“IBM wants to wipe us off the face of the earth,” said Steve Jobs, in a 1984 interview.

Putting over the Macintosh is not the only item on the company’s agenda for 1984. Apple AAPL 0.56% is peddling three new models of its top-of-the-line Lisa and will be adding at least one new computer to the familiar Apple II line; it will also introduce a host of peripheral products like laser printers and mass-storage devices. It hopes to become the industry leader in manufacturing technology with its highly automated $20-million Macintosh plant in Fremont, California. As if all this weren’t enough, John Sculley, Apple’s chief executive, is “changing the discipline of the company,” as he puts it. By most accounts Sculley, who headed up Pepsi-Cola PEP 0.86%, the
domestic soft drink part of PepsiCo, before coming to Silicon Valley last April, is bringing discipline—controlling costs, reducing overhead, rationalizing product lines—to an organization that some in the industry called Camp Runamok. One result is that some 25% of the executive committee is new since he arrived.

The need for discipline did not become apparent until fairly recently. For much of its seven-year history Apple had no serious competitors, and its growth curve looked like a straight line north. From 1978 to 1983 its compound growth rate was over 150% a year. Then IBM muscled into the personal computer business and, two years after introducing its PC, passed Apple in dollar sales of the machines. Last year Apple’s market share of personal computers retailing between $1,000 and $10,000 went from 20% to 21%, while IBM’s rose from 18% to 26%, according to Future Computing, a Texas-based consulting firm. IBM’s dominance has made its operating system, the software that tells a computer how to work, an industry standard. It’s a standard that no Apple product follows.
Click to enlarge.

Apple’s revenues nonetheless rose 69%, to $983 million, for the 1983 fiscal year that ended in September, and its net income of $77 million was 25% better than the year before. The company’s return on shareholders’ equity, down somewhat from the 1982 figure of 28%, was a commendable 24%. But Apple earned only $5.8 million in the fiscal quarter that ended in December, 75% below the level of the previous year. The drop, which halted the company’s quarterly contributions to the employee profit-sharing program for the second time (the first was the previous quarter), was caused by increased expenditures on new products and their introductions, as well as price-cutting on its best seller, the Apple IIe.

One of the first things Sculley did on joining Apple was to put “the highest priority” on clarifying a runamok product line. The Apple II, the world’s most widely used personal computer, was six years old. The more powerful Apple
III had never fully recovered from its traumatic introduction in 1981. Apple had to recall the first 14,000 units to remedy design flaws, and had trouble selling the re-engineered version.

The Lisa, announced to stockholders at last year’s meeting, should have been a worldbeater. It had the memory of an elephant—one million bytes—and was the first personal computer controlled by a mouse, a device the size of a cigarette box connected by cable to the computer. Sliding the mouse around a desktop moves an arrow on the screen to the job at hand, sometimes represented by a clever icon or picture, like a wastebasket for throwing old data out. Pushing the button on top of the mouse starts the task. But Lisa’s price, a user-unfriendly $10,000, undercut its appeal; Ulric Weil, the highly respected computer industry analyst for Morgan Stanley, figures that only 20,000 have been sold so far.

Worse yet, the product line as a whole lacked coherence. Each of Apple’s three computers used a separate operating system. And the Macintosh, as it was initially conceived, would not have been compatible with any of its Apple precursors. “Apple has a culture and an environment in which individual achievement is given a very high priority,” says Sculley. “There have been two results of that: some incredibly great products, and several different products that had no compatibility with each other, let alone the rest of the world.”

The Apple II nonetheless continued to be a successful product long after industry watchers thought it was over the hill. Apple understood the Apple II market—small business, the home, and primary and secondary schools—and priced the computer for that market. The company sold through a large network of independent retailers who gave the machine prime display space, and it cooperated in writing many of the 16,000 software applications for the Apple II, everything from games to farm management.
Lisa played off none of these strengths. At $10,000, it was positioned for the corporate market. Since Apple had no experience selling to large corporations, it developed a sales force to do so. But Lisa lacked what corporate customers wanted most—an ability to communicate with other computers, especially mainframes. In falling victim to what Steve Jobs now calls “Fortune-500-itis,” Apple bypassed most of its 1,500 dealers. The product had very little software of its own (Apple didn’t share Lisa’s inner secrets with software developers) and could not use the software developed for other computers.
CORPORATE PERFORMANCE

digital code, it will increasingly speak the language of computers. David Nagel, head of Apple’s advanced technology group, says, “Ten years from now we might distribute all our software electronically. People could try it before buying. Or we might support a home-shopping system where users look at merchandise on a monitor.”

