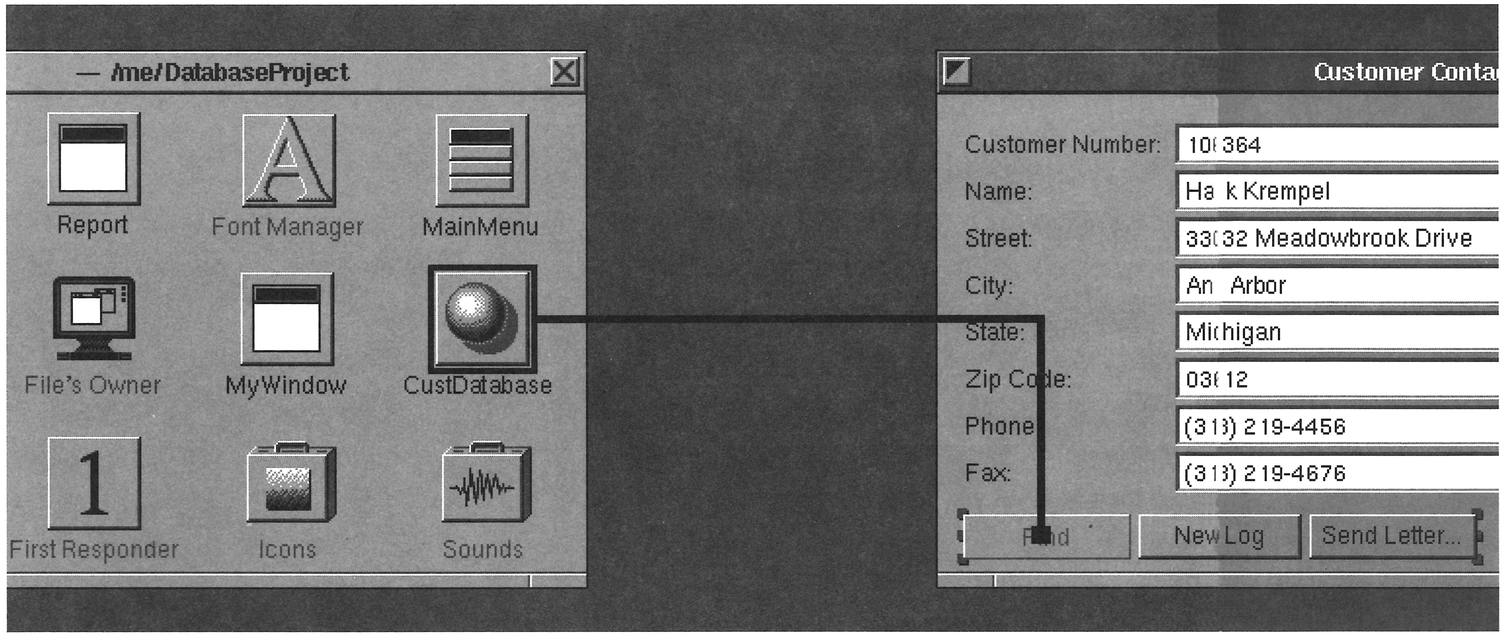
NOW THAT EVERYONE HAS COMPUTERS, WHAT WILL IT TAKE TO GAIN A COMPETITIVE ADVANTAGE?



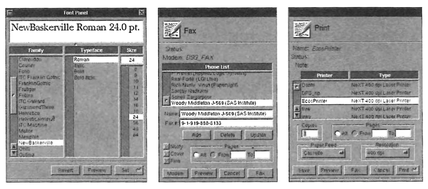
How could something so simple be so revolutionary? Ask the programmer who just cut his development time in half, and his maintenance time even more. Using the NeXTstep environment, this is how tough it is to establish a working relationship between two objects: Just use the mouse to make a simple graphic connection. Point, click, boom.

THE REVOLUTION.

At one time, merely buying a computer could help you pass the competition. But those days are long gone.

Now you've got computers. Your competitors have computers. Even your competitors' children have computers.

Gaining an advantage in this world calls for nothing less than another revolution. Only this time, it's not just a machine or a new kind of chip, but a new concept that goes to the core of how we use computers.



When you create powerful NeXTstep applications, you always have a head start. Objects for sophisticated functions come ready to use without writing new code.

It's called object-oriented computing.

"Objects" are software building blocks for a generation of applications that are simpler and more sophisticated than anything that's come before.

If your organization is downsizing from mainframes or minis to a network of desktops and servers (a "client-server" arrangement), this means almost unimaginable power. Because you can rapidly create and customize mission-critical applications that help people turn raw data into usable information.

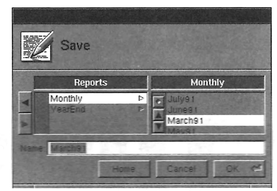
NeXT's object-oriented environment is NeXTstep™: A graphical world built upon standard UNIX®, where objects for vital functions (such as printing or faxing) are ready to be "plugged in" to new applications.

NeXTstep offers today what others promise in three to five years. It comes standard in NeXT™ workstations, and will be available soon for Intel® 486 machines.

