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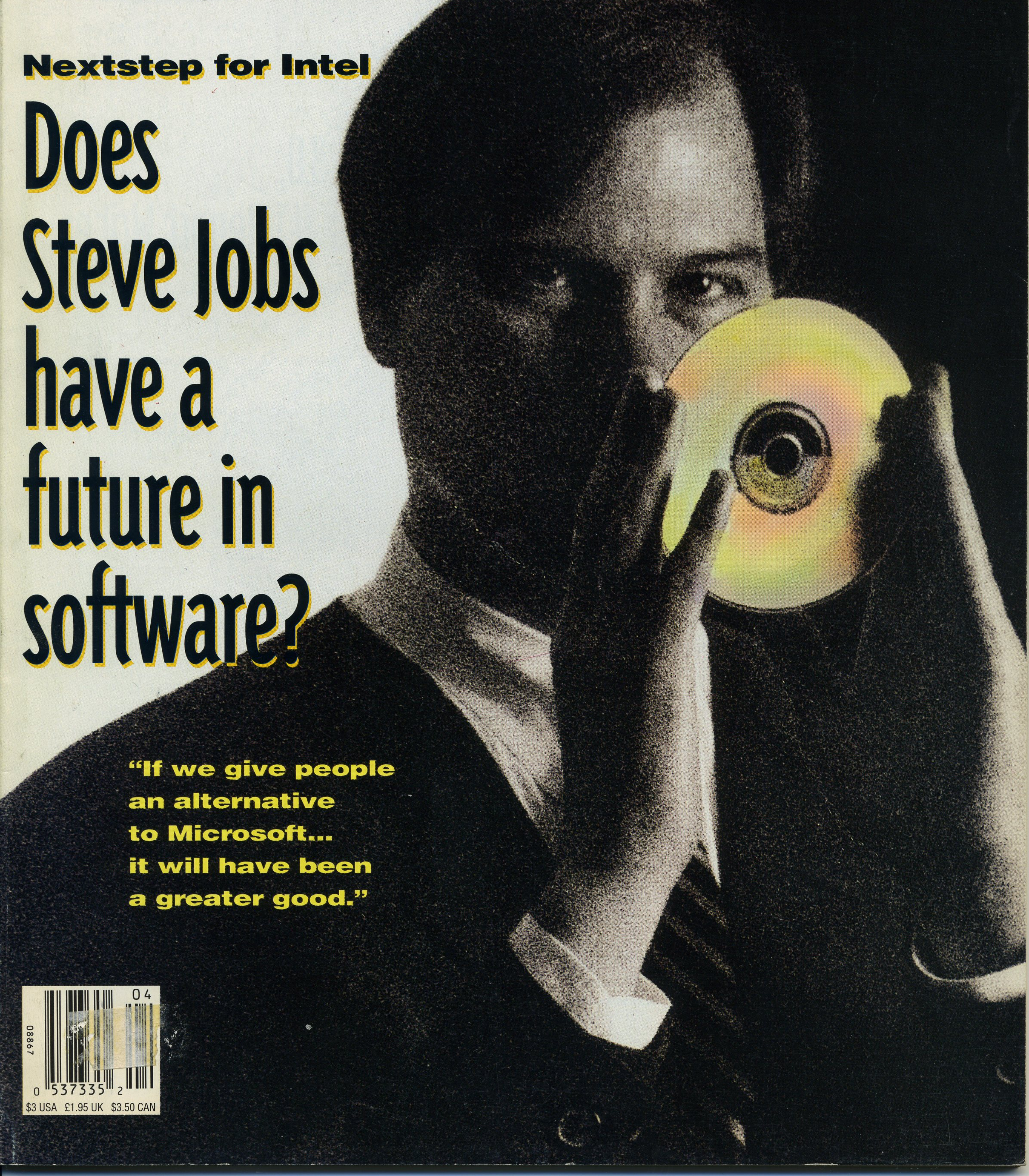


Nextstep for Intel

Does Steve Jobs have a future in software?

"If we give people an alternative to Microsoft... it will have been a greater good."

