APPLE: FROM GARAGE TO WORLD'S MOST VALUABLE COMPANY

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Apple, as a company, began as the product of a remarkable personal friendship between two young California friends, Steve Jobs and Stephen Wozniak. Jobs, like Wozniak before him, attended Homestead High School in Cupertino, California, a solidly middle-class school in the suburbs of Silicon Valley. They met in 1971 through a mutual friend. In about 1975, the two friends began attending meetings of the Homebrew Computer Club, a group of Silicon Valley electronics hobbyists that met to explore the latest in new computer technology.

Jobs and Wozniak, ca. 1976

Wozniak, who had no formal engineering training, designed a new single-board computer called the Apple-1, he says, "as a way of showing off to the people at the Homebrew Club." Based on an inexpensive microprocessor, the Apple-1 (either pre-assembled or in kit form) was aimed squarely at hobbyists who wanted to own their own computer. The Apple-1 was an elegant design, using minimal parts.

Showing insight and faith, Jobs quickly appreciated that there might be a demand for the Apple-1 beyond the geeky members of the Homebrew Computer Club. He showed one to Paul Terrell, owner of the nearby Mountain View computer store, Byte Shop. Terrell placed an order for 50 of the assembled circuit boards. To obtain funds to purchase parts for the Apple-1, Jobs had obtained 30 days' credit from parts suppliers, just long enough to enable the duo to build the computers (mostly in Jobs' home garage) and get paid for them. To fund the circuit board layout of the Apple-1, Wozniak sold his beloved HP-65 calculator and Jobs his Volkswagen van. The Byte Shop order brought in $50,000, a "total shock" to Wozniak, who was earning one-tenth of that as an engineer at HP. The sale spurred Jobs into thinking about a new computer that anyone—not just those handy with a soldering iron—could easily afford and use.

Jobs and Wozniak immediately moved forward with a new machine, the Apple II, which was a massive improvement over the Apple-1. It had an integrated keyboard and case, could plug into a TV set for display, and was ready to run right out of the box. It also had color graphics, which made it unique among competing computers at the time. It was a consumer item, not a kit for hobbyists.

Apple II personal computer, 1977
Photo: © Mark Richards

The Apple II was Apple's first mass-produced product and Apple advertised it as a computer for everyone, from students to homemakers to business people. The Apple II's success was unprecedented, especially in home and education markets, and with the 1979 release of the spreadsheet program VisiCalc, the Apple II sold in the millions. The Apple II lived on in various models until 1993, an astonishing 16 years, one of the longest product lifetimes in the history of computing.

Apple's greatest triumph, however, was the 1984 Macintosh, "the computer for the rest of us." Macintosh offered users a new way of interacting with a computer: the graphical user interface (GUI). No longer would people have to learn arcane commands or have specialized training to use a computer. Now everyone who could point and click a mouse (even children) could operate a computer. The Macintosh was revolutionary as a consumer product, stressing intuition and use of a common graphical look and feel over memorization of computer codes. Macintosh's GUI made computing understandable to the general public.

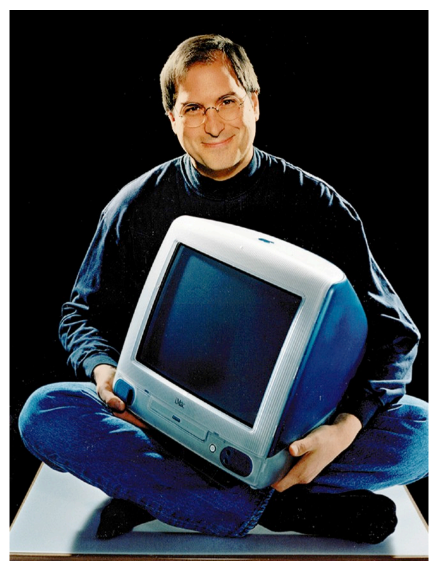
In spite of the publicity and its impressive GUI, the Mac sold poorly for the first year. In 1985 Jobs was fired from Apple, partly due to his notoriously difficult management style. In one of the most remarkable "second acts" in business history, he returned to Apple in 1997.

Apple Macintosh, 1984
Photo: © Mark
Richards

In the decade Jobs was away, Apple had lost it way and was losing money at a catastrophic rate. Its product line was bloated and confusing, while its marketing proved ineffective. Microsoft's Windows and its applications, which had become the de facto standard for personal computing worldwide, had long since eclipsed Apple's innovations in user interfaces and software. To make matters worse, Apple seemingly had no strategy for capitalizing on the Internet, which was exploding as a massive force in home and business computing.