BUT BACK to current reality, at the heart of which are questions about the company’s new pal, IBM, and what the friendship means for Apple’s soul. “We call it the deal of the century,” says the director of Macintosh software, Roger Heinen Jr. Actually it is not one deal but several:

■ An alliance to create the “PowerPC,” which will let Apple use IBM’s superfast RISC technology (for reduced instruction set computing). A RISC chip will help the Macintosh do new things, like reading scriptures.

■ A joint venture called Taligent to develop a new operating system that will enable independent software companies to write programs more easily. That could increase sales of the Macintosh.

■ A joint venture called Kaleida (pronounced like “collider,” in Brooklyness) to develop multimedia technology that will merge sound, data, graphics, and video in one new supergadget.

■ The OpenPental project, which will develop a new version of the Unix operating system used in most workstations and in other high-end computers. Apple wants to start making machines for those markets.

■ A project to help Apple and IBM machine work together better, which will help Apple with business customers. Apple also wants to make servers, medium-size computers that act as nodes connecting desktops.

The RISC chip brings Apple the most tangible benefit. If all goes according to plan, in time it will be the microprocessor at the heart of every Mac. The chip, which won’t be ready for a couple of years, should eventually be cheap enough to use in personal computers. Motorola, the current supplier of all of Apple’s chips, will work on the development of the RISC chip and manufacture it.

Taligent (the name is a combination of talent and intelligent) is a continuation of an Apple project, code-named Pink, that aims to streamline the writing of software and make it easier for users to customize their own programs. The so-called object-oriented operating system will let software writers plug standard commands into a program, like hooks into a library shelf. Today the command for sending a file to a printer in a particular way might entail writing 30,000 or 40,000 lines of code. With an object-oriented system, once a software writer specifies a common operation, the program itself writes the code.

Why an alliance? Apple could have bought a RISC chip from any of a number of producers, including Sun Microsystems, MIPS, and Motorola. The Taligent project was Apple’s idea. Nearly all of the 150 software engineers now working for Taligent, which put up its nameplate in March, are former Apple employees working in their old offices. Apple’s singular strength is its software, which makes its computers such a pleasure to use. Why share this expertise with Big Blue?

So Sculley is looking pretty smart, yes? But that doesn’t mean he has outmaneuvered IBM. Far from giving up something by bringing in a pair of partners on the RISC project, IBM locks in a big user in Apple, while Motorola bears the cost of tooling up for production of the chip.

At Taligent, the engineers may be from Apple, but IBM can exact the title. The swing vote belongs to Taligent CEO Joseph Guglielmi, who put in 30 years at IBM. That doesn’t necessarily mean he will side with IBM, of course, but Blue blood is Blue blood. If IBM does have the greater clout, Taligent may feel pressure to produce an operating system that favors developers of software for corporate applications rather than individual users.

A lingering question: How will Apple’s new way of doing business affect the special qualities that inform the company’s culture? Employee after employee extols “Apple magic.” They speak of the sense of empowerment felt by almost everyone who works there, and say that even lower-level workers on a development team can release a product if they don’t think it is ready. The good feeling is palpable in the relaxed atmosphere and easygoing enthusiasm that fills the headquarters in Cupertino.

David Nagel, for one, doesn’t think the IBM alliance will change this sensibility. “When we get together with the IBM guys, they look more like Apple people than we do like IBM people. Culturally, IBM will be moving a lot closer to Apple.”

But Sculley sounds like an IBMer when he summarizes the reasons for his new strategy: “Our cost structure was out of line. We didn’t know how to meet schedules. We were a benevolent company that sponsored people to work on things they were interested in.”