Steve's Gone

FINALLY. THE MOST STUBBORN MAN IN THE COMPUTER INDUSTRY HAS LISTENED.

For the last six years, Steven P. Jobs has been nagged and ridiculed by the industry he helped build. He's been called a one-hit wonder, a fluke, and–perhaps most damaging to his rather large ego–a failure. But Jobs refused to listen.

Once upon a time, Jobs rented out symphony halls to show off his company's distinctive black boxes: the infamous Cube, and the Nextstation. The audiences–padded with Next Computer Inc. employees–would cheer Mr. Charisma's demonstrations. They would delight in his aw-shucks *faux* boyishness when he'd show off his machines and say, "Now here's something that's *really* cool." At the end, Jobs would soak in the applause and bow his head in appreciation.

Now he has bowed his head again, but for another reason. Steve's black boxes–summarily rejected in the marketplace–are dead. And the famous Jobs-designed hardware manufacturing plant in Fremont, Calif. ("We intend to build our hardware here," he once said. "Forever.") is for lease. Many of Next's hardware engineers are looking for work.

Finally, Jobs has swallowed his pride and did what everyone has been telling him to do for so long: Make Next a software-only company.

"We have the best software of this decade, but it has a ball and chain around it: hardware," said Jobs in an interview a few weeks before he announced the new strategy to his employees. "We have great software in a box, but nobody wants the box."

Changing Directions

We sit in a meeting room at Next's avant-garde-inspired headquarters in Redwood City, Calif. There was a time when Jobs, now 37, was considered perhaps the most brilliant, precocious, and promising young man in the computing world. Today he wears a severe black turtleneck, looks out the window, and speaks apprehensively, as if he doesn't want to accept what he is about to say. "I don't think I'd be human if I didn't have regret," says Jobs, referring to the death of his beloved hardware line. "We've pulled the plug."

But has he pulled it soon enough? The high cost of manufacturing hardware caused Next to lose, by some estimates, $3 million a month for the past two years. It was a company divided into two warring camps–hardware vs. software. Jobs was openly partial to the hardware, to the point of being obsessed with the notion of building a hardware company to rival Apple Computer Inc., say insiders. Now, the hemorrhaging of capital that resulted from Jobs' hardware obsession may hurt the company's chances of building a future on its Nextstep object-oriented, UNIX-based, operating system. Nextstep will be released this May in a version that will operate on Intel 486 chip hardware.

"Next's technology is really nice," says Dick Shaffer, president of research firm Technologic Partners, "but the best technology doesn't always win: the Mac interface is better than Windows. So what? Microsoft can ship volume. Do people want to give up Windows applications for Nextstep? I don't think so."

Shaffer says he's not optimistic about Next's future, but adds that a move to emphasize software is an improved strategy. "It's *extremely* difficult to be a hardware company," he says, "but, in these times, it's *very* difficult to be a software company."

There is a need, however, for Next's object-oriented software. Not the technology *per se*, but the ability to write custom applications easily. Nextstep lets users build applications much faster than it would take to write thousands of lines of code. Next has about 200 shipping software applications from 130 independent software vendors (ISVs), and DOS and Windows 3.1 applications using Insignia Solutions Inc.'s SoftPC can run in an emulation window. But Nextstep isn't aimed at your average five-and-dime store, it's being marketed to the Business Week 1000 users who have a five-year backlog of custom applications to write. Nextstep

BY GARY ANDREW POOLE AND FRANK HAYES

PHOTOGRAPHS BY FRANKLIN AVERY

Soft

promises to let users streamline the software writing process to shorten the backlog.

This means Next will need to capture market momentum (something that it's never been able to do), get agreements with PC vendors (another thing it's failed at), and create a software organization by this summer (another difficult task). If it can transform itself into a full-fledged software company with good marketing, service, and support, analysts say it could succeed.

