

# Technology Plan

*Computers are useless. They can only give you answers.*

—Pablo Picasso

Every business needs technology. Even if your company makes old-fashioned chocolate chip cookies, you'll rely on technology to handle many, if not most, routine business operations, from maintaining financial records, to processing orders, to staying in contact with suppliers and customers. Because technology is so central to running a business today, you need to plan what technology you will use and how you will use it.

This section helps you outline your technology needs. If yours is a technology-intensive company, your technology needs may be far more complicated than indicated in this chapter.

## Why a Technology Plan?

Sometimes even the simplest technology issues prove to be difficult and time-consuming. For example, options for today's telephone systems can be surprisingly confusing, even for relatively small companies. Few of us have the technical expertise to understand the wide range of technology choices available to us. Often, we don't even know the right terms to use or questions to ask.

Many decisions you make about your technology, such as the choice of your database program, may be costly or cumbersome to change later. When outlining your technology plan, keep in mind how your company might grow or change; try to choose technology that is flexible enough to grow and change with you. As much as possible, choose technology that, while meeting your needs, is simpler rather than overly complex. All those extra "features" may just make your technology, whether it be a software program or a telephone, harder to use.

“I can sit at my desk as a venture capitalist and come up with 30 ideas; I have the money in the bank to play with—that's not the hard part; the hard part is figuring out all the mechanical issues of how you make a business. That's the part we really need to see.”

**Andrew Anker**  
Venture Capitalist

You may benefit greatly by using the services of a technology consultant to help you figure out the best products and systems for your company. There are consultants who can help you design a total system—hardware, software, telecommunications, and so on—and there are also specialists in specific areas.

Some industries have vendors who produce specialized software or hardware to meet industry-specific demands. Your trade association can help you identify vendors of such industry-specific technology, and you can typically find many sources exhibiting at industry trade shows. Although these products may be more expensive than general “off-the-shelf” software, they may better suit your company’s specific needs, and they’re less expensive than having software created specifically for you. Check, however, to see how compatible these industry-specific items are with common software or hardware; you’ll probably want to be able to use some “off-the-shelf” products.

If you are just starting your business, you may not need to figure out each of these technology issues in detail, but you should have a realistic sense of costs as you put your financial statements together.

The Technology Budget worksheet and Technology Plan Preparation Form at the end of this chapter will help you assess your technology needs and costs.

## Planning for Technology Businesses

If you are preparing a business plan for a company that is heavily dependent on technology, expect some potential funders, especially venture capitalists, to scrutinize your technology plan in great detail. They will want to see both that you understand the nature and scope of your technology needs and that you have planned adequately for your hardware/software needs and your need for specialized personnel.

Of course, some companies are specifically in the business of developing or exploiting new technology, not just using technology to achieve other business goals. In these companies, technology is essentially the core business, and potential investors want detailed information about the nature of your technology. This description can be included as part of the section on “Products and Services” or it can be a separate section of your plan. It should describe the basic concept and features of your technology with a level of detail geared to the expertise of the potential reader.

Be careful, however, about how you provide the necessary data. You’ll need to show the viability of your concept without revealing extremely sensitive company secrets (which should not be put in a written business plan). If, on the other hand, you are seeking conventional financing (e.g., bank loans) or investment from less knowledgeable sources, then the description of your new technology should be fairly general. If your plan is for internal use only, your technology section may be very detailed and include sensitive information about product development. In this case, be extremely cautious as to how the plan is distributed; you don’t want it to fall into the wrong hands.

## What Do You Use Technology For?

If you walk into a computer store and say, “I need a computer,” the first question the salesperson will ask is, “What do you need it for?” Base your technology choices on your actual and projected business needs.

