the computer to do a particular task. Programs are written in a computer language (such as FORTRAN, COBOL, BASIC). The software determines what information is to be entered into the computer and what output or report is to be returned by the computer after it has performed as instructed by the program. The act of entering information into a computer is called inputting the data.

Generally, there are three types of software:

1.   Compilers and interpreters -- This is special software that translates programs written in programming language that people can use (such as FORTRAN, COBOL, BASIC) into machine language that the CPU can execute.

2.   Operating system software -- These are the programs that control all the separate components of the computer, such as the printer and disk drives, and how they work together. System software generally comes with the computer and must be present (or loaded into memory) before the application software can work.

3.   Application software -- This is software composed of programs that make the computer perform particular functions, such as payroll check writing, accounts receivable posting or inventory reporting. Application software programs, particularly the more specialized ones, are normally purchased separately from

the computer hardware. Before beginning your search for the application software that is right for you, identify what the software must accomplish. Your time will be well spent if you research and write down your requirements before visiting your software vendor.

Determine Your Requirements

To determine your requirements, prepare a list of all functions in your business in which speed and accuracy are needed for handling volumes of information. These are called applications. For each of these applications make a list of all reports that are currently (or will need to be) produced. You should also include any preprinted forms such as checks, billing statements or vouchers. If such forms don't exist, develop a good idea of what you want -- a hand-drawn version will help. For each report list the frequency with which it is to be generated, who will generate it and the number of copies needed.

In addition to printed matter, make a list of information you want displayed on the computer video screen (CRT). Again, design a hand-drawn version. List the circumstances under which you want this information displayed.

For each application make a list of all materials used as input into your manual system. These may include items such as time cards, work orders, receipts, etc. Describe the time period in which these items are created, who creates them and how they get into the system. Also, describe the maximum and average expected number of these items generated in the appropriate time period. As with the reports, include copies of the input items or drawn drafts.

For all files you are keeping manually or expect to computerize (such as customer files or employee files), list the maximum and average expected number of entries in a specific time period, such as 10 employees per year, 680 customers per year. Normally, a file, manual or otherwise, is cleaned out after a specified time and the inactive entries are removed.

Identify how you retrieve a particular entry. Do you use account numbers or are they organized alphabetically by name? What other methods would you like to use to retrieve a particular entry? Zip code? Product purchased?

Note which of your requirements are a must and those on which you can compromise. The more detailed you are, the better your chance of finding programs compatible with your business. It is also true that the more detailed you are, the more time it will take to research and evaluate each alternative application software package.

Evaluate Your Choices

If, after compiling all of your information, you find your needs are fairly complex, you may wish to engage the services of a small business consultant to help evaluate your software requirements. Or you can submit your requirements to software retailers, custom software vendors or mail order software houses. They will propose software packages that meet as many of your requirements as possible.

At this point you should review and compare the software packages and verify the extent to which each meets your needs. Ask yourself these questions: Does it cover all of my musts? How many of my other requirements does it fulfill? Does it provide additional features I had not thought of earlier but now believe to be important?

After you have identified one or more software packages fitting your needs, examine other general features of the software.

> ! Does it come with effective documentation? Do you understand it? Is the operating manual written for the novice? Is the information organized so you can use it effectively after you gain experience?

> ! How easy is the software to use? Does the information displayed on the computer screen make sense? Is there a help facility?

> ! How flexible is the software package? Can you change data that have already been processed? Can you change the program instructions, such as payroll withholding rates, or will you have to pay the vendor to change these for you? If you must pay a vendor, what will it cost?

> ! Will you be required to change any of your business practices? If so, are these changes you should make anyway? Will the software provide the accounting and management information you need?

> ! How well is the software documented? You should be able to understand the general flow of information, i.e., which program does what and when.

> ! Does the software have security features, such as passwords or user identification codes? Can it prevent unauthorized access to private information?

> ! Is it easy to increase the size of files?

> ! Will the software vendor support the software? Does the vendor have a good track record? Will the vendor make changes and, if so, how much will the changes cost?

> ! How long has the vendor been in business? What are the vendor's prospects for staying in business?

Ready-Made Software

If you find a ready-made software package that fits your business's needs and price range, take it. You may still have to do a lot of work adapting your procedure, but generally you will be better off than if you design your own software system.

Although different brands of software and hardware can be adapted to work together compatibly, such standardization is not yet prevalent. For this reason, it is important that you first find the right software and then select the hardware that can handle it.