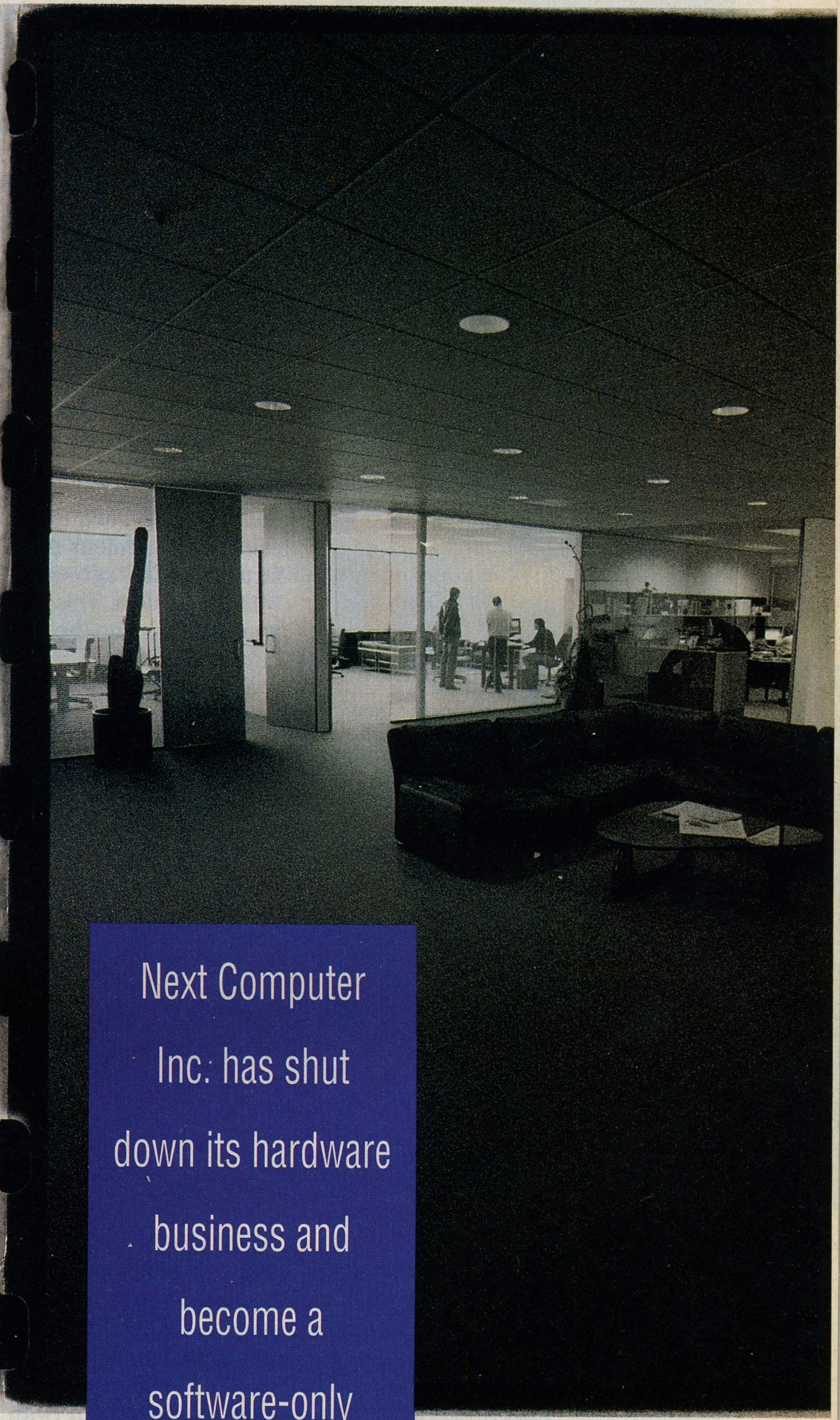
Window of Opportunity

Since founding Next in 1985, Jobs has tried desperately to repeat his Apple success. But the market simply hasn't responded. Next collected only 1.5 percent of the $9 billion spent on workstations in 1992, according to research firm Dataquest. So it has only been in Jobs' mind, which critics have referred to as the "reality distortion field," that hardware has been significant to the company's future. Within Next, he considered Nextstep–the company's greatest asset–a second-class priority.