If Sculley’s strategy works, ten years from now Apple could have an impressive piece of the new-computerized-devices pie by building on its enviable gift for making machines that are easy and fun to use. This summer Apple’s lawsuit against Microsoft and H-P should finally go to trial; if the court accepts the “look and feel” of computer software can be copyrighted, Apple should win. And a new operating system that helps make software easier to produce could keep the polish on Apple’s computer business too, by making its desktop machines ever more versatile. With luck, Apple could hold on to the magic—even as it swaps with the company it once looked on as the Devil.
Apple’s new products give it, for the first time, a coherent and reasonably integrated product array with a machine for each major market segment. The Macintosh will list for $2,495; three new Lisas will be priced, depending on how much memory comes with them, from $3,495 to $5,495—quite a discount from last year’s ten grand. These Lisa 2’s, as they’re called, can run the same operating system and programs used in the Macintosh. (The Mac, however, will not be able to use Lisa software.) Under a reorganization plan Sculley has put in place, both machines will be marketed by one Apple division, while another division will be in charge of Apple II. Apple will turn old Lisas into new Lisa 2’s—a relatively easy operation that a dealer can do—for free.

The center of all the excitement, the Macintosh, is a 17-pound beige box with a nineinch, high-resolution, black on white screen, a built-in 3½-inch disk drive, a separate three-pound keyboard, and a mouse. (No television-on-top-of-a-typewriter look here.) It offers 128K of memory, which means it can store about 130,000 pieces of information. Mac’s core is a 32-bit chip, so that like the Lisa it can access 32 pieces of information at a time compared with 16 for the IBM PC. Mac’s extra power supports the words and icons that work with the mouse.

One of its most appealing features is an ability to run impressive graphics programs like MacPaint, which prints text in eight sizes and 54 styles and makes charts, diagrams, technical renderings, and freehand drawings a snap. Jean Yates, who as president of a Los Altos computer industry consulting firm called Yates Ventures frequently includes such graphics in her printed materials, says, “The Mac will go down in history as the box that made it possible to put graphics in general business correspondence.”

The Macintosh is aimed primarily at small and medium-size businesses and at university students. The company recently announced the Apple University
Consortium, a group of 24 prestigious colleges and universities, including Stanford, the University of Michigan, and the entire Ivy League, which have so far said they will order $50 million worth of Macintoshs for use by their students. Meantime a not-so-academic order for 2,500 Macs, worth $7.5 million, came from Peat Marwick, the accounting firm, in January. The Lisa is positioned to appeal to the faculty at universities, senior managers at small and medium-size businesses, and even some iconoclasts at larger corporations.

Apple says it is putting just about as much money and effort into the Apple II family this year as it is devoting to Macintosh and Lisa. The company has to keep running with this technological relic, which it fondly refers to as the Volkswagen Beetle of the industry, because it provides Apple’s major cash flow—almost its only cash flow. Last fall Apple introduced a series of high-performance options for the IIe, including a new operating system that makes it somewhat compatible with the Apple III, though still not compatible with Lisa or Macintosh. It also brought forth a mouse and a special graphics program. Apple lowered the wholesale price to dealers by $150, encouraged them to add whatever software they wanted, and let them sell it at whatever price they could get—usually about $1,300 to $1,500.

Though sales were soft in October, Sculley says they took off the week after the long-awaited IBM Peanut, the PCjr, came out of its shell. “The PCjr did not live up to expectations,” says Sculley. Besides, it wasn’t in the stores. Apple sold 110,000 Apple IIe’s in December, a record for any month. Sculley, convinced that price-cutting has abated for the time being, says the current price will hold firm: “We have finally found the right price/performance ratio for this product.” The company is introducing another Apple smaller and cheaper than the IIe, and probably another one more powerful and more expensive. Says Sculley, “I guarantee that by the end of 1984 people are going
to be as impressed with the Apple II as by anything else Apple does this year.”

For more on Apple, watch this Fortune video:

Apple is putting a lot of effort into polishing up the dealers. Two weeks before the Macintosh introduction Sculley and Jobs, each accompanied by some 50 members of the Macintosh team, made separate three-city tours. In all, they met with 3,000 dealer representatives to promote the new product line. Says Jobs, “We just openly told the dealers: we have no plans to open stores; we have no plans to sell direct to corporations; you are our future.”

