



AN INTERNATIONAL ORGANIZATION OF CEOS

RESOURCE PRESENTATION SUMMARY



MOVING THROUGH THE TECHNOLOGY MAZE

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TECHNOLOGY OVERVIEW

In terms of technology, there is no "the answer." There is only "your" answer, the one that fits your business. The key to making technology work for your business is to be flexible in how you approach it.

Technology becomes easy to work with if you look at it as a tool to help your business. Too often, people get dazzled by the technology itself and lose track of what it is supposed to do, which is to help you get the job done better and faster.

In a TEC survey of 226 CEOs, 73% said they regularly use a PC in their jobs. When asked how they use their PCs, 21% said for business purposes exclusively, 75% said for business and personal use, and 4% said for personal use.

Most executives make technology decisions on a cost/benefit basis. But technology can't always be measured on that basis because often the cost is the soft cost. In addition to a cost/benefit analysis, ask the following questions:

- Can the technology improve communications in your organization?
- Does it improve the way you are able to serve your customers?
- Does it increase the productivity of your organization?
- Does it empower your people to get the information they need more quickly?

Information is critical to using technology successfully. With so much information available, companies with employees who can mine the information for the critical nuggets your business needs to stay competitive will be the successful ones.

ELECTRONIC MAIL

According to the TEC survey, 47% of CEOs who use online computer services use electronic mail (e-mail). E-mail can be one of the most effective tools to communicate with customers and employees. It is the key to business communication in the future.

There are two kinds of e-mail. Internal e-mail allows you to communicate with your employees on a local area network (LAN). External e-mail allows you to communicate with anyone else on any electronic mail system on the internet. Various points on the internet connect with your

LAN system, so anybody on the LAN can communicate with anyone in the world who has an electronic mailbox.

E-mail can give you a competitive advantage by allowing you to communicate with customers and buyers one-on-one. You don't have to deal with secretaries, gatekeepers, etc. E-mail will eliminate the illiteracy defense from people who feel they don't need to know how to use computers. Within the next few years, not having e-mail will be like not having a phone ten years ago. E-mail is going to change the way people do business.

Even if you don't have external e-mail now, start collecting your customers' e-mail addresses. It will be a good way to stay in touch with them in the future. Putting your e-mail address on your business card and letterhead is also a good idea.

In the TEC survey, 53% of the CEOs said they use an online service, but only half use it for e-mail. Seventy-two percent used an online service for research. Lexus Nexus is a good online service for research; they have some of the most extensive databases. Lexus Nexus can be expensive if you don't know what you are doing. You can easily burn up five or six hundred dollars of research in a few minutes by going through the databases in the wrong way.

The internet is a great tool for gaining competitive information and learning about new things going on in your market. Many services allow you to set up a news scanner, which scans all the news stories going over a wire. You indicate the names of companies you are interested in, and the scanner pulls all the articles relating to those companies and sends them to your e-mail address. The internet can also be very useful when planning travel and vacations.

The main commercial online services are CompuServe, America Online, and Prodigy, with Microsoft Network coming in the future.

E-mail is perhaps the best application for using a major online service. If your company isn't connected to the internet and you want to get on it yourself, using one of the major online services is probably the easiest and least expensive ways to do it.

Online services can also be used for business promotions and sales. Each service has forums, which are like imaginary meeting rooms. People can come in to the meeting rooms and put ideas on the group bulletin board. You can't blatantly promote your business or put up ads, but you can look for forums that are of interest to your business.

By answering questions or providing information that might be of use to consumers, you can broadcast your company name and position yourself as a resource. You can post information about your business in specially designated areas within the forums.

Forums are excellent for networking. They allow you to get together with a group of people in a non-meeting setting to answer questions, share ideas, and get feedback on specific issues.

THE INTERNET AND THE WORLDWIDE WEB

The worldwide web is a series of connections between "home pages" that quickly build elaborate and complex networks. Even if you don't know where the information you need is, you can find what you want very quickly by connecting with other people on the web. The worldwide web is also the fastest growing segment of electronic communications. In the past year, it's membership has grown by 1,000% each month.

Because of its networking capabilities and the speed at which information travels over the internet, the worldwide web will fundamentally change the way business gets done. The web will be the most significant thing to happen since the invention of television. The web is the new advertising medium. It is a way to get a message to your customer and change it on an inexpensive, ongoing basis. It is also a good way to publish information.

