

Family background

Steve Jobs was born on February 24, 1955, in the city of San Francisco. His biological mother was an unwed graduate student (and his biological father is said to be a political science or mathematics professor, maybe of Middle-Western descent -but this has never been confirmed).

Back in the 50s, it was unconceivable for such a young woman to raise a child on her own, so she decided to put her little baby boy up for adoption. But she insisted that the adoptive parents had to be college graduates, just like she was... This was not the case of Paul and Clara Jobs, but Steve's biological mother finally relented to let them her child after they promised he would be sent to college.

Paul Jobs was a midwestern farmer's son who had settled in the Bay Area after his war service in the USCG and married Clara in 1946. The couple decided to name their adopted child Steven Paul Jobs. Steve's younger sister, Patty, was adopted 3 years later.

Childhood & Teenage years

Steve was very bored in school. By his own words:

"I was pretty bored in school and turned into a little terror"
(Playboy Interview with David Sheff, February 1985)

But this would soon change thanks to his 4th grade teacher, Imogene "Teddy" Hill. Steve would later say about her:

"She was one of the saints of my life. She taught an advanced fourth grade class, and it took her about a month to get hip to my situation. She bribed me into learning."

His skills became so apparent that the school allowed him to skip 5th grade and go straight to middle school. The problem was, the Crittenden middle school was not a nice place to be around. Steve, who felt left behind in the ambient chaos, insisted that his parents moved him to another school the next year, otherwise he would refuse to go to school altogether. The 11-year old's thoughtful parents bowed and moved to Los Altos in 1967, so that Steve could attend the much cozier Cupertino Junior High School.

This move is worth noting because the city of Los Altos, as well as the neighboring towns of Cupertino and Sunnyvale, distinguished themselves by the great number of engineer's garages they hosted.

A little history here. In 1957, the launch of Sputnik I by the Soviet Union rushed the US into what would later be known as the space race. Federal money was poured in the emerging electronics industry which can roughly be traced back to the invention of the transistor for which William Shockley (as well as Walter Brattain and John Bardeen) obtained the Nobel Prize for Physics in 1956. It just so happens, Shockley set up the Shockley Semiconductor company in the Santa Clara County, 30 miles south of San Francisco,

thus making it the world center of electronics research. The area was soon filled with engineers and young companies started to appear in their garages. Such was the case of Hewlett-Packard.

HP engineers played a major role in Steve's life, as they were the ones who introduced the youngster to the world of electronics. This would become his #1 hobby as he would enter Homestead High the following year. At Homestead, he attended his first electronics class and befriended Bill Fernandez, who shared his passion for electronics. Fernandez happened to know an electronics whiz, 5 years older than Steve Jobs, whose name was Steve Wozniak, but that everybody called "Woz".

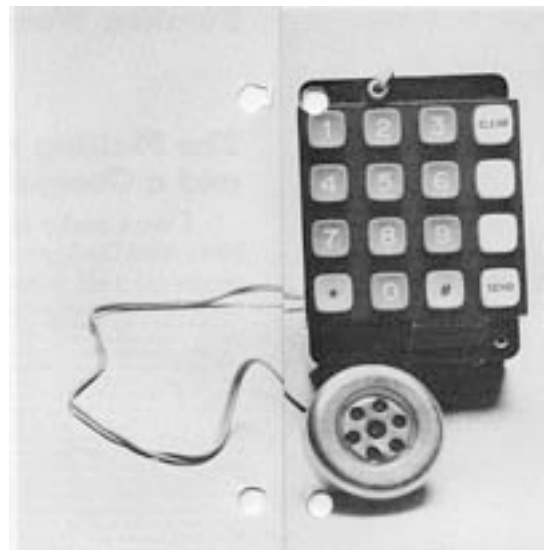


14-year old Steven Paul Jobs

Bill Fernandez and Woz, despite their differences of age, had bonded together because they were working on a project of building their own computer with spare electronics parts, which they called the "flair pen & cream soda computer". They were so good at it that a local reporter from the San Jose Mercury News came to Bill's garage to interview them. Anyway, Steve took interest in the project and Bill introduced the 14-year-old Steve to his 18-year-old friend. Although they met in 1969, a real friendship between Steve and Woz started developing a couple of years later, when Woz became a renowned figure in the small world of "phone phreaks". These were a primal form of hackers who had found out a way to fool AT&T's long-distance switching equipment, thus providing a way to make international calls for free. The hardware they used to do so was known as "blue boxes". Woz's blue boxes were the best ones around, and it fascinated 17-year-old Steve. He soon convinced his friend they should sell the boxes, and they did so for a few months (the price varying from \$150 to \$300) before it started to become too illegal to be safe.