Preparing a Request for Proposal

If you are unable to find a software package that fits your needs, send a request for proposal (RFP) to selected hardware vendors and turnkey systems houses. (The latter are companies that put together complete, ready-to-use hardware and software systems.) The form of your RFP depends on the kind of proposals you are soliciting -- a turnkey system with customized software, a turnkey system with packaged software, or hardware and/or software in separate packages.

Because most first time users get turnkey systems, the following guidelines apply to RFPs for this method:

1. Give a brief description of your company.

2. Describe the business operation to be computerized.

3. Submit the materials you designed and accumulated earlier.

4. Describe the criteria that will be used to evaluate proposals and request a response to each criterion (i.e., maintenance, technical support, training, etc.).

5. Specify which of your requirements must be met exactly and which must be met only in substance. This is important when dealing with software packages.

6. Request a detailed price quotation that includes all charges to meet your needs, including one-time charges, such as for equipment, training, applications and systems software, and ongoing charges, such as maintenance and technical support. Request financing alternatives such as lease-purchase and direct or third-party lease.

CHOOSING THE RIGHT EQUIPMENT/HARDWARE

Choosing the software is by far the most difficult part of deciding on the computer system that is right for you. Because most software is written for one or more specific computers, you will probably have narrowed your equipment choices down considerably by the time you have selected your software.

Review the choices and ask the same questions about potential computer hardware vendors that you asked when evaluating software vendors. Don't forget to check the cost of shipping, installation and equipment maintenance.

The computer and associated equipment known as hardware consist of a number of components that do different jobs. They include

!   *Processor* -- The thinking part of the computer is known as the processor or central processing unit (CPU) and is designed to execute software instructions, perform calculations, control the flow of data to and from the memory and control other hardware components. The faster the CPU, the quicker you can work with your data.

!   *Computer memory* -- Computer memory usually is measured in bytes (which is a grouping of binary digits or bits). Roughly speaking, each byte of memory holds one character of data, either a letter or a number. A 2K (2,048 bytes) memory in practical terms holds about one double-spaced, typed page. There are two kinds of memory: ROM (read-only memory) and RAM (random access memory). We are only concerned with RAM.

!   *ROM* -- Read-only memory is a program stored in the computer memory that cannot be changed by the user or an externally entered program.

!   *RAM* -- Random access memory is located in the CPU and is normally measured in Ks or 1024s (64K = approximately 65,536 characters or about 32 pages of information). RAM is used to store all the information necessary for the CPU to do its job: the program running the portion of data that is currently being processed and some portion of the system software. Information stored in RAM lasts only as long as the power is on. Once the power is turned off, all RAM information is erased. Store your RAM-based data on more permanent storage media, such as diskettes.

!   *DOS* -- The disk operating system (DOS) is software that controls the interactions among the CPU, disk drive, keyboard, video monitor and printer. ROM, RAM, DOS and the applications program may need about 55K, depending upon your version of DOS.

!   *Storage* -- Just as a company retains its relatively permanent records in a file cabinet, a computer most commonly retains relatively permanent information on disks. These resemble small phonograph records and may be floppy or hard. A floppy disk is made of soft, thin plastic encased in a stiff paper envelope and comes in 3 1/2- 5 1/4- and 8-inch diameters. Hard disks are encased in metal and have faster access and more storage capacity than floppy disks. Hard disks are also much more expensive than floppies, but their greater storage capacity and speed usually make up for the difference in cost. Information on a disk is recorded, retrieved and erased through a disk drive, which is controlled by the system and application software.

!   *Terminal* -- In order for a computer to perform useful work, you must be able to

communicate with it. Most often this two-way communication is carried out through a keyboard, used to enter data into the computer, and a display monitor. The monitor (screen) should be able to display 24 lines of 80 characters at one time. Some monitors can handle color and graphics. Color graphics quality is determined by pixels or picture elements. If a display is 280 by 192 pixels, the screen is divided into 280 rows and 192 columns. The larger the number of pixels, the finer or more precise the picture display will be. EGA or VGA monitors are your best choice for color monitors.

! *Printer* --The main output of a computer system is usually printed material -- reports, checks, invoices, etc. As with all other hardware choices you make, choose a printer that can accomplish your specific jobs. The print quality of various printers ranges from dot matrix to letter quality. Laser printers have surged in use because of their high quality print and speed and because of lowering prices and increasing interest in desktop publishing.