The web costs very little to get into, especially if you put the pages together yourself. Have someone in your organization learn how to use the web very well so they can make some of the simple changes for you. The changes are written in a language—called "HTL"—that is easy to learn and use.

To get information on the web, you need a "browser," a piece of software that reads the code you have written and translates it into what it will look like on the screen.

In addition to the major online services, there are many local internet providers who charge a small fee to hook you up to the web. They generally charge slightly less than the major online services. If you set up a commercial account, so everyone in your company can use the service, the rates are much cheaper.

Security is a big issue on the internet and the web. There are a lot of people who enjoy cracking into others' databases. If you have vital customer or business information, don't leave it exposed. Use a dedicated line to hook up to the net, one that is not hooked up to sensitive information. This will also protect your system from being infected with computer viruses.

If you're going to have a page on the web, put it on someone else's server so it is not physically connected to any of your key business information. Or, if you set up your own server, create a firewall that allows outsiders to access only part of your computer and blocks them from the rest. If you want people to have access to critical business information, put it on another computer rather than letting them into your whole system.

Buy brand-name diskettes. Some of the cheaper bulk packs of diskettes have been known to be sold with viruses already on them. Buy a virus detection software and use it regularly. Do everything you can to protect yourself.

If you're buying a new modem, don't buy anything less than a 28.8 speed modem. They currently cost about \$390, which is more than most modems, but as the web grows you will

want that much speed. If you need to access a slower service, you can always slow down the modem speed, but the faster you can get the information, the better.

The next step up from a dial-up modem is an ISDN line, which is a dedicated line that enables you to hook up at 56.6 kilobytes per second. It is also a digital connection, so the information you receive is much cleaner. ISDN stands for integrated service digital network. It allows you to electronically split the line so you can receive information from multiple lines without having more than one physical line.

One unusual point about the internet is there is no central controlling point. Some organizations have been set up to track the domain names. But for the most part, the internet is just a group of people who communicate using computers. The internet was originally designed for military use in case regular communication channels went down.

The internet is not the same thing as the worldwide web. The internet is the underlying connections; the worldwide web is one way to look at those connections. The worldwide web is much easier to use than the original internet.

There are many ways to get e-mail through the internet. You can have your e-mail box retransmit your e-mail so that it comes over your pager. If you don't have access to a computer, you can forward your e-mail to a fax machine and print it out as hard copy. If you don't want to get into computers at all but you want to put up a web page, you can set it up so you can pick up web pages using your fax machine. You can set up an e-mail box so that it sends all your e-mail to a fax machine. You can receive, but you can't answer e-mails in that situation.

If you want to pick up e-mail and the phone lines are digital (meaning you can't plug your modem in), find a fax machine. It will have a phone line you can use.

Using the web is a great way to market your business, but it's a new medium that has new rules. You can't do what you do on television, radio and print. You have to build things and use a lot of links and connections. You have to make the web page nice and visual, but even though visual is important, it won't keep the web going. It's the underlying content and information that makes it such a powerful tool. Make your web page an information tool so people can get the information they want quickly and find it at your site.

A web page is much more than just an electronic brochure. You need to keep changing it in order to build up a clientele of people who want to keep reading your page. If your page stagnates, people have no reason to return to it.

Electronic catalogs are great if you have a huge inventory that you want to show or if you change prices on an ongoing basis. You can secure sites with a password so that only certain groups of people can have access to the information.

The web can also help with customer support. If you have a lot of customers that need general information, or if you get a lot of customer inquiries about the same issues, the web is a great place to put that information. If people find out your site has good content, they will come again and again.

The web will help you stay competitive in the future. You can't afford to be the odd company out and not have it. At the present, the web is still in its infancy, and you won't make a lot of money on it initially. But from a marketing perspective, it can become a significant part of what you do. It can also keep you on top of the learning curve.

To be successful on the web, focus on the information you put on your page. It must be critical information that the person looking for your page really wants, otherwise they won't come back a second or third time. The value in a web page is not the first time someone looks at it, but how often they come back. When you put up a web page, have good sites for people to link to, change the sites and the information often, and make sure that people know that you change it.

Promote your web page. Use it like you would a phone number. Put your web address on your business card, letterheads, and ads. Give your customers an alternative way to reach you. Get your web number listed on as many indexes as you can. Send the indexes an e-mail note about your page, and in a day or two you will appear on their index.

