

Steve Jobs | 1955-2011

The Inventor Of the Future

BY LEV GROSSMAN
AND HARRY MCCrackEN

▼ SCROLL TO READ MORE ▼

Illuminations *Jobs at home in Cupertino, Calif., on Dec. 15, 1982*

Photograph by Diana Walker for TIME

STEVE JOBS REMADE THE WORLD AS COMPLETELY AS ANY single human being ever has, but he had no business doing it. He wasn't qualified. He wasn't a computer scientist. He had no training as a hardware engineer or an industrial designer. He had a semester at Reed College and a stint at an ashram in India. Jobs' expertise was less in computers than it was in the humans who used them.

If that were all he'd had, Jobs might have been a talented psychotherapist or maybe a novelist, like his biological sister. The genius of Jobs, and the paradox, is that while Jobs understood us completely, he wasn't like us. He was better.

Human minds dull. His didn't. It's a rule of thumb in the world of technology that you get to revolutionize one industry at most, but Jobs did it every few years with stunning regularity: computers, movies, music, phones. Unlike the rest of us, he didn't doubt himself, but his wasn't the arrogance of the narcissist. Jobs learned from his mistakes, which were many. As he would have put it, he *iterated*.

He became the most celebrated, successful business executive of his generation—in 2011, Apple's market capitalization passed that of ExxonMobil, making it the planet's most valuable company—and he did it all the wrong way. He didn't listen to his customers. Jobs liked to quote Wayne Gretzky: You don't skate to where the puck is, you skate to where it's going to be. (That Gretzky may never have said this makes it only more Jobsian: if Steve said he said it, then the Great One said it.) Jobs didn't crowdsource. He was the source.

Jobs will be remembered as a great man, but not necessarily as a kind or good one. His ferocity toward his employees is the stuff of legend: outside Apple, his products helped a generation think different, but inside One Infinite Loop, there was only one way to think, and that was like Steve. He did not suffer fools gladly—or at all. Unlike his contemporary and rival Bill Gates, he never made the transition from plutocrat to philanthropist. The perfection of the tools he made suggested both a deep empathy with others and also a raging aggression toward them: he would make things so perfect that we could not refuse them.

MAYBE JOBS THOUGHT DIFFERENT BECAUSE FROM THE START HE felt different. He was born in 1955 in San Francisco to a Syrian graduate student and his American girlfriend, who immediately gave him up for adoption. He was raised by Paul and Clara Jobs—Paul was a machinist who worked with lasers; Clara was an accountant—in Silicon Valley just as it was becoming Silicon Valley.

Jobs was only 21 when he started Apple—officially formed on April Fools’ Day 1976—with his buddy Steve “Woz” Wozniak, a self-taught engineer of rare talents. (A third founder, Ronald Wayne, left after less than two weeks.) Jobs already had a lot of experience, though not the kind you usually think of as preparation for building a company. He’d spent one unhappy semester at Reed College in Portland, Ore., and 18 happy months of “dropping in” on Reed classes as he saw fit. (He audited a class on calligraphy, which shows in the gorgeous fonts of every Apple product he ever shipped.) He’d worked low-level jobs at Silicon Valley icons HP and Atari; he would often claim, appropriately but not unassailably, to have created the original version of the seminal game Breakout. He’d taken a spiritual journey to India and dabbled with psychedelic drugs and primal-scream therapy.

Woz, a technical genius of the first order, built computers because he loved them. Jobs wanted to sell them. Their first creation, the Apple I, was mostly a warm-up act for the Apple II in 1977. The insides of the II were the product of Woz’s engineering genius, but much about the computer—from its emphasis on ease of use to its stylish case design—reflected the first stirrings of Jobs’ keen instincts. In an era when most computers still looked like high school science projects, the Apple II was a consumer-electronics device—and a best seller.

In 1981, Woz crashed his V-tail Beechcraft Bonanza and spent months recuperating, and he returned to Apple only nominally thereafter. From then on, Jobs was the Steve who shaped Apple’s destiny. In 1979 he visited Xerox’s PARC research lab in Palo Alto, Calif., and was dazzled by what he saw there, including an experimental computer with a graphical user interface and a mouse. “Within 10 minutes ... it was clear to me that all computers would work this way someday,” he later said. It was a moment he would repeat again and again in his career: Jobs did not invent things, but he recognized their power before anyone else did. He knew what Xerox had better than that company did, and he plundered it gleefully.