When you examine your business operations, look at which functions require or could benefit from technology. Common business needs that utilize technology include:

- Accounting, taxes, finances
- Order taking and tracking
- Order fulfillment/shipping
- Inventory management
- Database management, such as customer, product, supplier, or inventory
- Mailing lists
- Communication with customers
- Internal communication
- Presentations
- Desktop publishing/graphics
- Personnel/human resources management
- Production: design, cost-tracking, supply management
- Internet marketing/website/email
- Internet sales

Many of these functions are offered online as software-as-a-service (SaaS). SaaS enables you to access your data anywhere you have Internet access and to pay monthly for the service instead of purchasing costly software outright.

### Choosing Technology

Key issues when choosing technology include:

- Functions
- Ease-of-use
- Cost
- Security
- Ability to be upgraded and expanded
- Integration with existing data, technology, systems, and the like

As a guideline, ask yourself the following questions:

- What features do you absolutely need? Make certain the technology can handle your most important functions. If you can't do the things you have to do, you'll waste your money.

“You have to work with and understand the existing infrastructure, the existing distribution channels, the existing brick and mortar manufacturers. Navigating those waters, understanding their issues, and working both within and outside the system are very important things.”

**Andrew Anker**  
**Venture Capitalist**

“At HotWired, we tried to build a company where the process, the flexibility, was more important than the product. We knew that the product was going to change a thousand times before we were done with it, but the process had to work.”

**Andrew Anker**  
Venture Capitalist

- What features would be helpful, although they are not absolutely essential? In addition to meeting your essential needs, some technology products or features can save you time or money in the long term. Look for those solutions that can improve your business and review them in light of the extra cost and complexity they present.
- How often will you need to change or update computer software? The biggest problem with computers is not that they fail, but that as new software and peripheral devices are introduced, they don't work with older computers. Newer versions of software require more and more memory and faster processing speed. If you'll need to upgrade frequently, purchase hardware that is more liable to be able to handle such upgrades.
- Does your equipment have to be compatible with other equipment or lots of software? With a piece of stand-alone equipment, such as a copier, you have a lot more flexibility when making your selection, and it may not matter if you buy an unknown brand. If you have equipment that has to be integrated or connected with other equipment, such as a computer or some smaller telecommunications devices, look for well-known products. You'll want to avoid the hassles of trying to make an off-brand work with your other equipment. Software programs, for instance, usually come equipped with drivers to handle only the most popular brands of computers, printers, or scanners.
- With equipment that uses “consumables,” such as ink cartridges for printers, find out if replacement supplies are readily available. Office and discount stores usually carry only the most well-known brands. Take into account the availability and costs of supplies before making your final selection.
- Do you perform tasks like design, desktop publishing, presentations? If so, go for the latest equipment. Those types of software programs eat up lots of memory and processing speed.
- How cool do you want to be? Some people and some companies want to be seen as on the cutting edge of technology.

## Global Technology Concerns

It's easier than ever to operate internationally, primarily due to technology. The Internet, mobile communication, and VOIP (Voice over IP) all make it possible to connect with virtually anyone throughout the globe.

Technology is generally well suited to being used internationally. Most technology has been developed for international standards. In a few, rare instances, however, you may find conflicts between technology systems. Some issues may arise from things such as electrical currents or telecommunications standards. Some mobile phones will not work in other countries, for example. Occasionally some governments may place limits on the use or access of technology. For instance, certain countries limit their citizens' access to particular search engines or social networking websites. Other countries put limits on what can be advertised on auction sites.

If you are operating your technology across borders, consider any conflicts or problems that are likely to arise.

### Chapter Summary

Technology is a critical aspect of all businesses today, used in most areas of business operations and marketing. Because technology decisions can be confusing and costly, you may want to seek the help of outside experts to help you make your technology choices. Developing an overall technology plan gives you a framework to understand the scope of your technology needs and create a more realistic technology budget.

**Globalization: Technology Concerns**

What kinds of conflicts could there be in your software, hardware, or other technology solutions?