If it succeeds, a software focus at Next could pay some handsome financial dividends. As the company ships Nextstep on Intel this spring, it will make Next more available on mainstream equipment. Before the software-only focus, users were forced to buy proprietary Next hardware, which would have required a high capital expense of about $7,000 for each machine. Starting May 25, customers will be able to buy Nextstep for $995 and put it on their Intel 486 PCs (developers will have an Intel package too), without being tied to the Next platform. Although $995 seems like a steep price for PC operating-system software, it will undoubtedly be discounted for larger orders.

But can Next become a software company for all people? Jobs says he wants to make his company the Novell Inc. of the 1990s, an organization whose object-oriented software will proliferate in much the same way that Novell's Netware PC local-area network (LAN) software has proliferated, establishing a market before Microsoft has a chance to introduce products.

Next has a window of opportunity, according to analysts. Neither Microsoft's "Cairo" object-oriented operating system, which is considered Next's biggest competitor, nor the product of the



Next Computer Inc. has shut down its hardware business and become a software-only company. Did Steve Jobs wait too long?

The Money Pit

"My friends say that Next can't die with my ego and Steve's ego in it. At least it will never fail for lack of money." That's what Ross Perot said in 1987, when he invested $20 million in Next. They were the last dollars he sunk into the company.

'85 — Jobs starts Next with $7 million.

'86 — The initial capital runs out, so Perot, impressed with Jobs' intentions to manufacture computers in the United States, kicks in $20 million. Jobs puts in another $5 million

'87 — Once again pressed for cash, Next convinces IBM to pay a reported $60 million in exchange for an option to put Nextstep on IBM workstations.

'88 — Japan's Canon Inc. invests $100 million in exchange for Next distribution rights in the Far East.

'89

'90 — IBM cancels its licensing option.

'91 — With Next short of cash once again, Canon and Jobs each reportedly kick in another $10 million.

'92 — Next secures a $55 million credit line from Canon and another $10 million credit line from Jobs.

IBM-Apple joint effort, Taligent, will be ready for two years. And Jobs has money to invest and a product for which there's virtually unanimous technical approval. But will Next take advantage of its edge and become a success in the face of Microsoft's imminent threat? Jobs looks particularly pensive when he answers saying: "This transition isn't going to be a bowl of cherries."

Not that anything *has* been in the past eight years. None of the company's many incarnations has made any money or garnered market share. Next's focus on software means it will need to sign original equipment manufacturer (OEM) agreements with PC vendors. This is not an easy task for the mercurial Jobs, who's widely regarded as an unreasonable negotiator. Next must establish a larger direct sales force to sell to the Business Week 1000, which has mostly shunned the company's offerings as being incompatible with existing hardware. The company also needs to attract more ISVs to write applications for the operating system. An abundance of software will make Nextstep more attractive to users who need underlying tools to write specialized applications. And Next needs to capture the attention of some large distributors.

Style Over Substance

With its lavishness, Next's headquarters could be a museum for the 1980s: the bleached hardwood floors, the I.M. Pei-designed staircase, the Next logo (with a reported $100,000 price tag), the espresso bar, the sleek black furniture, and across the San Francisco Bay, the modern and very expensive manufacturing plant.

Once, Next was the most celebrated start-up in high-tech history. But the emphasis was on style, not on how its product would sell in the marketplace.

Like Jobs' earlier design project, the Apple Macintosh, the original Nextcube was very stylish, but lacked basic user requirements. It's 256-megabyte optical disk made the machine slower than most workstations and its screen was grayscale. The Nextcube *was* stylish, but that was largely cosmetic, like the black, cubical magnesium cases that raised the Nextcube's manufacturing cost without improving its functionality.

The Nextcube was originally intended as a $3,000 workstation for students, but its final $6,500 price tag put it out of their reach. Next's next target was business. In 1989 the company cut an exclusive distribution deal with then-top PC retailer Businessland Inc., whose chairman, David Norman, bragged he would sell $100 million of Next machines in a single year. But neither Next nor Businessland could manage to create demand among business customers, and Businessland sold fewer than 1,000 Nextcubes.