19-year old Steve Jobs



A blue box

After Steve finished high school, his parents, true to their words, asked him to pick a college. Steve chose Reed College in Oregon... Paul and Clara were dismayed: although a renowned liberal arts college, Reed was very far from home, and one of the most expensive institution in America. But Steve refusing to go anywhere else, all of their savings were spent in his tuition.

After a few months spent at Reed, young Steve appeared to be much more interested in the elimination of mucus and the path to a higher awareness through Eastern mysticism than his Physics & English Literature classes. His grades were extremely poor. Here's what he said about it some 32 years later:

"After six months, I couldn't see the value in it. I had no idea what I wanted to do with my life and no idea how college was going to help me figure it out. And here I was spending all of the money my parents had saved their entire life. So I decided to drop out and trust that it would all work out OK. It was pretty scary at the time, but looking back it was one of the best decisions I ever made. The minute I dropped out I could stop taking the required classes that didn't interest me, and begin dropping in on the ones that looked interesting.

It wasn't all romantic. I didn't have a dorm room, so I slept on the floor in friends' rooms, I returned coke bottles for the 5¢ deposits to buy food with, and I would walk the 7 miles across town every Sunday night to get one good meal a week at the Hare Krishna temple. I loved it."
(Stanford Commencement Address, 12 June 2005)

Steve kept on hanging around Reed campus the following year as well, and it wasn't before 1974 that he got his first job at a young video game company called Atari. He was hired despite his neglected look and bad smell because Atari was growing fast and be-

cause it was Silicon Valley, but, after a while, he was only allowed to work by night so he wouldn't bother his fellow colleagues.

One day, he came to see his boss at Atari, Al Alcorn, and asked him for money to go make a spiritual journey in India. Alcorn agreed (only in exchange of a little rewiring work for him to do in Germany). So in the summer of 1974, Steve left with one of his best friends from Reed, Dan Kottke. But after a month spent in the midst of poverty, visiting guru after guru without finding any spiritual enlightenment, Steve and Dan's opinion about the search for truth had changed quite a bit.

"We weren't going to find a place where we could go for a month to be enlightened. It was one of the first times that I started to realize that maybe Thomas Edison did a lot more to improve the world than Karl Marx and Neem Kairolie Baba put together."
(quoted in Michael Moritz's "The Little Kingdom")

After his return from India, Steve started working for Atari again and renewed his interest in electronics (which did not prevent him from frequenting the Los Altos Zen Center and spending time in the All-One Farm in Oregon where his hippie friends from Reed lived). He started to be more and more interested in Woz's progress on a new computer design.

Apple's first years

Indeed, at the time, Woz was starting to become a respected member of the Homebrew Computer club, a computer hobbyist group that belonged to the "Free University Movement". The club, whose popularity was rapidly increasing, gathered twice a week at the Stanford Linear Accelerator Center auditorium. Its members were mostly passionate engineers who came to show off their latest achievement and share tips and information about computer kits, programming language and the design of what, after all, would soon be considered as the first personal computers.

Steve's own interest in computer design was limited, but he quickly understood that his friend's current project was an amazing feat of engineering. He started to get involved and after a few months, he convinced Woz to found a company to sell his computer to other hobbyists. He had understood that there were hundreds of software hobbyists out there, who, unlike Woz, were not interested in building a machine, but rather in using it for programming.

So, on April 1, 1976, Apple was born. The name "Apple Computer" was chosen because they hadn't found anything better and because it was Steve's favorite food at the time (he was a fruitarian). Jobs and Wozniak got each a share of 45% while the remaining 10% went to Ron Wayne, an Atari engineer who had given an hand to the duo. The original capital was quite modest: Steve had come up with \$500 by selling his Volkswagen while Woz had brought another \$500 by selling his HP calculator.