At Apple, PARC’s ideas showed up first in the Lisa, a \$10,000 computer that flopped. They reappeared in improved form in 1984 in the shape of the Macintosh, the creation of a dream team of gifted young software and hardware wizards led by Jobs. He launched it with an unforgettable Super Bowl commercial directed by Ridley Scott that represented the IBM-PC status quo as an Orwellian dystopia. Jobs dubbed the \$2,495 Mac “insanely great,” a bit of self-praise that became forever associated with him and Apple.

Jobs was right—but the Mac was also deeply flawed. The original version had a skimpy 128 KB of memory and no expansion slots. Computing pioneer Alan Kay, who worked at Apple at the time, ticked off Jobs by calling it “a Honda with a one-gallon gas tank.” It didn’t matter. Jobs had had an insight that the rest of the world is still catching up to and one that somebody with a proper engineering background would never have had: design is more important than functionality. All the horsepower in the world is useless if you can’t figure out how to use it—and look good doing it.

Jobs’ distinctive management style was also coming into focus. Whereas hackers hacked computers, Jobs hacked hackers. “He wanted you to be great, and he wanted you to create something that was great,” said computer scientist Larry Tesler, an Apple veteran, in the PBS documentary *Triumph of the Nerds*. “And he was going to make you do that.” Jobs understood people, but not the way an artist does. He wasn’t going to write you a poem about it. This was another facet of his genius, the least attractive one: he understood how to get people to do what he wanted, to give him more than they thought they could, even when they really, really didn’t want to. And he was willing to do it. He dismissed people who didn’t impress him—and they were legion, inside and outside Apple—as bozos. He tormented hapless job candidates. Jef Raskin, the originator of the Macintosh project, said Jobs “would have made an excellent King of France.”

Among the people whose buttons he pushed was Apple’s president, John Sculley, formerly the CEO of Pepsi, the man whom he had famously shamed into joining Apple with the question “Do you want to sell sugared water for the rest of your life, or do you want to come with me and change the world?” Frustrated with Jobs’ management of the Macintosh division and empowered by the Mac’s sluggish sales, Sculley and Apple’s board stripped Jobs of all power to make decisions in May 1985. In September, Jobs resigned.

Decades later, the notion of Apple’s deciding it would be better off without Steve Jobs is as unfathomable as it would have been for Walt Disney Productions to sack Walt Disney. In 1985, though, plenty of people thought it was a fabulous idea. “I think Apple is making the transition from one phase of its life to the next,” an unnamed Apple employee told *InfoWorld* magazine. “I don’t know that the image of a leader clad in a bow tie, jeans and suspenders would help us survive in the coming years.”

Using his Apple millions and funding from Ross Perot and Canon, Jobs founded NeXT, a computer company that would be even more Jobs-like than Apple had been. Built in a state-of-the-art factory and sporting a logo by legendary designer Paul Rand, the NeXT system was a sleek black cube packed with innovations. Un-

fortunately, it was aimed at a market that turned out not to exist: academic types who could afford its \$6,500 price tag. After selling only 50,000 systems, NeXT refocused on software, though Jobs can claim credit, obliquely, for yet another revolution: Tim Berners-Lee invented the World Wide Web on a NeXT.

For years, Jobs' second post-Apple venture, Pixar, looked like another disappointment. Its image-processing computer was a tough sell, and Jobs kept the company alive by pumping millions of his own money into it. As a sideline, however, it made computer-generated cartoons that started winning Oscars. In 1995, Disney released Pixar's first feature, *Toy Story*. When it became the year's top-grossing movie, it gave Jobs his first unqualified success in a decade. (By the time he sold Pixar to Disney for \$7.4 billion in 2006, his career had reached such dizzying heights that the deal was merely a delightful footnote.)

Jobs later called the NeXT-Pixar years "one of the most creative periods of my life" and said his dismissal from Apple had been "awful-tasting medicine, but I guess the patient needed it." It was also the time when he went from high-profile bachelorhood—he had fathered a daughter out of wedlock and dated Joan Baez—to family man. He married Laurene Powell in 1991; by 1998 they were the parents of a son and two daughters.

Meanwhile, without Jobs, Apple was failing on an epic scale. Sculley had given way to a vision-free Apple executive named Michael Spindler, who was replaced by Gil Amelio, who presided over \$1.6 billion in losses in Apple's 1996 and 1997 fiscal years. He couldn't even sell the company: deals with potential white knights IBM and Sun Microsystems fell through. The possibility that Apple would run out of cash and cease to exist was not unthinkable. Michael Dell said publicly that Apple should be sold for parts.