Next could not establish itself in other sales niches either. Desktop-publishing guru Jonathan Seybold touted the Nextcube early on as the best computer available for high-end desktop publishing, but Next could never convince desktop-publishing software leader Quark Inc. to port its Xpress program to the Next. Quark cited lack of demand.

Eventually, Next gained visibility in a different niche–as a trading station at Wall Street financial companies. But even there, Next computers are still clearly outnumbered by Sun Microsystems Inc. workstations. In all, Next has an installed base of 50,000 machines. It now must be more successful in establishing an installed base for its software by convincing ISVs, PC vendors, and Business Week 1000 companies that there's a need for Nextstep.

"He was in my face..."

As Next wandered aimlessly, its executives wandered too. Most press reports blame Jobs' temperamental management style for the departures, but there was more to it. For three years, an internal battle divided the management team into two areas: the software camp and the hardware camp. Both camps disagreed strongly with each other, and realizing that Next was a rudderless ship, many executives left.

Not surprisingly, Jobs was in the hardware camp. "Steve wanted a complete systems company," says one high-level executive who left the company. "He always wanted to re-create Apple."

In more than one meeting over the last three years, Jobs berated people who believed Next should be a software-only company. "He was in my face screaming at me," recalls a former Next insider from the software camp. "He was telling me I was an idiot."

In the last year, more than a half-dozen executives have departed. Guy "Bud" Tribble, the original architect of Nextstep, left for Sun, where he is working on "DOE," the company's object-oriented software. Rich Page, who was vice president and general manager of the hardware division, had the not-so enviable job of designing Next machines to fit Jobs' "perfectionist" desires. Page resigned in January 1992 pleading burnout. There was a tremendous amount of time spent trying to satisfy Jobs' hardware whims, says an insider. "The hardware organization never delivered the goods," he says. "Page was always bowing down to Jobs. This all caused a crumbling of Next's esprit de corps. The whole thing's a tragedy."

This lack of direction is part of what caused the company's slow sales. In early 1991 Next estimated it would hit $200 million in revenue; instead, revenues reached only $127.5 million. And although sales rose 10 percent in 1992 to $140 million, outside North America they plummeted from $55 million to $42 million, according to the company. In Europe and the Far East–hot growth markets for most computer vendors–Next was dead in the water.

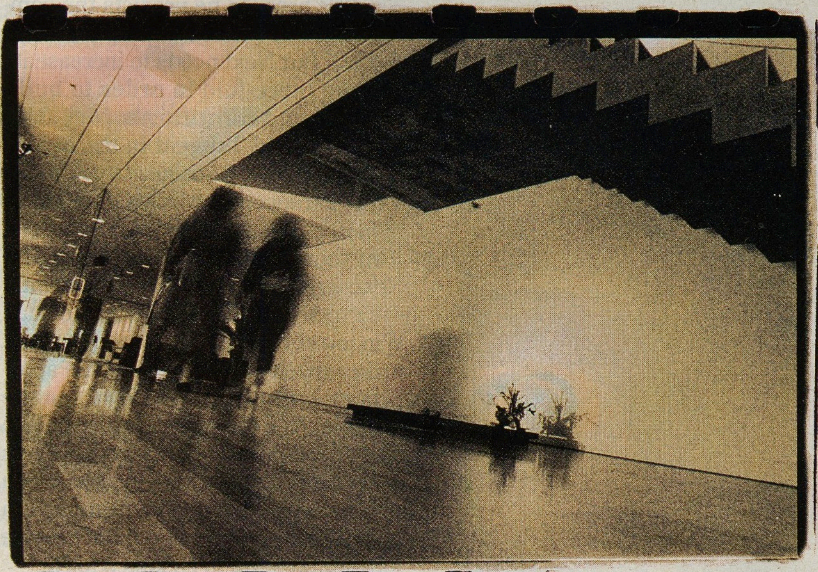
The meager sales mean Next has run at a perpetual deficit. At the end of 1992, the company reported its first profitable quarter, with $45 million in sales–but for the year, Next fell about $40 million below its break-even point. With Next's plant running at only 20 percent capacity, the company has run average deficits of about $3 million per month.