Stephen Wozniak and Steve Jobs in 1976

While the introduction of the Apple I to the Homebrew Computer Club went practically unnoticed, Apple Computer made its first sale a few weeks later: Paul Terrel, who has just founded a new chain of computer stores called the Byte shop, wanted to buy apples. He said he would buy 50 of them at \$500 each, cash on delivery. That was worth \$25000!

“Nothing in the subsequent years was so great and so unexpected”

Wozniak said as he recalled the event.

While the first Apples were made of just a circuit board, which wasn't exactly the idea that Terrel had of a computer, the following models, which were all assembled in Apple's first headquarters, the Jobses' famous garage, were delivered in a wooden box as followed:



An Apple I computer



Apple's first logo, designed by Ron Wayne

It was also that year that Woz started working on the design of the Apple II. The Apple II was a real breakthrough in personal computer design: among other things, its operating system would load automatically and it didn't require a fan (Jobs hated fans) because of a revolutionary new type of power supply - but, most of all, it could do a lot more than its rivals with an incredibly lower number of components, thanks to Woz's genius.

The first working mock-up of Apple II was ready for Apple's first public appearance at the Personal Computer Festival of Atlantic City in Summer '76. The Apple booth at that show, consisting of a card table with the entire product line (the Apple II mockup and an Apple I circuit) in front of yellow curtains, was far from impressive compared to the enormous setups of MITS, on which everyone's attention was focused (MITS had produced the first personal computer kit ever, Ed Roberts' Altair). Steve realized two things at that show: the importance of first impression and the fact that to succeed, the Apple II had to be a self-contained device, nothing like a computer kit.



Woz, Steve and Dan Kottke at the Personal Computer Festival in Summer '76

In late 1976, Steve decided Apple had to hire a PR agency to take care of its advertising. He turned to one of the most regarded advertising agency of the Valley, which was run by Regis McKenna (it had just released Intel's popular advertising campaign). Although he had first turned him down, thanks to Steve's sheer force of persuasion, McKenna finally accepted to work for Apple. One of their first decision was to advertise in Playboy magazine. But they quickly realized that to do so, Apple would need more capital.



Steve Jobs with Mike Markkula in 1977

So after a couple of investors suggested by McKenna who turned them down, they finally found their savior in the person of Mike Markkula. Markkula was a retired Intel executive who had plenty of money to spend and was very interested in the emerging market of personal computers. When he saw Steve's enthusiasm and after Woz had demonstrated the Apple II to him, he decided Apple was a good place to invest in. He drew up Apple's first business plan and the deal was signed at his home on January 3, 1977. Part of the plan was the hiring of a new president for the company, one of Mike Markkula's acquaintance, an executive from National Semiconductor called Mike Scott, as well as Woz's full commitment to the company by the resignation from his job at HP.

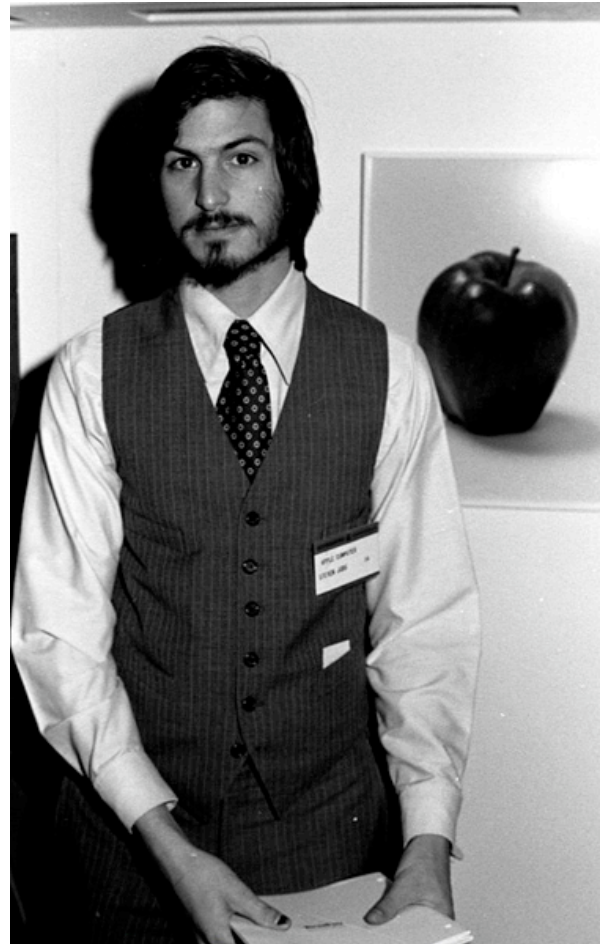


Regis McKenna and Steve (in 1984)

One of the first decisions of the company was to make an impressive contribution to the first West Coast Computer Faire that would take place in April 77. And it worked: Markkula spent \$5000 on the booth design on which was displayed Apple's brand new, stylish logo and an impressive lineup of three Apple II in their plastic cases (which were in fact the three only Apple IIs that had ever been built). Steve bought his first suit for the occasion.