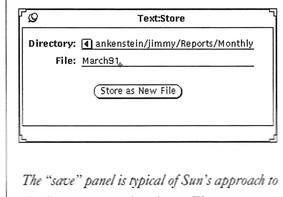
NeXT object-oriented computing allows you to create mission-critical applications faster, and with much more stunning results, than traditional platforms like Sun®.

NeXT

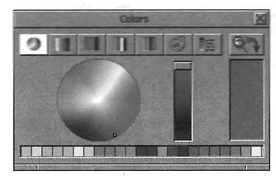
Sun



NeXTstep provides elegant objects, ready to use right out of the box. So custom applications will work consistently and intuitively.

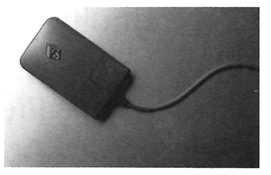


The "save" panel is typical of Sun's approach to developer resources: bare bones. There are no objects here and only poorly developed tools, so refined applications require much more work.

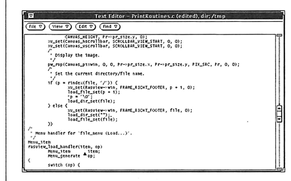


NeXTstep's object library contains the objects common to most programs. That means fewer lines of code to write, maintain and debug.

If you want to include features like a color picker in your Sun application, good luck. Without objects, you'll have to start from scratch.



NeXT objects let you include program features (such as printing to any printer on the network) with a simple point and click.



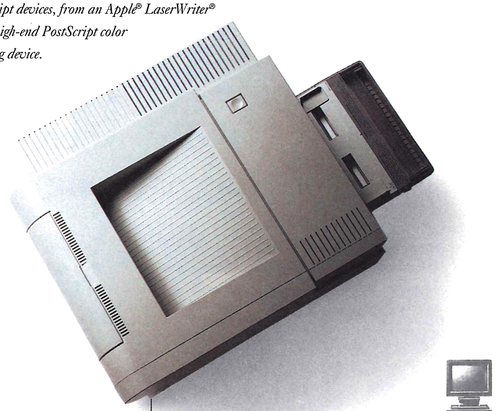
In Sun's world, just the simple act of getting the application to print can send a developer off into pages of complex programming.

The best part is, this revolution isn't theoretical. It's happening today, and the companies that have adopted NeXT technology have seen almost instant results.

They've implemented easy-to-use custom applications that offer stunning graphics. Simplicity and consistency, to help lower training costs. And the ability to integrate seamlessly with multimedia electronic mail and the best-of-breed applications from companies like WordPerfect®, Lotus®, and Adobe®.

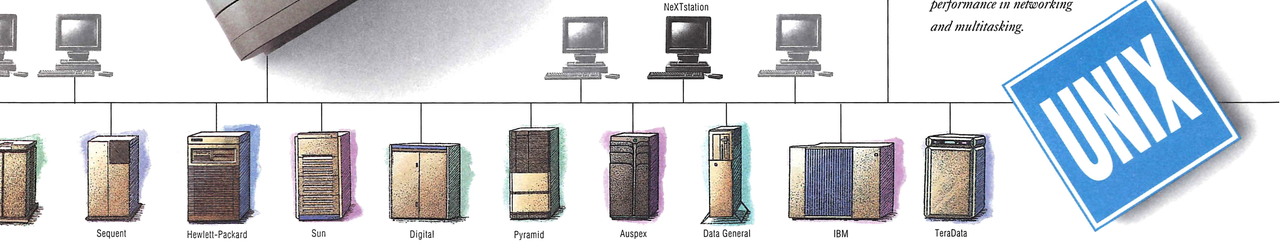
Those who have invested in object-oriented computing are already boosting productivity and profits. The only question is, do you wait around for your competition to give you a demonstration– or take a closer look at what NeXT can deliver today.

Being pure PostScript® machines, NeXT computers let you output to a wide range of PostScript devices, from an Apple® LaserWriter® to any high-end PostScript color printing device.



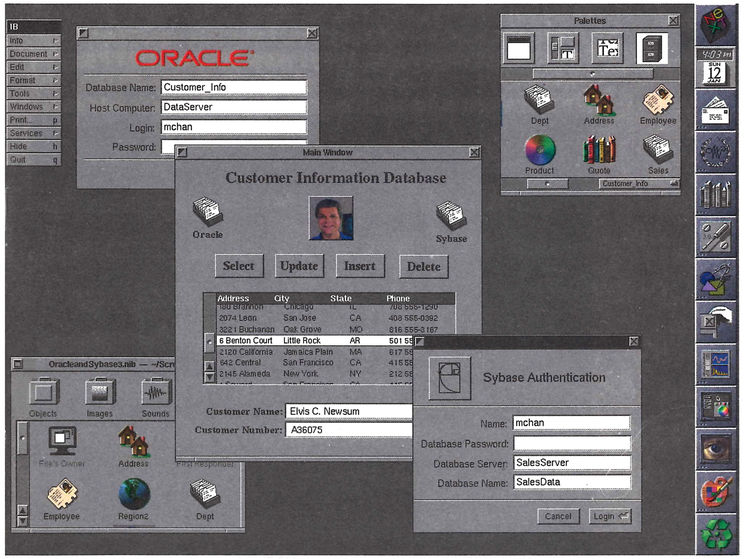
Plug a stock NeXT machine into a network of PCs or Macintoshes, and it automatically becomes a client. Ethernet is built in, along with full support for Novell and AppleTalk networks, no cards or special software required.