Consider online "mall" locations, which are groups of pages. In an online mall location, people actually come to shop. If the mall gets a lot of traffic, you'll get a lot of traffic. The online malls even have anchor points, just like regular malls.

Build reciprocal links. The idea is to become the key source of information on the web for your industry. Ultimately, there will be one or two sources on the web for each industry. If you can make yourself the place where people want to come, you will become one of those sources.

Register your "domain name" now before someone else gets it. The domain name is the piece that identifies your company. You can register through any local internet provider for a cost of \$75-\$150. If you wait too long, your name may be gone by the time you want to use it. Once it's gone, you can't get it back unless you buy it from whoever has it. Even if you don't want to put a web page up, you can still register a domain name by creating an electronic presence. The local internet service will also do that for you.

VIDEOCONFERENCING

There are many types of videoconferencing available:

- **PC-based.** This method is still in its infancy. It uses a camera, hardware and software and costs about \$900 to install. The system plugs into a regular phone line, you dial the other person over the modem, and pictures of you and the other person pop up on the respective computer screens so that you can see and hear each other through the computer. You can also call up a document on the computer screens and work together on the document as you talk.

This method of videoconferencing is the lowest end of the spectrum. You have to be fairly computer literate to use it effectively. Within three years it will likely be a standard piece of equipment on most computers.

- **Dedicated system on the public network.** This method involves renting a conference room at a Kinkos or some similar outlet. At each site you have a TV camera and video monitor that connects with people in another Kinkos. This method costs about \$150 per hour per site. The quality of the video is good because the line is dedicated. Often, stores will give you a free hour to promote the service. With dedicated systems, you can hook up with a large number of locations.

If you do a lot of videoconferencing, you can buy the equipment and install it in your company for cost of about \$12,000. Then you only pay for the connect time through a long distance carrier.

- **Satellite broadcast.** This method involves larger conferences where a major speaker gets beamed across the country. Some larger companies use satellite technology to do their own video conferencing. It's a great alternative to shipping people back and forth on planes.

INFORMATION ON DEMAND

The information era is giving way to the communication era. Information is so plentiful that customers need to be able to communicate and pull out the information they need. There are a variety of tools available to accomplish this:

- **Interactive voice response.** Automated switchboards are the simplest version of this tool. You can also receive information by punching in a code and getting a recorded message back. This is especially useful with customer service information. These programs can now be run completely by PCs.

- **Fax on demand.** Fax on demand is the ability to call a phone number, enter your fax number, and enter a piece of information you want to get off the other end. When you hang up, the other computer automatically faxes back the information you asked for. In the future, most PCs will have fax on demand built in as a standard part of their communication package.
- **E-mail repeater.** If you have a customer that wants information you send out on an ongoing basis, they can send an e-mail and the word "info" to your domain name. The e-mail repeater automatically sends them back the standard document. The only interaction required is to update your e-mail.
- **Contact management.** There are two kinds of contact management: personal information and contact management. Personal information managers tend to be driven by an activity more than a customer. They track projects as well as people. Contact managers work much better for people that are focusing strictly on selling. They enable you to track information about appointments, meetings, calls, messages, etc. and alert you when to take action. They can also boost productivity by making it easy to send out form letters and other written customer contacts that go out on a regular basis.

MULTIMEDIA

Multimedia integrates video, audio and graphics. It uses the concept of linking—the ability to click on one thing and go to one place, and click on something else and go to another place. Interactive kiosks are one of the most popular uses of multimedia.

Multimedia has many applications. You can put multimedia presentations on the web. You can do large-screen, laptop or monitor presentations. You can build your own screensaver to deliver a message about your product or company. You can attach a multimedia presentation to e-mail. Multimedia can be put on web pages and hyperlinked so that the document can move from one point of information to another.

Most multimedia products come with a "run-time player," so the person you send the presentation to can run anything you have created for them.

ELECTRONIC PUBLISHING

CD-rom publishing, the ability to put huge amounts of printed material on a single CD-rom that plugs into a computer, is phenomenal. It only costs about \$2 to produce each CD and it contains huge amounts of audio and video information. More and more companies are starting to use these for sales, marketing and customer service activities.

Other companies will master and produce the CDs for you, or you can buy a "read-write CD-rom" and create them yourself. The cost is about \$1,200 for the machine.