Amelio made one smart move during his 17 months at Apple. Just before Christmas 1996, he paid \$400 million to buy NeXT, thinking its software could serve as the foundation of a next-generation Mac operating system. He was right: every operating system Apple has created from 2001 on, including the one on the iPhone and iPad, is a direct descendant. NeXT's software came with a bonus: Steve Jobs. With touching naiveté, Amelio thought Jobs would cheerfully serve as a figurehead for the company he had co-founded. Instead, six months after the merger, Jobs orchestrated Amelio's ouster and accepted the position of interim CEO—iCEO for short—splitting time with Pixar. "I'm here almost every day," he told *TIME* in 1997, "but just for the next few months. I'm really clear on it." He finally ditched the *i* in iCEO in 2000.

Jobs' return cheered up beleaguered Apple fans, but few indus-

try watchers expected miracles. They got them, though. Jobs staged the greatest comeback in the history of business. During his first months back at Apple, Jobs dumped board members, cut staff, slashed costs, killed dozens of products and accepted a \$150 million lifeline from perennial *bête noire* Microsoft. (When Bill Gates made a remote guest appearance during the 1997 Macworld Expo keynote, looming on a video screen over Jobs, the audience booed.)

Jobs rolled out a triumphant contrarian advertising campaign—“Think different”—that gobbled up mind share, if not immediately market share. And he presided over the release of the all-in-one iMac, which came in a translucent candy-colored case crafted by Jonathan Ive, the British industrial designer who would be responsible for every major Apple product to come. “When we took it to the engineers, they said, Oh, and they came up with 38 reasons why it couldn’t be done,” Jobs told *TIME*. “And I said, ‘No, no, we’re doing this.’ And they said, ‘Well, why?’ And I said, ‘Because I’m the CEO, and I think it can be done.’” It’s a garish period piece now, but at the time it redefined not only what a computer could look like but also how you could feel about it. In 1998 the iMac became the best-selling computer in America.

Little by little, Jobs started acting less like a turnaround artist and more like a man who wanted, once again, to change the world. “Victory in our industry is spelled *survival*,” he told *TIME* in 2001, when Apple was still on the rebound. “The way we’re going to survive is to innovate our way out of this.”

In May of that year, Apple had opened retail locations in McLean, Va., and Glendale, Calif., the first of hundreds it has built. Jobs micromanaged their construction to an almost pathological extent—not only did he know which quarry the stone tiles came from, but he also knew from which side. The result was spare, uncluttered perfection. Retailers rarely did a good job of explaining to consumers why they should choose a Mac over cheaper Windows computers; now Apple could do the job itself, in miniature theaters of its own devising. Jobs outboxed the big-box stores, and he did it in his spare time.

The single most important moment in Apple and Jobs’ redemption came six weeks after the 9/11 attacks. At a relatively low-key press event at Apple’s Cupertino, Calif., headquarters, Jobs explained that the company had decided to get into the MP3-player business. Then he pulled the first iPod out of his pocket. All of a sudden, Apple was a consumer-electronics company.

Soon it was an exceptionally successful consumer-electronics company. Apple hadn’t invented the iPod; it got most of the technology in acquisitions. The iPod wasn’t even the first digital music

player on the market, not by a long shot. It did less than most, and it cost a lot more. What was different was that it looked as if it had fallen out of a time machine, and it made people want it. Once again, form trumped function. It became a cultural touchstone, especially after Apple made it work with Windows PCs as well as Macs. Even its white earbuds became iconic. iPods gained the lion's share of the media-player market and never lost it.

And that was only half the revolution. At first, iPod owners got music free—legally, by ripping their own music off CDs, or illegally, by “sharing” tracks on peer-to-peer networks like Kazaa. Apple, seeing a need for a simple, legal source of music, introduced the iTunes Music Store in 2003. iTunes offered a proposition of elegant, Jobsian simplicity: songs were 99¢ apiece, and you could play them on up to three devices and burn them to CDs. To make this happen, Jobs pulled off two coups: not only did he talk the famously recalcitrant record labels into letting him sell their songs online, but he also conned consumers into paying for what they could steal. He did the business equivalent of an Indian rope trick: he beat free. Consumers bought a million songs in the first week, and by 2008 they had purchased 5 billion of them. Five years after Apple entered the music business, it surpassed Walmart to become the U.S.'s largest music retailer. By that time, iPods had screens capable of displaying video, and Jobs' company was a major distributor of movies and TV shows as well.