NeXT technology is based upon standard UNIX®, acknowledged universally for the highest performance in networking and multitasking.

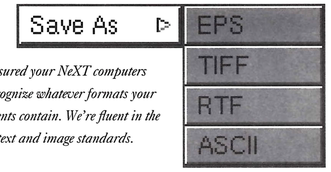


In a world where downsizing is the operative command, NeXT computers are designed to bring new power to a client-server relationship. We connect to all the major database servers.

The new NeXT Database Kit lets you design your database application independent of any particular format–then simply attach it to a specific database adapter. This makes it easy to migrate your application to a new database. It also allows you to integrate data from multiple sources with one application. Adapters for Oracle and SYBASE are included with the NeXTstep environment.

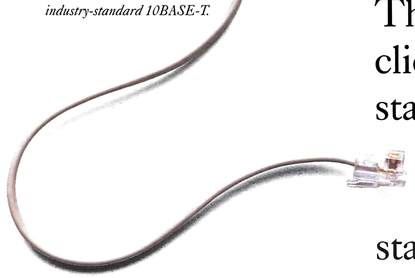


Rest assured your NeXT computers will recognize whatever formats your documents contain. We're fluent in the major text and image standards.



NeXT computers thrive on a diet of 3.5-inch disks from IBM and Macintosh (1.44 megabytes) computers. We read and write in either format, so data files can be shared across platforms.

Every NeXT machine plugs directly into a high-performance Ethernet network, using the industry-standard 10BASE-T.



THE STANDARDS.

The goal is downsizing. The way to get there is client-server computing. And it's all based on standards to which you are seriously committed.

So how can you even think about revolution?

Easy–with a revolution born of the very same standards. Being just that, NeXT object-oriented technology makes the idea of downsizing all the more realistic and attainable.

NeXT workstations can effortlessly connect to networks of Suns, PCs and Macintosh® computers via NFS®, Novell® and AppleTalk®. They run PC and X-Windows™ software, emulate 3270 terminals and connect to all the major database servers.

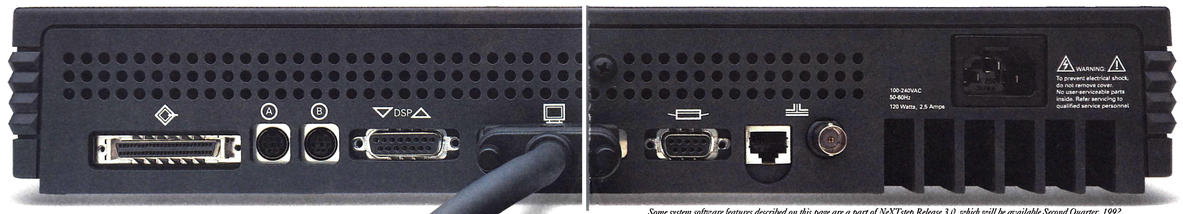
Far more critical, the NeXT Database Kit lets you create (in record time, we might add) custom applications that give you access to your Oracle® and SYBASE® databases. These are the mission-critical applications that form the backbone of competitive advantage.

And to reap such benefits, you need not even confine yourself to NeXT computers. NeXTstep is an open environment, soon to be available on Intel 486-based machines.

All of which makes it easy to keep your standards–and raise them at the same time.

NeXT machines incorporate all the standards that make networks work. They connect via Ethernet running TCP/IP, and run NFS to ensure file compatibility.

A SCSI port and two RS423 ports allow you to connect to a world of optional devices, ranging from hard disks and CD-ROM drives to scanners and fax modems.



Every NeXT computer comes with the networking hardware built in–no expansion cards necessary. With connections for both thin-Ethernet and 10BASE-T, you're ready no matter what type of network you're running.

Some system software features described on this page are a part of NeXTstep Release 3.0, which will be available Second Quarter, 1992.

Unlike most computers, NeXT workstations have one unified imaging system from screen to printer. Based, of course, on the one imaging language widely accepted as the industry standard: PostScript®.

THE IRON.

In designing the family of NeXT machines, we had to make a few basic assumptions:

Like the rest of us, you'd be under pressure to get your money working harder. You would need power, with the best connectivity.

	NeXTstation Turbo	SPARCstation IPX
MIPS	25	28.5
RAM	16MB	16MB
Storage	2.88MB Floppy Drive 250MB Hard Disk	1.44MB Floppy Drive 207MB Hard Disk
Ethernet	Thin and10 Base-T Standard	Thick Ethernet Standard, Thin & 10Base-T optional w/Adaptors
Video	17"-Monochrome	17"-Monochrome
DSP	56001 Standard	None
$ SRP	$6,995	$11,995
$ per MIPS	$280	$421