Compatibility \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Time zone \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Currency conversion \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Paper source \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Measurement standards (e.g., metric versus Imperial, pounds vs. stones) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Language and terminology \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

What steps will you take to mitigate these potential issues? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Technology Budget** \$ > \$\$ > \$\$\$

*Use this worksheet to specify the costs of your ongoing technology needs.*

|                             | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-----------------------------|--------|--------|--------|--------|--------|
| <b>Software</b>             |        |        |        |        |        |
| Accounting                  |        |        |        |        |        |
| Customer relationship mgmt. |        |        |        |        |        |
| Human resource mgmt.        |        |        |        |        |        |
| Inventory mgmt.             |        |        |        |        |        |
| Office suite                |        |        |        |        |        |
| Custom software             |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| <b>Hardware</b>             |        |        |        |        |        |
| Desktop computers           |        |        |        |        |        |
| Portable computers          |        |        |        |        |        |
| Servers                     |        |        |        |        |        |
| Backup systems              |        |        |        |        |        |
| Printers                    |        |        |        |        |        |
| Networking                  |        |        |        |        |        |
| Peripherals                 |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| <b>Telecommunications</b>   |        |        |        |        |        |
| Telephone system            |        |        |        |        |        |
| Mobile phones/pagers        |        |        |        |        |        |
| Fax machines                |        |        |        |        |        |
| Internet access             |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| <b>Consulting Personnel</b> |        |        |        |        |        |
| Systems design/maintenance  |        |        |        |        |        |
| Tech support/help desk      |        |        |        |        |        |
| Other:                      |        |        |        |        |        |
| <b>Total</b>                |        |        |        |        |        |

### Technology Plan Preparation Form

*Using this form as a guide, summarize the key technology concerns and technology needs of your business, which you can then include in your business plan, either in a separate Technology section, or in the Operations section.*

Software Needs: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Hardware Needs: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telecommunications Needs: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Personnel Needs (specify in-house or outsourced): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Use this information as the basis of your plan's Technology section.*

**SAMPLE PLAN: TECHNOLOGY PLAN****TECHNOLOGY**

ComputerEase is in the technology business. As such, we must always stay on top of new developments and continually upgrade not only our equipment, but our skills.

The most critical component of our technology plan is making certain our course developers and instructors are fully capable of using new software in the most productive ways possible, so that they, in turn, develop appropriate training materials and train our students. To that end, our course developers and instructors receive pre-release copies of software programs and pre-release training from major software manufacturers.

Key to success is staying on the cutting edge of instructional design technology. We are partnering with experts in the field to stay abreast of new developments in interactive online courseware and anticipate adding enhancements as they are developed.

ComputerEase offers online, distance learning capabilities. National competitors currently offer such training, and we want to be prepared to be able to take on such competition. Additionally, we believe our online distance learning programs will enable us to expedite our geographic reach into other areas not only in the Midwest and other parts of the U.S., but also into any English-speaking country.

Our training centers are also critical. One training center is already in operation, and we anticipate opening a second center by January 2011. This center will have 20-30 of the most up-to-date personal computers, 3-4 printers, overhead projection equipment, and other audiovisual equipment. We lease our computers for the training centers rather than purchase them; this enables us to always offer students the latest equipment.

Our company website contains background information on the company and lists the schedule and descriptions of training classes for both online and in-person training sessions. Students of corporate training classes taking place in our center can register for sessions online and access password-protected areas to receive additional assistance after completing their training sessions. This will enable us to provide more continual support for our corporate clients. Online students enjoy these same capabilities, in addition to access to their training sessions through the website.

ComputerEase intends to pursue the development of training materials and applications for smartphones, iPads, and other electronic tablets. Outside of the U.S. market, especially in Europe and Asia, users tend to rely on their phones as their primary electronic device. As we attract more and more international clients, we will need to develop our technology accordingly. In the U.S., we foresee continued growth in the popularity of electronic tablets and smartphones as well.