! *Drives* -- Disk drives are single- or double-sided. Diskettes, either 3 1/2 inch or 5 1/4 inch, are loaded into these drives. You store and retrieve data from diskettes. You may find it helpful to configure your PC with both size diskette drives. Diskettes are also high and low density, referring to the quantity of data that can be stored on them. A high-density diskette, although it costs more, will store more data than a low-density diskette.

! *Warmware* -- Warmware are the critical services and support you will require after your purchase. If you choose wisely, the combined software and hardware packages can become an invaluable tool to enable you to better manage your business. However, without qualified people to train your staff, install the system and be available to answer questions, your system may never get off the ground. Once your computer system is up and running, you will need support to help you solve any problems that may arise.

Evaluating the Computer System

The most important sources of feedback in judging a computer system are companies using the computer system you think you will buy. Try to find companies with configurations and applications as close to yours as possible and visit them, without the computer sales representative.

Use the following criteria, listed in order of importance, to evaluate a computer system.

1. *Software developer's past performance record* -- software developer should have prior experience with similar applications for the same equipment configuration as the one you are considering.

2. *Commitment of hardware vendor* -- Where will your commission sales representative be after the contract is signed? How many systems engineers does

the vendor have in your area?

3.   *Hardware capacity* -- Does the hardware have adequate processing capability to meet your requirements within acceptable time frames?

4.   *Quality of systems software* -- The quality of the system software (operating systems and utilities) dramatically affects how difficult the system is to program and use.

5.   *Systems documentation* -- What kind of systems documentation does the vendor provide and how is it updated? Can it be understood at some basic level by the user? Is it designed so other experts can understand how things were done and change them when necessary?

6.   *Service and maintenance support* -- When your system breaks down, how long will it take to get it fixed? Who will do it? Will it be subcontracted? Are there any provisions for backup during downtime?

7.   *Expandability and compatibilities* -- What are the technical limits of your system and how close to those limits is your current configuration? Is there software compatibility among the vendor's product lines?

8.   *Security* -- What security features will your system have to prevent unauthorized use of the system or unauthorized program modifications?

9.   *Financial stability of vendors* -- Satisfy yourself about the financial stability of your vendor.

10. *Environmental Requirements* -- Mini and microcomputers do not usually require special environments such as raised floors, special wiring or special air-conditioning. Some may, however, and it pays to find out in advance. Local area networks (LANs) require cabling.

11. *Price* -- With computers, as with anything else, you generally get what you pay for. Low price alone should not be a prime evaluation criterion.

CONTRACTING FOR A TURNKEY SYSTEM

If you decide to purchase a complete hardware and software system (turnkey system) rather than buying the software and hardware separately, you should have a contract or agreement. Examine the standard contract supplied by the vendor. Be aware it may not protect your interests. If you have any questions, have your lawyer review the contract and suggest changes to help you implement the system.

An important part of the contract is the payment schedule. Do you pay before or after

installation? Will you pay for the installation periodically on a draw schedule? The more money held back until the installation is complete, the more power you will have to ensure that the vendor satisfactorily completes all that has been promised and contracted.

The contract should include detailed references to the following:

- ! Description of equipment and software.

- ! Installation responsibilities.

- ! Provisions for additional equipment.

- ! Performance guarantees.

- ! Responsibility for training.

- ! Software rights.

- ! Provisions for default, bankruptcy of vendor or termination of contract.

- ! Software documentation.

- ! Systems documentation.

- ! Responsibility for hardware freight charges and sales tax.

- ! Acceptance testing.

- ! Conversion responsibilities (from manual system to computer).

- ! Upgrading privileges and trade-in rights.

- ! Restart (what is required to restart system from failure).

If the contract is for software developed especially for you, the contract should specifically refer to your RFP and the vendor's responding proposal. A good contract will help you prepare for the system's installation and ensure a more satisfactory business transaction.

Points to consider when selecting your computer system include

- ! Reliability -- How qualified are the manufacturer and the vendor? What is their reputation? What is the incidence of repair on the system equipment?

- ! Resources -- How long have the manufacturer and vendor been in business? How strong are their financial positions and credit ratings?

!   Services -- Are ongoing consulting, training, supply and repair available?

!   Rates -- Are charges competitive? What terms are offered?

!   Backup -- What happens if your system fails?

IMPLEMENTATION

Immediate Concerns

As was suggested before, successful computer applications for your business depend heavily on the implementation process. Problems are inevitable but proper planning can help avoid some of them and mitigate the effects of others.