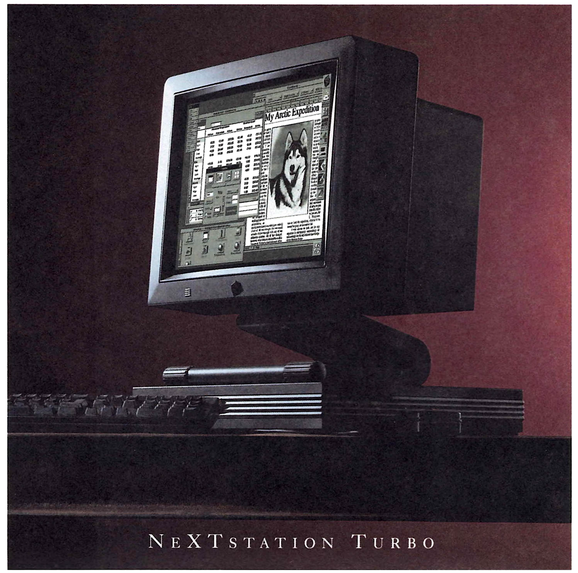
No other computer maker–Sun, IBM or Apple–offers the price and performance of NeXT. And as you can see, both NeXTstations offer dramatically lower cost per MIPS than comparable Sun machines.

	NeXTstation Color Turbo	SPARCstation 2
MIPS	25	28.5
RAM	32MB	32MB
Storage	2.88MB Floppy Drive 424MB Hard Disk	1.44MB Floppy Drive 424MB Hard Disk
Ethernet	Thin and10 Base-T Standard	Thick Ethernet Standard, Thin & 10Base-T optional w/Adaptors
Video	21"-Color	19"-Color
DSP	56001 Standard	None
$ SRP	$13,495	$20,495
$ per MIPS	$540	$719

You'd insist on extreme ease of use. And, having worked with a computer or two in your career, you'd appreciate one that had a distinctive design. That thinking has helped us develop a complete family of sleek professional workstations that simply can't be matched in price/performance. Not by Apple®, not by IBM and not by Sun®.

No matter what NeXT system you select, it comes complete with generous memory, a high-capacity hard disk, 2.88-megabyte floppy drive, built-in networking, a large-screen high-resolution display, the keyboard and mouse.

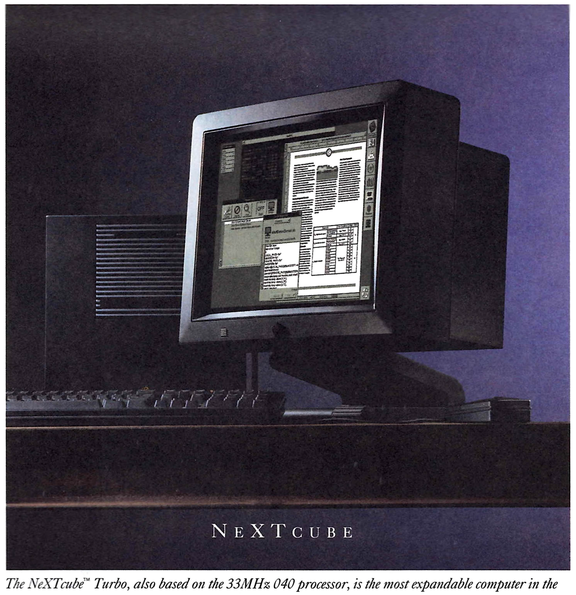
Last year, Byte Magazine called the 25MHz 040-based NeXTstation™ "the industry price/performance leader." So naturally, we immediately began improving it. In addition to the original NeXTstation, we now offer the NeXTstation Turbo. It has a 33MHz 040 processor, eight megabytes of RAM, expandable to 128 megabytes, and a 250-megabyte hard disk (with options up to one gigabyte). Ethernet is built in, so it can easily be configured in networks of PCs, Sun and Macintosh computers, as well as IBM and DEC® mainframes. Standard equipment includes the 17-inch ultra-high-resolution NeXT MegaPixel Display™ (with integrated microphone), 2.88-megabyte floppy disk drive, keyboard and mouse.



NeXTstation Turbo

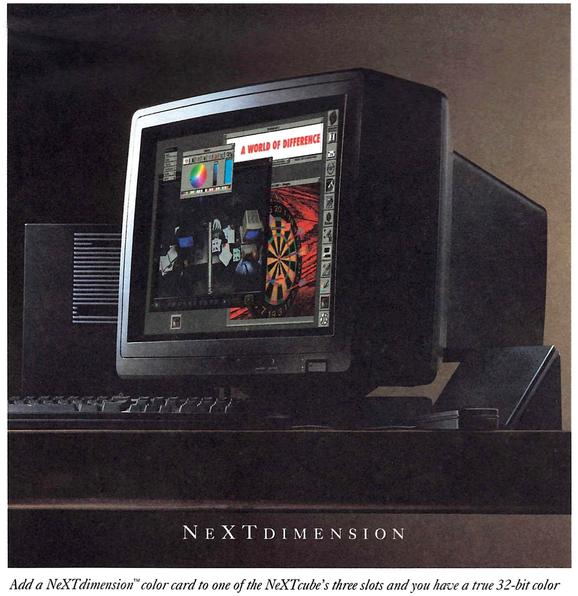
The NeXTstation Turbo Color is a high-performance 16-bit color workstation perfect on an individual desktop or configured in a workgroup. Like the NeXTstation Turbo, the Turbo Color is based on the 33MHz 040 processor. Its advanced color capabilities (up to 4096 colors on screen simultaneously) make it an ideal choice for publishing, graphic design, presentations and analysis. Thanks to the combination of on-screen Color Display PostScript® and our unique dithering of 32-bit color, the NeXTstation Turbo Color produces images that rival much more expensive 24-bit color systems. Standard are the 17-inch Color Display, 16 megabytes of memory, a 2.88-megabyte floppy drive and a 250-megabyte hard disk.