Copier technology has advanced to the point where you can hook your PC up to a color copier and get very high quality documents.

WINDOWS'95

Like it or not, Windows '95 is here to stay. In some respects, it is slower than previous versions of Windows and it has a number of unexplained bugs that pop up from time to time. Not all vendors have drivers that work with Windows '95. Plus, it can be hard to get through to their 800 phone support line. On the plus side, Windows '95 has great multi-task capabilities.

If you decide to install Windows '95, back up all your data and save the old data so you can recover it if you don't like the new operating system. Don't load Windows '95 on any machine that is less than a 486 and has less than 16 megabytes of RAM. Have plenty of hard drive space available; the entire Windows '95 application takes up 72 megs of disk space.

In many respects, Windows '95 is not ready for commercial applications. If you want to use it now, try it at home and get used to it there first. It is a great improvement over Windows 3.1 and ultimately will offer a lot of the benefits Microsoft says it does. But unless you have a compelling reason for doing so, don't install it in your company.

In the very near future, be prepared to move your business to a 32-bit operating system. Whether it is Windows NT or Windows '95, everything you buy from now on should have plug-and-play hardware as well as 32-bit software. Don't buy any software less than that because it will quickly become obsolete.

The single biggest technology challenge in the next decade will be finding and keeping the people required to operate all the new technology being introduced. It's hard to find people who can keep up with the rate of change. It's okay to be one generation behind, but once you get further behind, you start to be at a disadvantage. New software and operating systems not only will do more stuff, they will increase productivity.

As more companies look to technology for competitive advantages, employees skilled in technology will be in greater demand. Many companies aren't doing much training in technology; they're letting people get it on their own. Investing in training will help keep your company ahead of the game.

Many companies have spent money buying specialized software products that serve only their company or industry. Often, these softwares are not written in standard interface language. If you are considering buying a proprietary software product, get one that uses standard Windows commands. If not, you have to retrain every new employee that comes into the company.

PROCESS FOR SUCCESS

To use technology successfully:

1. Start out with a thorough needs assessment. Make sure you understand what you are looking for.
2. Get agreement from the people who are going to use the new technology that they feel it's a tool that will help them do their jobs more effectively.
3. Get participation and agreement from end users in both the evaluation and the selection process.
4. Recognize that there is a constant evaluation and learning process that goes on in any software or technology product, and you're going to be wrong some of the time.
5. It's never too early to test the waters with new technology.
6. Most companies have a core of people that are very computer literate. Use them as change agents in your organization and support their initiatives. Give these people the flexibility to put some non-standard things on their computers that might help them on their jobs.
7. Build a technologically comfortable company. Start testing new technology early. Using tomorrow's technology today always puts you a leg up on the competition. If the technology fades, what you learn from the experience will translate to other areas.
8. Develop a strategic technology plan, a document that outlines the technologies you want to use in the future. Plan where you want to take technology next in your company.

9. Supply your people with the best technology tools. The equipment you buy today is already obsolete. Don't buy older, less expensive and less efficient equipment in an attempt to save money.
10. Provide ongoing technology training, not just on software but on computer literacy as a whole so your people can interface with whatever tools you bring in.
11. Form strategic technology alliances. You may not be a technologically strong company, but you may deal with some that are. Many times you can join another organization on a project or some other type of alliance so that you can benefit from their technological strength.

LOOKING AHEAD

Some amazing technologies are just a few years away:

- **Voice-operated computers.** In about two to three years, you will be able to put a headset on, dictate a letter to the computer, and verbally send it to the printer. Most new PCs are already being built with microphones and the hardware to handle voice commands. The software is still about two years away from being ready.
- **Inexpensive optical storage.** Having rewrite CD-rom built right into the PC is only about two years away.
- **Integrated online access.** This will be the technology that makes the whole concept of the internet and global communication truly come together. Every home will have an "information appliance" that controls the TV, computer, phone, fax, etc. It will be a single appliance rather than having stand-alone components.
- **Virtual organization.** There are many tools that currently allow people to come together in a virtual organization to work on a specific project. Once the project is done, the team dissolves. There are thousands of these alliances being formed on the internet and worldwide web that can help you with specific strategic situations in your business.
- **Training on demand.** Using video clips on the PC to custom train people will soon be a way of life. The computer uses a camera to monitor the users learning. The trainer then uses the computer to communicate how the user needs to modify their behavior.

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