!   *Employee involvement* -- The success of a new computer system will depend on the cooperation of your employees; therefore, it is important to involve them as early as possible in the implementation. Explain to each affected employee how his or her position will change. To those unaffected, explain why their jobs will remain unchanged.

!   *Schedule for implementation* -- Set target dates for key phases of the implementation, especially the last date for format changes.

!   *Installation site* -- Prepare the installation site. Check the hardware manual to be sure the location for your new computer meets the system's requirements for temperature, humidity and electrical power.

!   *Converting applications* -- Prepare a prioritized list of applications to be converted from manual to computer systems. It is important to convert them one at a time, not all at once. Prepare a list of all business procedures that will be changed so the computer system will fit into the regular work flow. Develop new manual procedures to interface with the computer system.

!   *Training* -- Train, or have the vendors train, everyone who will be using the system.

When these steps are complete, the computer system can be installed. Each application on the conversion list should be entered (files set up, historical data entered and the system prepared for new transactions) and run parallel with the preexisting, corresponding manual system for a number of processing periods. This means that two complete systems will be running, placing a great deal of pressure on your employees and on you. However, until you have verified that the new system works, it will be worth the effort.

Be sure to insist on progress reports from everyone involved in the changeover.

Long-Term Concerns

At the same time you are converting each application, you must begin dealing with the long term issues that will keep your computer operation successful.

System security -- If you will have confidential information in your system, you will want safeguards to keep unauthorized users from stealing, modifying or destroying the data. You can simply lock up the equipment, or you can install user identification and password software. You can also

> ! Control access to your computer, disks and reports.

> ! Label all disks to identify their contents and verify correct labeling.

> ! Initiate original accounting transactions, adjustments or corrections yourself.

> ! Rotate computer employees or schedule their vacations to expose possible unauthorized practices.

> ! Require dual signature authorizations to control software modifications.

Data Safety -- Data, confidential or otherwise, can be destroyed by unexpected disasters (fire, water, power fluctuations, magnetic fields, etc.) or through employee tampering, resulting in high replacement costs. The best and cheapest insurance against lost data is to back-up information on each diskette regularly. Copies should be kept in a safe place away from the business site. Also, it is useful to

> ! Have and test a disaster recovery plan.

> ! Identify all data, programs and documents needed for essential tasks during recovery from a disaster.

Employee cross-training -- Just as with a manual system, it is important to have more than one employee who knows how to operate the system. Once your business relies on the computer system, the absence (sickness, termination, etc.) of a computer operator can be devastating unless another person is prepared to fill in.

Management controls -- Although computer systems allow small businesses to process more data more accurately than ever before, there is a chance that the same system can cause greater problems if left unsupervised. All systems, manual or otherwise, must be continually monitored to ensure the quality of the input and output data.

SUMMARY

If all this seems like a lot of work, it is. The computer, like any tool, requires learned skills in order to fulfill its purpose. If you believe that you and your business need a computer, plan to spend the time and the money it takes to make its installation and operation of the system successful.

With no prior knowledge of computers, you can buy a personal computer with applications for your business. With some guidance, study and experience, you can develop computer-based management planning and control expertise. By taking advantage of the speed and complex capabilities of a computer, you can tap the potential for growth and profit in yourself and your business.

APPENDIX A: A QUICK REVIEW WHAT TO CONSIDER WHEN BUYING

Needs	!	Business operations to be done.
Costs	!	Comparative cost versus comparative capabilities.
Memory	!	Capacity of RAM.
Disk Drives	!	Size (5 1/4 or 3 1/2").
	!	High or low density.
	!	Multiple drives.
	!	Hard disk size and speed.
Keyboard	!	Typewriter style.
	!	Numeric keypad.
	!	Mouse.
Software	!	Number of programs written for or compatible with the PC you are interested in.
Display	!	Color or monochrome.
	!	Resolution quality.
	!	Graphics capability.
Expandibility	!	Connections for add-ons and attachments.
	!	Compatibility with other manufacturers' equipment.
Supplies	!	Custom forms.
	!	Printer paper.
	!	Furniture.
	!	Accessories.
		-- Diskettes.
		-- Dustcovers.
		-- Anti-static mats.

-- Surge protectors.

Repair and Training   !   Service contracts.
                       !   Type and quantity of training provided.

APPENDIX B: INFORMATION RESOURCES

U.S. Small Business Administration (SBA)

The SBA offers an extensive selection of information on most business management topics, from how to start a business to exporting your products.

This information is listed in The Small Business Directory. For a free copy contact your nearest SBA office.