NeXTstation Turbo Color



NeXTcube

The NeXTcube™ Turbo, also based on the 33MHz 040 processor, is the most expandable computer in the NeXT line, and so makes an ideal workgroup server. It comes standard with 16 megabytes of memory, which can be stretched all the way up to 128 megabytes. And for hard disk storage, it offers the option of 400 megabytes, 1.4 gigabytes or 2.8 gigabytes–enough to store the proverbial warehouse-full of data. With this machine acting as a server, you can economically assemble a powerful workgroup using only basic NeXTstations on individual desktops. The NeXTcube Turbo also offers three NeXTbus™ expansion slots, so you can add worlds of new power as your needs grow in the future.



NeXTdimension

Add a NeXTdimension™ color card to one of the NeXTcube's three slots and you have a true 32-bit color computer. This system produces rich photographic-quality images with over 16 million colors on the screen simultaneously. Tapping the power of Intel's 33MHz RISC-based i860™ graphics coprocessor, the NeXTdimension lets you process complex images with lightning speed. Without an additional board, it connects to a VCR, laserdisc player, camcorder and other video sources, making it an ideal choice for high-end publishing, graphics, video and animation applications. Of course, the NeXTdimension system also incorporates all the networking power of a NeXTcube, so it fits effortlessly into a group environment.

Even the most affordable of our workstations demonstrates an unusual depth of thinking. The microphone is integrated into its design. The fan is whisper-quiet. It's constructed of magnesium for strength and heat dispersion. It produces CD-quality sound. And these are anything but empty shells. The hard disk is pre-loaded with an online dictionary and thesaurus, intuitive NeXTmail™, a hypertext help system, support for Novell and AppleTalk networks and the revolutionary NeXTstep development environment.*

While the industry has settled comfortably into 300 dpi laser printing, the affordable NeXT Laser Printer achieves 400 dpi resolution. Which, in terms of coverage per square inch, means over 75% greater quality.

Is nothing sacred anymore? Now NeXT offers full-color, true-black 360 dpi PostScript Level 2 printing on plain paper as big as 11" x 17"–all in a machine that has a list price of less than $3500 (literally a third of the price of competitive PostScript color machines).

It's all part of this competitive advantage idea.

In a world where everyone has computers, it's still possible to have something even better.

**NeXTstep Release 3.0 Extended (containing complete developer tools) is provided on all factory-installed hard disks with a capacity of 400MB or greater.*

THE LEVERAGE.

The reason you're downsizing is because you can.

Suddenly, new technology has made the idea of a client-server structure much more attractive than the old system of mainframes and minis.

But just as you demand more from your computers, we would pose the question:

Shouldn't you demand more from your software?

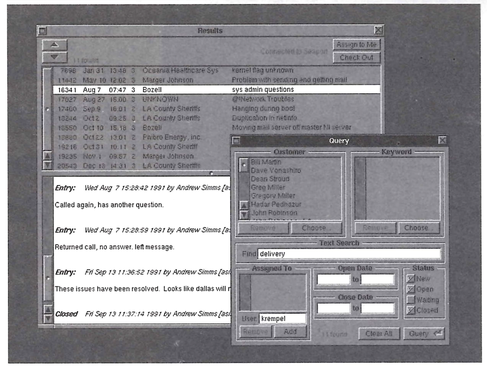
That's precisely the essence of NeXTstep–creating the maximum impact with minimum effort and investment.

Such leverage is possible because NeXTstep is a total operating environment, not just an ordinary operating system. In this rich and graphical world, the power and scope of customized applications is automatically extended.

It falls under the category of "seamless integration."

In our world, your mission-critical applications will automatically integrate with software from the most popular names in mainstream business software, such as Lotus,® Adobe,® WordPerfect,® Frame® and SAS.®

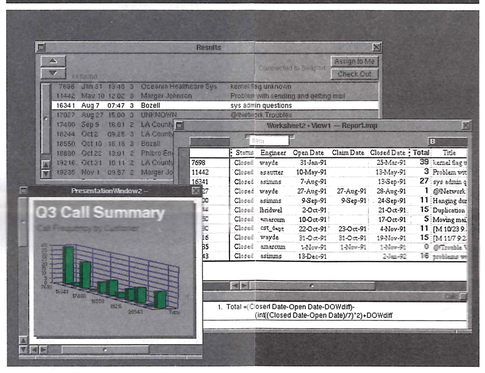
Develop and Deploy Stunning Custom Applications



Here's an example of how NeXTstep can put tangibly greater power directly into your hands. It starts with a mission-critical custom application–in this case, an easy-to-use application that extracts vital information from the database server.

How's this for downsizing: A single NeXT machine can run custom software, PC and X applications and emulate a 3270 terminal, all at the same time, allowing full cut-and-paste among them. So you can eliminate the clutter of computers you have on certain desktops.