The West Coast Computer Faire



Steve Jobs in his first suit

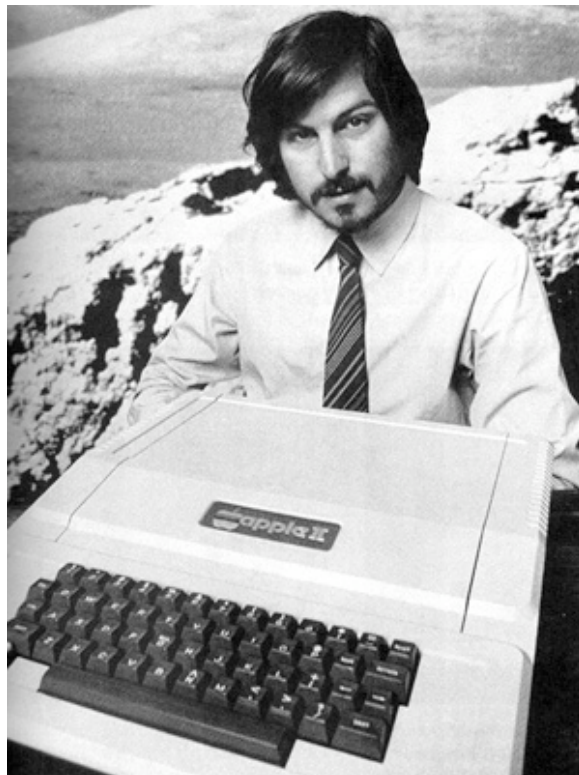
Early success

Apple's presence at the West Coast Computer Faire was a great success. The company received 300 orders for Apple IIs on the show, twice as much as the total number of Apple Is sold. This was only the beginning.

By January of 1978, Apple was valued \$3,000,000. The Board of Directors had been extended to new investors: in addition to Markkula (who had originally invested \$250,000), there were the renowned venture capitalists arthur Rock (\$57,600), Don Valentine (\$150,000), and the Venrock firm (the venture capitalism agency of the Rockefeller family), which had put in \$288,000.

When the first disk drive for the Apple II became available in early 1978, allowing wanna-be programmers and amateur hackers to write software for the computer that would work at a reasonable speed and could be transferred easily from machine to machine, the number of programs available quickly increased. This, combined to the many advantageous features of the Apple II's revolutionary design, quickly made the computer the gold standard of personal computers.

Although there were some tensions between Steve Jobs and Apple's president Mike Scott, the overall atmosphere at the company was euphoric. Work on the Apple III started to begin in late 1978. Sales of the Apple II went through the roof: 2,500 were sold in 1977, 8,000 in 1978 and up to 35,000 in 1979, producing \$47 million in revenue for the 2-year old company. Apple became the company of personal computers. In fact, there were no personal computers on the market other than the Apple II. One of the key factors to its success was, surprisingly for Steve and Apple, the education market, because it allowed the teaching of the BASIC language. Steve had not foreseen this but he would remember it later. Another thing which destroyed the competition was the introduction of VisiCalc in the fall of 1979, the first spreadsheet for personal computers ever. It remained available exclusively on the Apple II for another year, and made Apple the king of personal computing until IBM entered the market in 1981.



Steve Jobs posing with an Apple II in 1979

It is around that period that Steve started to change. His personality changed as he metamorphosed into a businessman. He was no longer a frequent visitor at the Los Altos Zen Center and he started to polish his appearance and occasionally wear suits. It must be mentioned that at the age 24, he had become a millionaire, thanks to Apple's sales of \$7 million in private stocks, including \$1,050,000 from the Xerox Corporation.