As important as the iPod was, it was ultimately just a high-tech Walkman. The iPhone, unveiled at a Macworld Expo keynote in 2007, was something far more: a powerful personal computer that happened to fit in your pocket. “Every once in a while, a revolutionary product comes along that changes everything,” Jobs said in introducing it. It was a statement that would have been hype from anybody else; in this case it was merely true. The boldness of what lay behind that sinister black glass face is easy to miss: in one fell swoop, Jobs brought to market a new touchscreen technology and an entirely new interface to match it. It instantly made every other smart phone on the market look like an antique.

For Jobs, this wasn't just business; it was personal. He'd been thrashed by Microsoft in the PC market, but now, in the consumer-device market, he would win it all back, and he did. Typically, he responded not by aping the strategy that had worked so well for Microsoft the first time around but by being even more like Steve Jobs. Like the first Mac, the first iPhone had obvious deficiencies. For instance, it shipped with a poky 2G wireless connection just as 3G was becoming pervasive. But its software design was such a radical improvement over anything anyone had ever seen that it

didn't really matter.

The other piece of the puzzle was control. In Apple, Jobs had built a corporation that was truly an expression of his obsession with it. Whereas most companies specialized in hardware or software or operating systems or retail or consumer electronics, Apple did them all at once: it controlled what Jobs called "the whole widget." Once you owned an Apple device, you filled it with movies, music and apps from Apple's online stores. Jobs had created a closed technological universe of gleaming Copernican perfection, and everybody wanted to live there. Jobs had realized that building products to play nicely with those of other companies was all well and good—that was the Microsoft way—but to really get it right, you had to build everything yourself.

The idea was counterintuitive and practically un-American, but the marketplace proved Jobs right. The iPhone had serious competition, especially from handsets that used Google's Android operating system. But the iPhone ecosystem—phone plus apps, movies and music delivered through Apple services—contributed to Apple's success in a way no other company could match. By 2011, Apple was selling roughly 210,000 iPhones a day and, according to one analyst, capturing two-thirds of the industry's profits.

In 2010, Apple followed up the iPhone with the iPad, its first effort in a category, tablet computers, that had existed for two decades without a single hit product. It was a classic example of Jobs' *modus operandi*: every company had a tablet, but only Jobs saw what they had. He didn't invent it, but he reinvented it. According to Jobs, Apple sold more than 15 million iPads in the product's first year, a number that dwarfed the predictions of Wall Street analysts.

Success may have given Jobs some satisfaction, but it didn't soften him. He remained the difficult, demanding, sometimes unreasonable perfectionist that Apple thought had been dispensable a dozen years earlier. More than any major Silicon Valley company, Apple kept its secrets secret until it was ready to talk about them; every article about the company included the words "A spokesperson for Apple declined to comment." Apple was demonstrably full of talented employees in an array of disciplines, but Jobs' reputation for sweeping micromanagement was so legendary that nobody who admired the company and its products wanted to contemplate what it might be like without him. Shareholders were even more jittery about that prospect: a stock-option-backdating scandal that might have destroyed a garden-variety CEO barely dented his reputation.

But more and more, the world was forced to confront the idea of a post-Jobs Apple. Jobs' singleminded vision created an environment in which rivals, and potential successors, didn't thrive. In 2004 he was diagnosed with pancreatic cancer and told he had months to live; further investigation showed it was a rare form of the disease that could be controlled. Jobs turned day-to-day control of Apple over to chief operating officer Tim Cook, underwent surgery, recovered and returned. Then during a 2009 medical leave, he received a liver transplant. In 2011 he went on another medical leave, which became permanent when he resigned as CEO on Aug. 24, assuming Apple's chairmanship and handing off CEO duties to Cook.

Always happier praising a new Apple product than talking about his private life, Jobs said little about his struggles with ill health. He did, however, address them briefly in a commencement speech he gave at Stanford in 2005. "Your time is limited, so don't waste it living someone else's life," he said, sounding as if the very thought of living someone else's life infuriated him. "Don't be trapped by dogma, which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become. Everything else is secondary."

Jobs was right, as he almost always was, and he took his own advice. He lived nobody's life but his own, and he followed his heart and his intuition. Sometimes they brought him to the edge of ruin. Sometimes they led him to overpower other people's visions and drown out their inner voices with his own. But it's the paradox of Jobs, never to be resolved, that when he was done, he had built some of the greatest tools for creativity and self-expression that humanity has ever seen. He wanted the rest of us to live our own lives fully and richly too, and he was going to make absolutely sure we did—whether we liked it or not. ■