This show of top-level dedication has pleased the dealers, who seem to be getting a signal from Armonk that is somewhat the reverse. IBM, which now has more than 70 of its own Product Centers, is building about 20 more this year. It sold 33% of its PCs directly to corporate customers last year, up from 15% in 1982, according to Future Computing. IBM’s newest PC product, an add-on operating system derived from the sophisticated UNIX system developed by Bell Labs in 1969, isn’t handled by computer stores at all. “We don’t want a world that’s strictly IBM,” says Frank Uller, president and chief executive of Quest/Simtec, a 12-store chain based in Dallas.

Though only a trickle of independently produced software is available now, more than 80 companies are writing programs for Macintosh. This time Apple is not only cooperating with the software scribes, it is sending around a “software evangelist”—that’s the title on his business card—to encourage the independents. Three of the best-known rivals in software manufacturing—William Gates, chairman of Microsoft; Fred Gibbons, president of Software Publishing; and Mitchell Kapor, president of Lotus—appear together, wearing Macintosh shirts, in a 20-page Macintosh brochure that Apple is inserting in major magazines. Gates, whose MS-DOS is the basis for the operating system that IBM has made an industry standard, expects that as much as half his
1984 software revenues could come from Macintosh programs.

The Macintosh, which has been tested by industry consultants, journalists, dealers, and software companies, has received only a few early pans. Some worry that its 128K of memory, twice the amount of the basic IBM PC, may not be enough. Apple points out that another 64K of memory is available to store the operating system, making for 192K in all. And the company says that once 256K chips become readily available, perhaps by the end of the year, the machine can be easily upgraded to offer 512K of memory. If you can’t wait that long, your friendly Apple dealer would probably be happy to sell you a Lisa 2.

A larger concern is that Macintosh is not IBM compatible. Apple acknowledges that it will have an uphill fight selling to the big corporations that are IBM territory. “We have thought about this very hard,” says Sculley. “It would be easy for us to come out with an IBM look-alike product, and put the Apple logo on it, and sell a lot of Apples. Our earnings per share would go up and our stockholders would be happy, but we think that would be the wrong thing to do.” The Macintosh is deliberately not compatible with the IBM line because, according to Apple, the Mac with its 32-bit microprocessor can do more things better than the PC.

Apple is probably right in its judgment that being an IBM clone doesn’t make sense for the long term. The market is already getting saturated with IBM look-alikes, and an IBM-compatible Apple would have nothing unique to offer. Andrew M. Seybold, who has written a book about the IBM PCjr and is writing another about the Macintosh, notes that IBM is increasing production of the PC; soon a customer wanting the real thing won’t have to settle for a mere IBM-compatible. And, he adds, the computer colossus is widely expected to move away from the MS-DOS-based standard to a proprietary
one that would be difficult to copy.

In fact, incompatibility is becoming a major part of Apple’s new strategy. “We’re not going to sell five million computers a year by being IBM compatible,” says Jobs, referring to a future sales goal. “We’re going to do it by making a second industry standard.” Computer consultants, software manufacturers, and dealers laud this approach. As Aaron Goldberg of a computer market research firm called International Data Corp. says, “The market will stagnate if people stick with the IBM standard. This is its third year, in an industry that lives and breathes on innovation. It’s a good time for something else, and Apple is the only company solid enough to do it.” Will Apple ever offer an IBM-compatible product? Some industry watchers think so, especially if the Mac attack fails, but Goldberg says, “I think they’ll make refrigerators first.”

Apple is not totally insensitive to the power of IBM. Macintosh and the new Lisa models will be able to communicate with IBM and other mainframes. They will also be able to connect to each other and to peripheral equipment—up to 32 machines in all—through a small data communications network called Applebus that Apple hopes to introduce this spring. “We clearly realize that we’ve got to sell systems, that we must offer computers that connect with each other and communicate with mainframes, including IBM’s mainframes,” says Sculley. “What we are trying to say is: We can do all those things that you might expect, but we also offer a much higher performance which takes the form of a very easy-to-use product.”