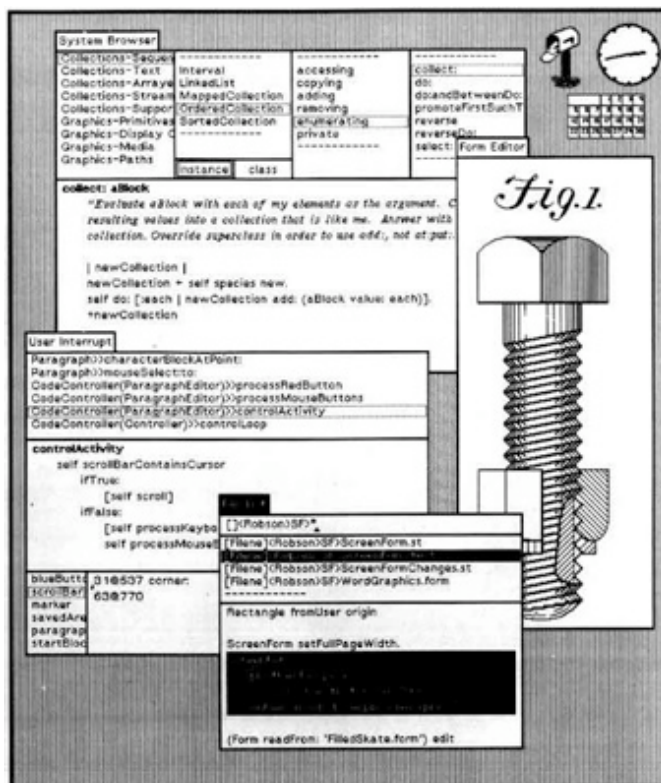
Lisa

In early 1979, Steve decided he would launch his own distinctive project, a computer whose success, unlike the Apple II, could not be attributed to Woz's great talent. He decided to call it the LISA. The name that Steve chose was not innocent: it was the name he and his former girlfriend Chris-Ann Brennan had picked one year earlier for the daughter he would not recognize as his own before a few more years.

In December of that same year, Apple was allowed to make a visit that changed Steve's life and the future of computing as well. In return of the investment agreement with Xerox, a little team from Apple including Steve and a few programmers like Bill Atkinson and Rich Page, as well as the head of the Lisa Project John Couch, would be given a tour of the Xerox's PARC (Palo Alto Research Center).

The PARC was at the time the Land of Oz of computer development. The researchers working there had invented what would change the experience of computing forever: the Graphical User Interface (GUI), and the mouse (as well as Ethernet, the laser printer and a few more amazing achievements).

The GUI basically is the metaphor of the desktop applied to computing. It is at PARC that the concepts of point-&-click, nested folders filled with files, windows with elevators, copy-&-paste were invented, and actually implemented in a fully working computer environment, SmallTalk, which ran on a prototype Xerox Alto computer.



Xerox's Alto & its GUI, the SmallTalk system

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The biggest problem at the PARC was not developing new technology, it was to convince Xerox's heads on the East Coast that what they were doing was a revolution in the making. The problem is, they never believed in that vision, and the researchers remained frustrated that their talent was not recognized. There was also a big problem of pricing: the price tag of the Alto was around \$10,000!

What was going on at the PARC was not entirely secret, as there were many professors from the Stanford campus -on which the building was located- who had been given a similar tour, and articles about the GUI had been written in the specialized press, but the tour given to Apple that day was of major importance for at least 2 reasons:

1) it proved Apple's engineers, Bill Atkinson in particular, that their dreams about "a more graphical way to do things" could be materialized; it inspired them in letting them think that making a GUI work was actually possible.

2) it attracted Steve's attention to the GUI. It was like a bolt of lightning to him, and what made the difference with Xerox's stubborn executives. He would later say about it:

"Within 10 minutes, it was obvious to me that all computers would work like this someday."

(from "Triumph of the Nerds")

He decided that this was the way to go for Apple, or more precisely, for the Lisa project. 100 engineers were hired for the project alone, but everything didn't go as smoothly as planned. To begin with, there were big tensions between Apple's three divisions: the Apple II group, which was considered an uncreative group, the Apple III group, which was still working on a project that had been launched in late '78, and finally the superior Lisa group. Plus, the list of features that were to be added to the Lisa was growing so fast that the original goal of a \$2,000 office computer was completely forgotten. Lisa's price tag was nearing \$10,000, as expensive as the Alto!