SBA has offices throughout the country. Consult the U.S. Government section in your telephone directory for the office nearest you. SBA offers a number of programs and services, including training and educational programs, counseling services, financial programs and contract assistance. Ask about

>   !   **Service Corps of Retired Executives (SCORE)**, a national organization sponsored by SBA of over 13,000 volunteer business executives who provide free counseling, workshops and seminars to prospective and existing small business people.

>   !   **Small Business Development Centers (SBDCs)**, sponsored by the SBA in partnership with state and local governments, the educational community and the private sector. They provide assistance, counseling and training to prospective and existing business people.

>   !   **Small Business Institutes (SBIs)**, organized through SBA on more than 500 college campuses nationwide. The institutes provide counseling by students and faculty to small business clients.

For more information about SBA business development programs and services call the SBA Small Business Answer Desk at 1-800-U-ASK-SBA (827-5722).

Other U.S. Government Resources

Many publications on business management and other related topics are available from the Government Printing Office (GPO). GPO bookstores are located in 24 major cities and are listed in the Yellow Pages under the bookstore heading. You can request a Subject Bibliography by writing to Government Printing Office, Superintendent of Documents, Washington, DC 20402-9328.

Many federal agencies offer publications of interest to small businesses. There is a nominal fee for some, but most are free. Below is a selected list of government agencies that provide publications and other services targeted to small businesses. To get their publications, contact the regional offices listed in the telephone directory or write to the addresses below:

Consumer Information Center (CIC)
P.O. Box 100
Pueblo, CO 81002
The CIC offers a consumer information catalog of federal publications.

Consumer Product Safety Commission (CPSC)
Publications Request
Washington, DC 20207
The CPSC offers guidelines for product safety requirements.

U.S. Department of Agriculture (USDA)
12th Street and Independence Avenue, SW
Washington, DC 20250
The USDA offers publications on selling to the USDA. Publications and programs on entrepreneurship are also available through county extension offices nationwide.

U.S. Department of Commerce (DOC)
Office of Business Liaison
14th Street and Constitution Avenue, NW
Room 5898C
Washington, DC 20230
DOC's Business Assistance Center provides listings of business opportunities available in the federal government. This service also will refer businesses to different programs and services in the DOC and other federal agencies.

U.S. Department of Health and Human Services (HHS)
Public Health Service
Alcohol, Drug Abuse and Mental Health Administration
5600 Fishers Lane
Rockville, MD 20857
Drug Free Workplace Helpline: 1-800-843-4971.
Provides information on Employee Assistance Programs.
National Institute for Drug Abuse Hotline: 1-800-662-4357. Provides information on preventing substance abuse in the workplace.
The National Clearinghouse for Alcohol and Drug Information: 1-800-729-6686 toll-free.
Provides pamphlets and resource materials on substance abuse.

U.S. Department of Labor (DOL)
Employment Standards Administration

200 Constitution Avenue, NW
Washington, DC 20210
The DOL offers publications on compliance with labor laws.

U.S. Department of Treasury
Internal Revenue Service (IRS)
P.O. Box 25866
Richmond, VA 23260
1-800-424-3676
The IRS offers information on tax requirements for small businesses.

U.S. Environmental Protection Agency (EPA)
Small Business Ombudsman
401 M Street, SW (A-149C)
Washington, DC 20460
1-800-368-5888 except DC and VA
703-557-1938 in DC and VA
The EPA offers more than 100 publications designed to help small businesses understand how they can comply with EPA regulations.

U.S. Food and Drug Administration (FDA)
FDA Center for Food Safety and Applied Nutrition
200 Charles Street, SW
Washington, DC 20402
The FDA offers information on packaging and labeling requirements for food and food-related products.

For More Information

A librarian can help you locate the specific information you need in reference books. Most libraries have a variety of directories, indexes and encyclopedias that cover many business topics. They also have other resources, such as

> ! **Trade association information**
> Ask the librarian to show you a directory of trade associations. Associations provide a valuable network of resources to their members through publications and services such as newsletters, conferences and seminars.

> ! **Books** -- Many guidebooks, textbooks and manuals on small business are published annually. To find the names of books not in your local library check Books In Print, a directory of books currently available from publishers.

> ! **Magazine and newspaper articles** -- Business and professional magazines provide information that is more current than that found in books and textbooks. There are a number of indexes to help you find specific articles in periodicals.

In addition to books and magazines, many libraries offer free workshops, lend skill-building tapes and have catalogues and brochures describing continuing education opportunities.