Jobs quickly sought new financing, terminated languishing projects, fired hundreds of people, and focused the company on a desktop computer and a laptop computer that would appeal to professionals and general consumers. The first desktop computer from the new Jobs era was the iMac in 1998. Ultimately available in several vibrant colors, the iMac emphasized connection to the Internet and—Jobs' mantra—simplicity. Out of the box, the iMac could connect to the Internet in just two easy steps. "There is no Step 3," Apple claimed. The iMac and its distinctive design also marked the first tangible collaboration between Jobs and Jonathan Ive, the British-born designer with whom Jobs would form a legendary partnership.

Innovations came in rapid-fire succession. In 2001 Apple introduced OS X, the new operating system for the Mac platform, marking a total redesign of the Mac operating system from the ground up.



Jobs with the original iMac, 1998
© Apple Inc./Moshe Brakha

That same year Apple opened its first retail store, in Tysons Corner, Virginia. It was a daring step at a time when computer companies had long abandoned their own branded retail outlets in favor of "big box" electronic superstores and online retailers. In an Apple store, products were stylishly arranged for direct use by customers in a minimalist, laboratory-like zone of utilitarian consumerism. A "Genius Bar," staffed by Apple experts, solved customer problems in-store.

The most momentous event of 2001, however, was the introduction of the iPod digital music player. Although not a new idea, Apple's take on the device featured an easy-to-use interface and, thanks to new miniaturized hard drive technology, a prodigious amount of music storage. Jobs announced the iPod with the slogan "1,000 songs in your pocket." Music was sync'd to the iPod through the iTunes software application, another Apple innovation. As of October 2014, more than 400 million iPods had been sold worldwide.

iPod Evaluation and Test Prototype, 2001
Photo: © Mark Richards

In 2003 Jobs introduced an even more radical innovation: the iTunes store and music management system. Jobs convinced powerful and deeply skeptical music company executives that, together, the iPod and iTunes represented a legitimate and profitable alternative to music piracy, which was then rampant. In exchange, Jobs won a revolutionary concession from the music industry: a flat-rate pricing of 99 cents per downloaded song. The iTunes concept revolutionized the retail music industry and sounded the death knell for brick-and-mortar record stores. As of February 2013, the iTunes music store had sold more than 25 billion songs.

The iPod marked a turning point in Apple's strategy. Jobs sought to move Apple beyond computers and into consumer devices. It was a bold gamble but the success of the iPod and iTunes ecosystem showed that the strategy could win on two levels: it eroded traditional industry structures and it catapulted Apple into a widely recognized global consumer brand.

Formally recognizing that Apple had become more than a computer company at the 2007 Macworld trade show, Jobs announced that Apple would drop the word "Computer" from its name and become simply "Apple Inc." Jobs also saved the customary "one more thing" portion of his presentation for a blockbuster announcement, the iPhone. He described it as nothing less than the reinvention of the telephone: a combination "widescreen iPod with touch controls," a "revolutionary mobile phone," and a "breakthrough Internet communicator."

When the iPhone went on sale, thousands of people worldwide waited patiently outside Apple stores, sometimes for days, to be one of the first to own one. Like the iPod before it, the iPhone sold briskly and transformed another industry (telephones) by making the smartphone an established category of "must-have" devices, for everyone from teenagers to business executives. The iPhone was a computer at its core: like the iPod, it ran on Apple's iOS operating system. Also like the iPod, users downloaded apps (applications) from the iTunes App Store, launched in July 2008. By October 2014, more than 85 billion apps had been downloaded.

Apple's last revolutionary product before Steve Jobs passed away on October 5, 2011, was the iPad, a tablet computer optimized for media consumption, quick emails, and web browsing. Like the previous iPod and iPhone, the iPad pioneered a new set of experiences and possibilities for users. Within a year of launch, software developers had created more than 100,000 apps for the device, ranging from navigation aids to cameras to wildly popular games.

One of the visions articulated by Jobs was to create an ecosystem in which Apple products could thrive. The iTunes and App Store are thus as critical to the success of these devices (and Apple) as the devices themselves, establishing Apple not simply as a brilliantly innovative product company but also as a massive-scale global content distribution company.

On August 21, 2012, Apple became the most valuable company in history, with a market capitalization of $620 billion. The company's story touches upon many aspects of the American dream: its humble origins, the "wilderness years" when Jobs sought to find his next great project (as well as himself), his triumphant return, and the new frontiers Jobs and Apple explored and then settled. Over its history, Apple has persisted, surviving near-death experiences, changing market conditions, constantly changing technology, and stiff competition. Ultimately, it focused on a strategy of combining high-end consumer devices with groundbreaking software and a built-in e-commerce ecosystem.

Despite Jobs no longer being at Apple, the company continues to innovate, highlighting Apple's world-class technical and design talent accumulated and honed over many years. As Jobs himself remarked, "My model for business is The Beatles. They were four guys who kept each other's kind of negative tendencies in check. They balanced each other and the total was greater than the sum of the parts. That's how I see business: great things in business are never done by one person; they're done by a team of people."

iPhone, 2007
Photo: © Mark Richards