Decisions were taken at the top (by Markkula and Mike Scott); Apple was completely re-organized into three new divisions: the Accessories division, the Professional Office Systems (POS) division -which of course would include the Lisa project- and the Personal Computer Systems division. Steve was aiming at the title of VP R&D of the POS, which would have given him total control of Lisa. Instead, this became the responsibility of John Couch, who was head of the Lisa project. Steve was given the title of Chairman of the Board.

*Steve Jobs and John Couch
in 1983*



The Wall Street Journal's advertising campaign that made Steve famous

This title was justified by Steve's incredible charisma and the fact that the media loved him (he had also started to be known by the general public because of a series of ads that had been published the same year in the Wall Street Journal).

This public image would be useful for the upcoming public stock offering of the company. And indeed, on December 12, 1980, Apple went public with a success no company had experienced since Ford's own IPO in the 50s. Steve, who owned \$7.5 million of Apple stocks, was worth \$217.5 million by the end of the day. He became one of the richest self-made men in America.



Steve and Woz on the day they both became centimillionaires in December '80

Macintosh

However Steve refused to spend the rest of his life playing the role of the successful young entrepreneur. He wanted to be involved in the development of Apple's future products. And he was worried that the Lisa, with all the bureaucracy that came with it, would not be as great a computer as he had envisioned. Apple, whose workforce by then was over 1,000, had shown its limits with the introduction of the Apple III that took place with great fanfare in the summer of 1980 at Disneyland - but the computer turned out to have major design flaws and the first 14,000 models had to be returned to the company.

So Steve decided he wanted to run the Macintosh project. The Macintosh project was born out of the imagination of Jef Raskin. One of Apple's earliest employees (#31), Raskin had written the manuals for the Apple II.



Jef Raskin

He wanted the Macintosh to be a personal computer “as easy to use as a toaster”. He had picked the name Macintosh because it was the name of his favorite apple (which in fact is spelled McIntosh).

Steve had major disagreements with Raskin on how Macintosh should evolve. The latter wanted Macintosh to be very inexpensive, at a building cost of \$300, whereas Steve wanted it to be like a cheaper Lisa, keeping all its great features like the GUI. In order for these features to be implemented, the Macintosh would have to be based around the 32-bit Motorola 68000 chip. Raskin disagreed - and therefore, by early 1981, Steve took over the project.

He extended the team which was composed of hardware genius Burrell Smith and programmer Bud Tribble (and a couple more engineers) with new brains like Rod Holt, Randy Wigginton, Bill Atkinson, Andy Hertzfeld. Other members like programmer Steve Capps, marketing adviser Mike Murray and icon artist Susan Kare would jump in the boat

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later on. The idea was that this small, nonconformist group was going to save Apple with the Mac. This feeling of holy mission was reinforced when, in Summer '81, a major competitor to Apple entered the personal computer market: IBM.

“It is coming down to Apple and IBM. If, for some reason, we make some big mistake and IBM wins, my personal feeling is that we are going to enter a computer Dark Ages for about 20 years. Once IBM gains control of a market sector, they always stop innovation -they prevent innovation from happening.”

(Playboy Interview with David Sheff, February 1985)



Steve in front of IBM's headquarters...

In late 1981, Steve convinced the Apple Board to give him full control of what would now be considered as one of the most important project for the future of Apple Computer: Macintosh. After all, Apple's revenues at the time came only from the Apple II and its licensed software, and despite its evident superiority to the IBM PC, the name of IBM was so trusted in business that it quickly became a standard. “You can't be fired for buying an IBM” was the motto in most companies' IT department.

The Mac team quickly became isolated from the rest of the company. They saw themselves as “Pirates” - whereas the rest of the company was dubbed “the Navy”. They even decorated their offices on Bandley Drive 3 with a pirate flag:

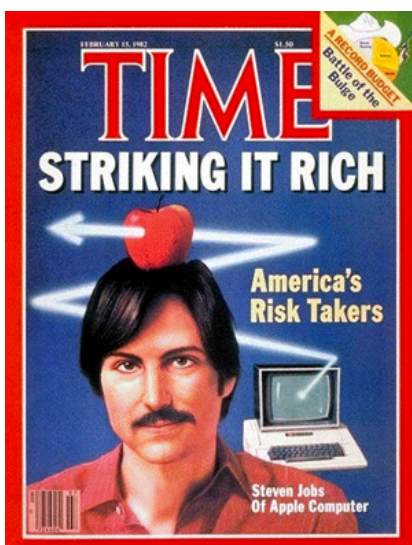


Steve Jobs with the Mac team (left) and with Apple's CEO John Sculley (right) in front of the Pirate flag - and the Bosendorfer piano - in 1984