Tap the Strength of Off-the-Shelf Software

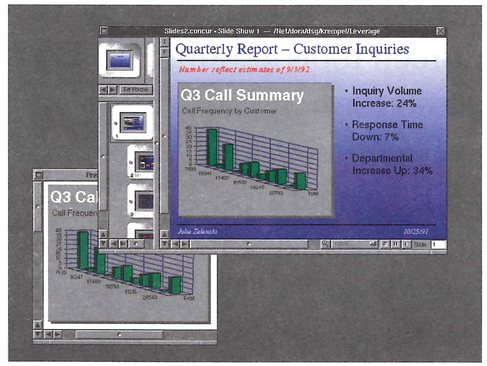


Now that we have secured the needed information, we take advantage of NeXTstep's seamless integration. Our custom application has been configured to leverage off the analytic power of Lotus Improv – which can quickly turn our data into a colorful three dimensional graph that communicates much more powerfully.

That is, your customized application will not only integrate with commercial NeXT applications, it will work exactly the same graphical way.

You can freely cut-and-paste data between different programs or drag-and-drop a complete file, containing text or graphics, from one place to another. (Drag a file from your directory, for example, and drop it right into a mail message.) And you can easily

Share Data Effortlessly Between Applications

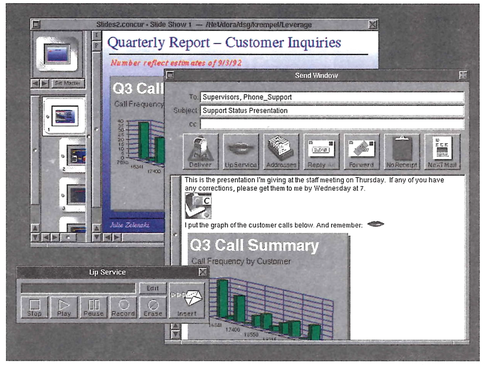


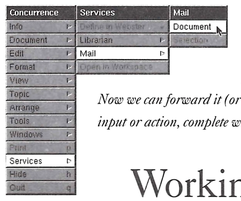
Our Improv graph, of course, makes a perfect presentation piece–so we copy and paste it into a sophisticated presentation package: Concurrence, from Lighthouse Design. Now we can make an even more persuasive argument by rearranging the elements, adding bullet type and enhancing the background.

access the services offered by other NeXTstep software. For example, you could summon the on-line electronic dictionary, Digital Webster™, for a definition. Or move an image to NeXTmail™ so it can be sent on to others for comments or approval.

A custom application can even be written to automatically pass data on to another program, like Lotus Improv™, for graphing or a more detailed analysis.

Exploit the Power of Multimedia Electronic Mail





Last, by selecting the graph and requesting NeXTmail services, we are automatically taken to a NeXTmail message, where the graph is already in place and ready to send. Now we can forward it (or an entire document) on to an associate for input or action, complete with voice annotation if desired.

Working together, NeXT applications offer much greater power than any one could alone. That's what leverage is all about.

And it's something you can really build a business on.

The power of the rich, graphical NeXTstep environment will soon extend beyond NeXT computers to Intel 486-based machines. So you can spread the benefits of truly integrated applications to many more people in your organization.

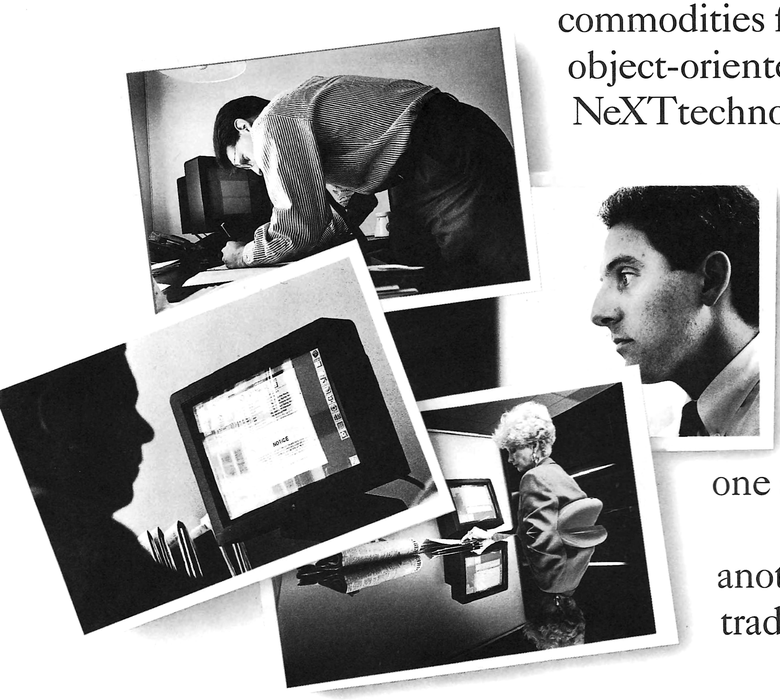
THE PROOF.

Enough of the hypothetical. We now direct your attention to the real world, where NeXT workstations are hard at work delivering the benefits of object-oriented computing to businesses and government agencies on a daily basis.