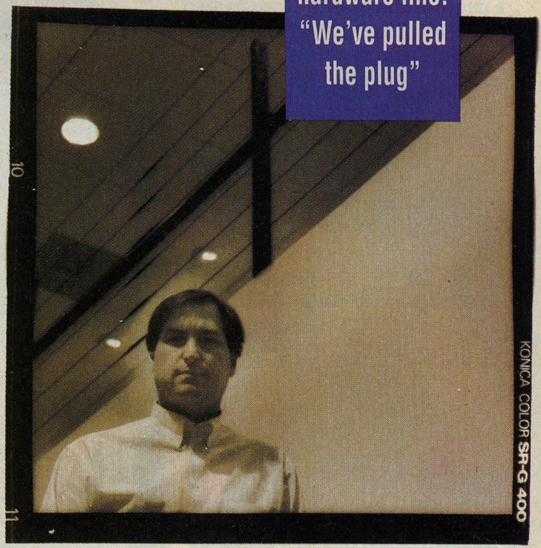
The cash-flow problems have been aggravated by Next's perennial under-capitalization. Hardware manufacturing requires plenty of capital, but Next's history is dotted with dates when the company ran out of money and had to find new investors. So far Next has run through an estimated $250 million in capital and credit. It's not uncommon for small startup companies to have an extremely low return on sales, given ramp-up costs for initial research and development, marketing, and the building of a support organization, says Catlin Wolfard, an analyst with Black & Co., a securities firm. But Next has been around for eight years.

Next's habit of periodically running out of money has taken its toll on the company's operations. When money is tight, budgets have been cut in areas such as sales and marketing–the areas most crucial to generating cash and reducing the need for new capital. This cycle has slowly strangled the company, and may have doomed its hardware product line from the start.

But even with adequate capital, Next probably would have still acquired its reputation as "The Hardware Gang That Couldn't Shoot Straight" when it came to product design, pricing, marketing, and distribution. Next's target market has changed repeatedly, not because the company spotted new opportunities, but because its expensively designed products forced prices out of the range of early target customers such as college students. And Next has not been able to effectively reach the markets that can afford its products. A common response? "That black machine is incredibly sexy," said a user at Boeing Computer Services, the kind of Business Week 1000 company Next had been trying to attract, "but it's a proprietary machine. We don't want a slow, proprietary machine." (The user made these comments before the company announced its redirection.)

"I don't think I'd be human if I didn't have regret," says Jobs, referring to the end of Next's hardware line. "We've pulled the plug"





What Next Needs to Do

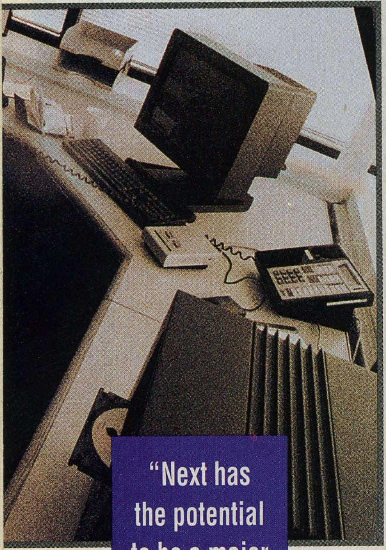
Jobs flutters his arms around–as he's apt to do when he's excited–because he's talking about announcing Nextstep 486 at Nextworld Expo–"Nextstep: The Alternative to the Microsoft Monopoly"–on May 25. "We'll have our transition completed by the show," he says. "We will be a software company, and we'll tell everyone about our plans."

May 25 will be the reckoning day. When Next must have a software channel in place (Jobs promises deals with PC vendors like Dell Computer Corp., Compaq Computer Corp., and NEC Electronics Inc.). Next may also need a retail channel, partly for credibility. Microsoft's Windows and IBM's OS/2 2.0 are highly visible because of the shrink-wrapped packages sitting on the display shelves of software retailers throughout the world. Nextstep will require a beefed up sales force. Next currently has only 100 direct sales people. The company's recent parade of departing executives was accompanied by the gutting of its marketing and sales force, but now Next needs them to sell its products directly to large corporations.