This spirit of independence was Steve's will: he wanted to recreate the atmosphere of the early days at the garage, to protect the Mac team from being corrupted by the ambient bureaucratic atmosphere. It was not easy joining the Mac team: one had to pass a series of tests like whether you could compete with Andy Hertzfeld or Burrell Smith on video games, whether you could eat pineapple pizza and answering questions from Steve like “How many times have you taken acid?” or “When did you lose your virginity?”... Mac team members could easily be identified with their characteristic T-shirts sporting slogans like “Working 90 hours a week and loving it” or “Let's be pirates!”.

There was also a major event in Steve's career that year, that would propel him even further into the public eye: he made the cover of Time magazine in February 1982. Actually, there would be a controversy with the same magazine by the end of the year.

The magazine originally contemplated giving Steve the title of “Man of the Year 1982”, but they changed their mind after they read the piece their local correspondent (Michael Moritz) had written about him. Instead, it was the Personal Computer which was named “Machine of the year”. Called “The Updated Book of Jobs”, the journalist's article about the current development of Mac featured criticism about Steve's tough managerial style and personality, as well as condemnatory quotes from his long-time friend Bill Fernandez and even Woz. Steve felt betrayed: he had given Michael Moritz *carte blanche* at Apple for his story. From this day on, he remained suspicious of journalists.

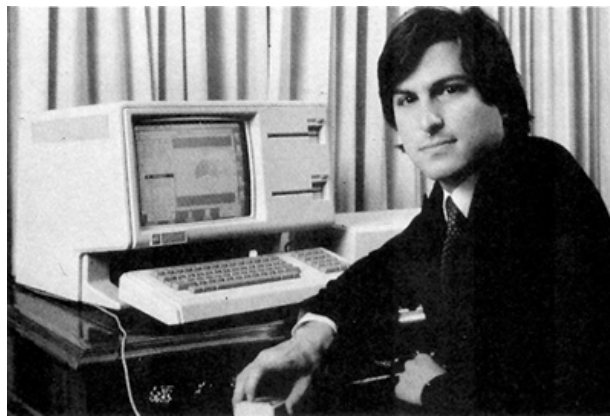


Steve Jobs on the cover of Time in February 1982

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The rumor mill got pretty active in 1982, as Steve kept calling in developers for building programs for the Mac so that would be plenty of software available when it would be introduced. That's about the time when they made a deal with Bill Gate's Microsoft - who also started the work on Windows, an IBM-compatible sort of GUI which Steve considered an out-and-out theft from the Mac. His paranoia would prove justified - however, Windows in those days was 10 years behind Mac technology.

In January 1983, Steve headed for the East Coast for the official launch of Lisa. Although the critical response was quite encouraging - after all, the Lisa was the first commercially available computer with a GUI - there were two major problems with this introduction. First, Steve couldn't help himself talking about his baby in the making, Macintosh, which was going to get all the great features and software of the Lisa, but with a much lower price (\$2,000 instead of \$10,000). Secondly, he had to confess Lisa and Mac would not be compatible. Each ran a different operating system! Basically, the result was that Macintosh cannibalized Lisa sales even before it was introduced! This fragmented product strategy was a disaster for Apple.



Steve Jobs promoting Lisa in 1983

While he was promoting the Lisa in Manhattan, Steve Jobs met Pepsi CEO John Sculley. Steve was so compelling that a few months later, he convinced Sculley to join Apple and become the new company's president. Indeed, the company had gotten rid of Mike Scott a few months earlier because of his mass firings on February 25, 1981 - known as Black Wednesday. The phrase Steve used to convince Sculley to join his 6 year-old company is now legend:

“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?”