Given the opportunity, just about any Macintosh manager will start to talk about telephones. As the Apple version of history goes, when the telegraph became popular for communication a century ago, some people suggested putting a telegraph machine on everyone’s desk. Of course, everyone would
then have had to learn Morse code. Just a few years later Alexander Graham
Bell filed his first patents for the telephone, and that easy to-use technology
became the standard means of communication. “We’re at the same juncture;
people just aren’t going to be willing to spend the time learning Morse code,
or reading a 400-page manual on word processing,” says Jobs. “The current
generation of personal computers just won’t work any longer. We want to
make a product like the first telephone. We want to make mass-market
appliances.”

Apple will spend some $50 million on advertising, most of it to support this
user-friendly pitch. “If we can turn the marketing war into a product battle,
we’ll win,” says Jobs. For many people, Mac should indeed be easier to use
because of its mouse and its clear on-screen instructions. A novice can master
it in half a day or less vs. up to 40 hours for the PC, depending on the
complexity of the software. Some might judge Hewlett-Packard’s new HP 150
even easier to use, since it responds when the user merely touches the screen,
but the 16-bit HP 150 lists for $3,995, and is slower to react.

Pricing their new machine turned out to be one of the most difficult issues for
Jobs and Sculley. Industry rumor has it that Sculley preferred a $1,995 selling
price, Jobs the $2,495 one. But the two protest that they each flip-flopped so
often on the issue it was impossible to say who stood for what price—although
Jobs admits he thought “we could sell out even at a higher price for the first
six months.” Once the factory is up to speed, the price will undoubtedly come
down.

Jobs and Sculley co-manage Apple by this kind of seesawing over the issues
until they come to a resolution. They meet several times a day—usually
starting well before dawn and ending way after dark—when they are both at
Apple headquarters, and talk at least that often by telephone when they are
traveling. Says one insider, “Steve and Sculley have the same goals, but they
reach them in different ways. Like new-product development. Sculley wants a new product because he wants to diversify the product line; Steve wants it because it’s just the best idea he’s ever seen and he can’t wait to do it.”

Some naysayers claim the partnership will never last—that intense, mercurial Jobs, who owns nearly 12% of Apple stock (worth almost $200 million at current prices), will drive intense, focused Sculley back East. But despite their differences, the two men say they have retained a friendship that they built up in the four months Jobs spent wooing Sculley to Apple. Jobs, who besides being chairman is vice president and manager of the Macintosh and Lisa division, admits that his relationship with Sculley, the chief executive, is unusual: “He’s my boss, but in a sense I’m his boss.” Arthur Rock, one of Silicon Valley’s best-known venture capitalists and a member of the Apple board, says, “Steve has been arrogant at times. Sculley has done a lot to mature him.”

Jobs and Sculley both talk about betting the company on the Macintosh introduction this year. That seems a bit dramatic. If the Macintosh doesn’t sell as well as they hope—Jobs is talking about 500,000 units in this calendar year, though he’s not sure Apple can make that many; Sculley’s figure is 250,000 units—Apple will survive. Certainly the stock market doesn’t view Apple as an endangered company. The stock took a beating last summer—the collapse in computer stocks that followed Osborne Computer’s bankruptcy, along with disappointing sales of Lisa, drove it down from a high of $63 to $17. But the price has since recovered to almost $30, about where it was at this time last year, and the price-earnings multiple of 22 based on 1983 earnings is still impressive.

What Jobs and Sculley are really betting is that the company can continue to be a technological leader of the industry, innovative, supple, and able to
attract and keep bright people. As Jobs puts it, “If you asked ten years ago what are the best-run companies, Xerox and maybe Polaroid would have been on everybody’s list. But where are they now? These companies seem to have lost their souls, their spirit.” Using one of his favorite pejoratives, he adds: “They seem to be vanilla companies.” Sculley expresses the same sentiment with more precision. “Some corporations that were the Apples of the day when I graduated from business school lost their culture as they grew up and got bigger. I think a company changes its culture not by any big decision, but by slowly making little compromises along the way.”

Apple offers no compromise to the IBM standard with the Macintosh. “The Macintosh is just the best we can do,” says Jobs. “If it fails, we deserve to fail.” If it succeeds, no compromise will be necessary.

A company like Apple that parts course with a powerful industry leader takes a great risk. But the alternative course is not much more attractive. By building IBM look-alikes, Apple would not only risk becoming a vanilla company, it would lose the distinction that offers it the best chance of remaining a strong No. 2.

*Research Associate: Nancy J. Perry*

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