Next will also need to have its product *finished,* not just shipping in a beta version. It took Next nearly a year following the roll-out of its first hardware product to officially release Nextstep 1.0. That kind of delay won't work for a dark-horse candidate in the intensely competitive PC operating system market. And because of the wide range of adapters PC users plug into their computers to support monitors, disk drives, and other peripherals, Nextstep will need hundreds of compatible device drivers.

Otherwise, Nextstep won't be able to run because of the variety of different components on Intel machines. In the past, Next hasn't had enough programmers experienced in writing drivers, which is a massive undertaking for a company of any size, but that much more of a challenge for Next's small staff. By comparison, when IBM introduced OS/2 2.0, the company tested it with hundreds of PCs and still couldn't provide all the drivers customers wanted.

Although Jobs will probably give a smashing performance on May 25–he usually does–the product introduction will only be the beginning. Next needs to learn an entirely new way of marketing its product. Next has been marketing to a specific niche, but now it needs to have broader appeal for the 25 million Intel 486s shipped every year. Will people really want to give up Windows applications for Nextstep? Sure, you can run Windows apps in Nextstep with an emulation window, but users have never been excited about that prospect.



"Next has the potential to be a major success as a software company, not as a turbo-charged PC company," says Peter van Cuylenburg, Next's president and CEO

Clearly, the new Next will not lose $36 million a year on hardware. Without this drain, the company can spend money on building a bigger sales force, increasing its support staff, hiring programmers to write device drivers, and giving the company more financial stability. Is $36 million enough to compete with Microsoft and Taligent? Yes, say analysts. But they add that the company must be incredibly organized if it wants to build a workable software infrastructure so quickly.

Users want software, not hardware. Just ask Yusef Javeri, vice president of administration for DKW Systems Corp., a systems integrator that bought 48 Next machines for the Alberta, Canada, motor vehicle department. "The reason we went with Next was because of the announcement of Nextstep on the 486," he said, a few weeks before Next's announcement that it was a software-only company. "There was concern that once Nextstep was available on the 486, the workstation side of the company would collapse, but the end feeling was the operating system would survive."

For the moment, at least, time seems to be on Next's side. Microsoft and Taligent are still two years away from a real product. "The [Nextstep] technology is so good that the industry should rally around it," says Larry Ellison, president of Oracle Corp., a $1.18 billion a year relational database vendor, which is reportedly in negotiations to bundle Nextstep into its own products. But Next must reinvent itself once again if it wants to keep its slowly evaporating lead.

In its existence, Next has sold a total of 50,000 copies of Nextstep, says Jobs. It's not much of an installed base, so he predicts the company will ship 50,000 Nextstep packages in 1993. But Next needs to increase its volume three-fold in order to build enough momentum to forestall Microsoft and Taligent in the object-oriented software business.

For perspective, Microsoft ships 12 million copies of Windows a year, and IBM ships 3 million units of OS/2. But Nextstep is a more advanced operating system with more added value than Windows or OS/2. Moreover, Microsoft makes much of its money on the applications it writes for Windows, not the operating system itself. Because people write applications with Nextstep, it is essentially an operating system *and* a software development environment in one package. Next must build volume momentum around Nextstep itself.

To achieve this, Jobs needs to make many alliances with software and hardware providers if he wants to ship Nextstep in high volumes. "Next has a head start," says T. Michael Nevens, a principal at McKinsey & Co., a major business consulting firm, "but it's going to need to run fast and build a market quickly."

Two years ago, Jobs might have had a much easier time introducing a new PC operating system. Instead, he's wrestling with the most difficult challenge of his professional life. "We're not carrying forth the hardware dream," he says, "but if we're successful as a software company...if we give people an alternative to Microsoft...it will have been a greater good."

Jobs looks out the window. He looks tired. "Many people would like to see me fall on my face," he says, closing his eyes. His boyish charm, perhaps temporarily, has faded. ■