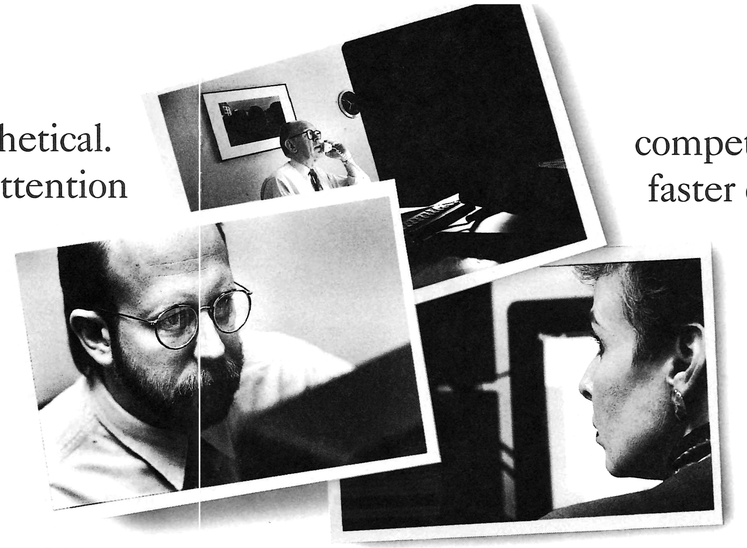
On Wall Street, where high-tech tools abound, NeXT machines already have a reputation for helping firms develop new lines of business faster and become profitable sooner.

The equities trading firm, UBS Securities, Inc., for one, chose NeXT so that their mission-critical applications could be developed just as quickly as the market changes. ("Responding in days or weeks–not months–is the difference between profit and loss," says Hadar Pedhazur, Vice-President of Equities Technology.)

At Phibro Energy, Inc., the billion-dollar commodities firm, object-oriented NeXTtechnology completely changed the way they do business. Cutting development time most notably, but also allowing traders to unclutter their multiple-machine desktops with one sleek black box.



O'Connor & Associates, another of the nation's leading trading firms, discovered their competitive advantage was a combination of faster development and good old-fashioned productivity–as in word processing and spreadsheets. The UNIX-based NeXT machines easily mixed with existing networks of PCs and Suns.



"Our evaluation revealed that NeXTstep was the only commercially available interface software that met our seamless interface requirement. In our view, there was no close second to the NeXT to do the things, right out of the box, that we needed the system to do, especially at the executive level."

CLAUDE FARRIS, CAPTAIN, DATA SYSTEMS BUREAU
LOS ANGELES COUNTY SHERIFF'S DEPARTMENT

"We saw no alternative available in UNIX or any PC that could marry personal productivity and global networking with our mainstream corporate development."

CRAIG HEIMARK, DIRECTOR OF TECHNOLOGY
SWISS BANK CORP. & O'CONNOR PARTNERS

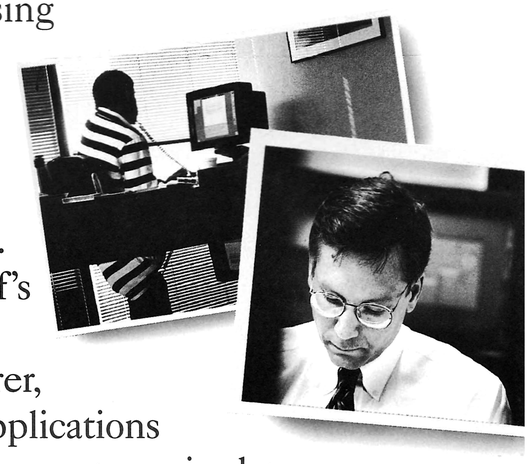
"We need to deliver the highest quality financial applications in the shortest possible time. We are convinced that NeXTstep is the best available tool to help us achieve our goals."

THOMAS J. CAMPBELL,
SENIOR VICE-PRESIDENT
FIRST NATIONAL BANK OF CHICAGO

"Macintosh-like ease-of-use and the raw power of a UNIX-based operating system combined in a sleek black box that retails at $4995, makes NeXT the best-kept secret on Wall Street."

ANDREW J. HALL, PRESIDENT
PHIBRO ENERGY, INC.

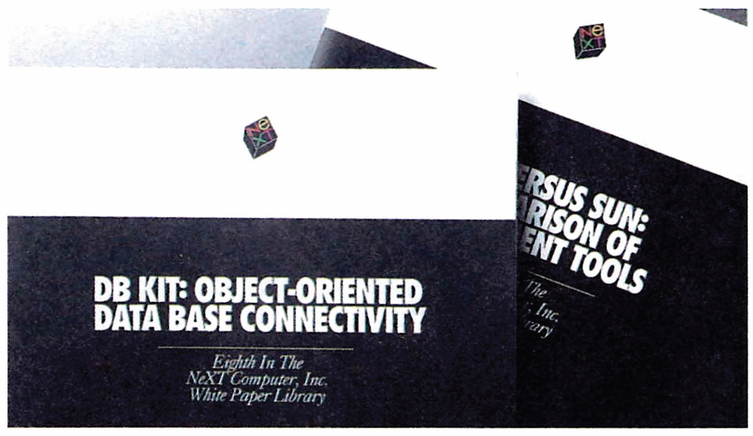
The William Morris Agency, the worldwide talent agency, selected NeXT computers out of an extreme need for fast, secure information management in a very competitive industry. Their people, some of whom never even touched a computer before, are suddenly wielding the power of UNIX without even knowing it–accessing complex data as if it were second nature–all thanks to NeXTstep's intuitive interface.



And the sprawling LA County Sheriff's Department, after looking at computers from Sun and virtually every manufacturer, chose NeXT for its ability to integrate applications and share information. Now their management manipulates an Oracle database and communicates between offices with much greater ease–taking advantage of NeXT's sound capabilities to add voice annotation to shared documents.

Clearly, NeXT is winning converts in wildly different worlds. Which proves that professional people everywhere do have one thing in common: the desire to do the competition one better.

THE INDEPENDENT STUDY. *An outside opinion from a qualified panel. Read "NeXTstep vs. Other Development Environments: A Comparative Study", from Booz•Allen & Hamilton, and see what conclusions the experts reached.*



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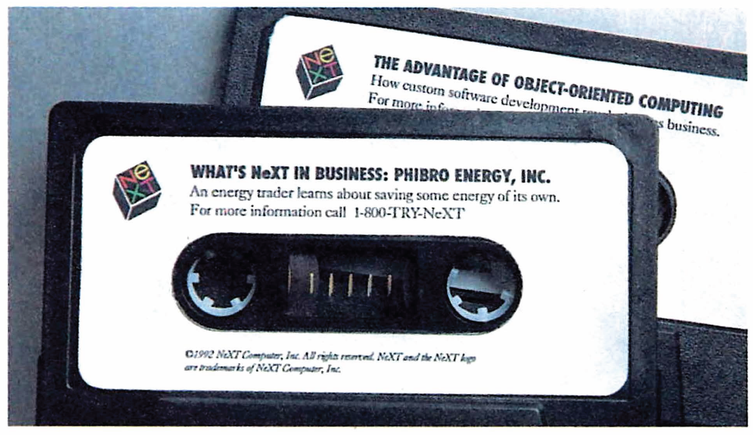
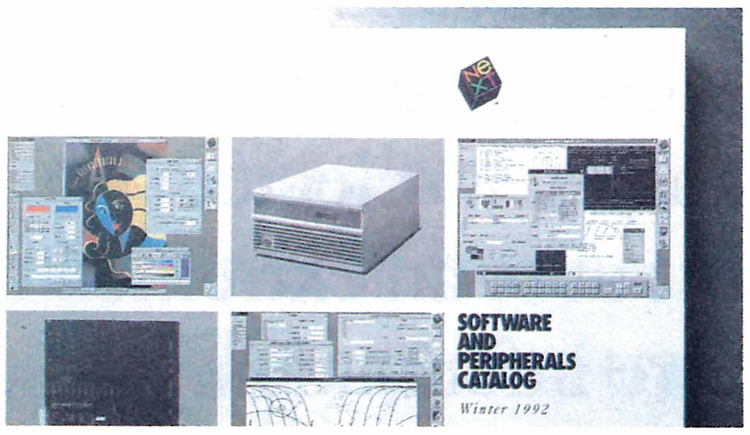


THE AUDIO CASSETTES. *On one tape, a billion-dollar trading firm tells how NeXT technology revolutionized the way they do business. On the other, business and computer industry experts discuss the impact of object-oriented computing.*



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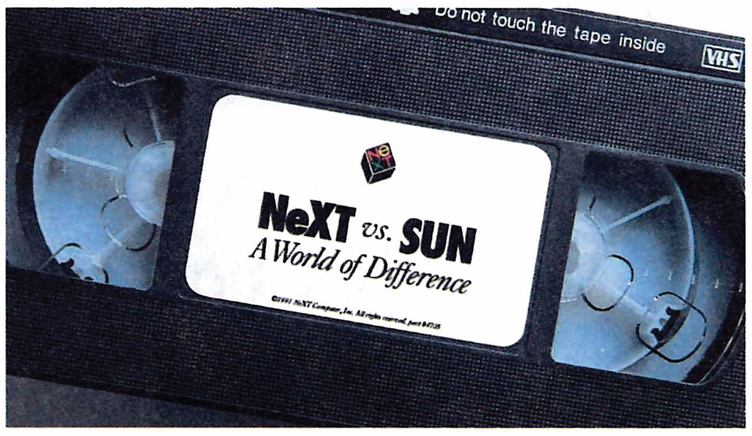

THE VIDEO. *Witness a shootout between NeXT and Sun programmers, as they develop the same custom application side by side, each using the most potent tools in their arsenal. May the best environment win. (Only $7.95)*

THE DATA SHEETS. *We've prepared individual spec sheets on every NeXT product (hardware, peripherals and software). So if you'd like to get more specific details on anything you've read about in this brochure, just call. We'll fax you what you need.*

THE DEMO.

If you're intrigued by the revolution of object-oriented computing, we invite you to do what any self-respecting revolutionary would do: come join us in a public demonstration.

At an open NeXT seminar in your area, you'll get a first-hand view of our technology and find out how your company can use NeXTstep to gain a tremendous edge using NeXT machines and 486-based platforms.

Just call 1-800-TRY-NeXT for the dates and locations.

We can also offer a wealth of other information, from the materials described on this page to details on special developer training courses offered by NeXT at locations all over the country.

So if you're at all interested in building a competitive advantage, give us a call. Preferably, before your competitors do. **THE OBJECT IS THE ADVANTAGE.™**

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