(quoted from "Triumph of the Nerds")



With John Sculley in 1984

There were changes in the Mac team as well. After the failure of both the Apple III and Lisa, all the company's eyes were turned to Steve's project. The team had lost its innocence of the first days and grown to a much larger division. The new members learned to deal with Steve's mercurial management style and all that came with it - including the so-called *Reality Distortion Field* - an expression still used today to describe his legendary charisma and his ability to make you buy into whatever he's talking about (for more, please read Mac stories from Andy Hertzfeld's Folklore.org [here](#) and [here](#)). There were also increasing tensions between the Mac group and the rest of the company (Steve called the Apple II group the "dull and boring product division").

Then came the time of the Macintosh introduction. After many delays, the date of January 24, 1984, Apple's annual shareholders meeting, had finally been chosen. Sculley approved a \$15 million campaign for the launch, including a TV ad that aired during the Super Bowl game, that is often considered one of the best commercials of the 20th century. Directed by Academy-award winner Ridley Scott, it pictured Macintosh as the savior from an 1984 Orwellian society where the figure of Big Brother represented, of course, Big Blue itself (see the **Media Gallery** for that video). The show was a huge success. And a personal triumph for Steve, who was called a father-figure by Mac itself while it pronounced his first words in public (again, you are invited to download a video of this presentation in the **Media** section). As he came off stage, Steve called it "the proudest, happiest moment of my life".



Steve on January 24, 1984

Coming off stage with John Sculley

During the presentation, Steve talked about the \$20 million high-tech factory that would build Macintosh - it was set up in Fremont, CA (overlooking Ford and GM) - and unveiled the *Apple University Consortium* plan. It was a plan Apple had made up in order to sell as many Macs as possible to one of its most significant markets, higher education. Apple salesmen, one of the most successful ones being Dan'l Lewin, had convinced the most prestigious universities in America (most from the Ivy League) to become Apple dealers themselves, i.e. to sell Macs directly to students via their own computer stores. Every university that had joined the Consortium was committed to buy \$2 million of Macs for resale to students over a 3-year period. One year later, higher education would turn out to be the only market where Mac would be successful:

“I could ship every Macintosh we make this year just to those 24 colleges”
(*Playboy Interview with David Sheff, February 1985*)

Although this is an overstatement, it is true that in 1985, the Mac-IBM PC ration on US campuses went from 15-to-1 to 40-to-1! The Macintosh had become a cult object for students.

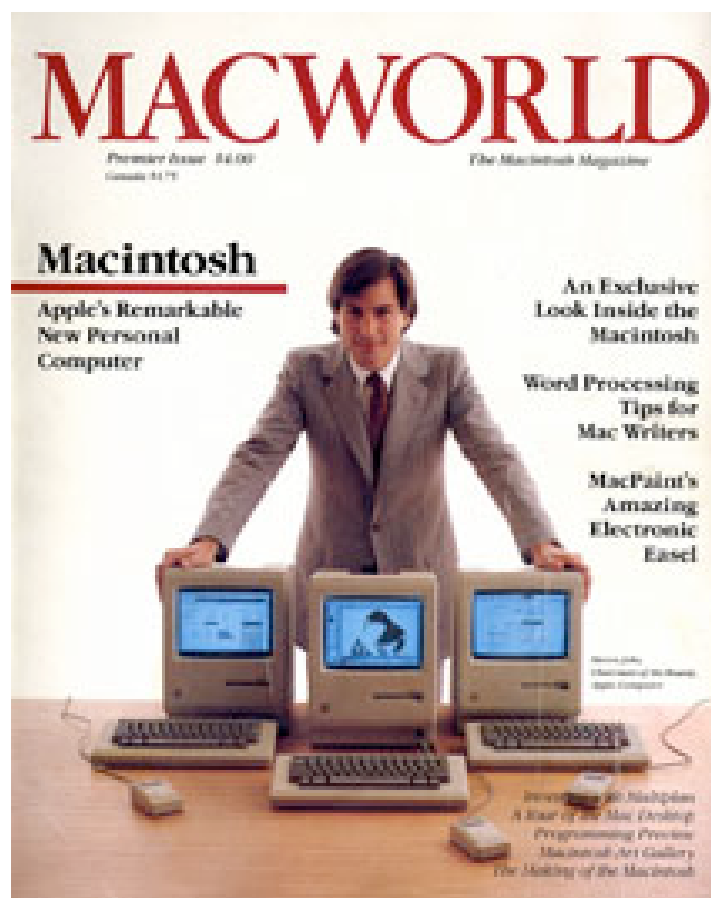
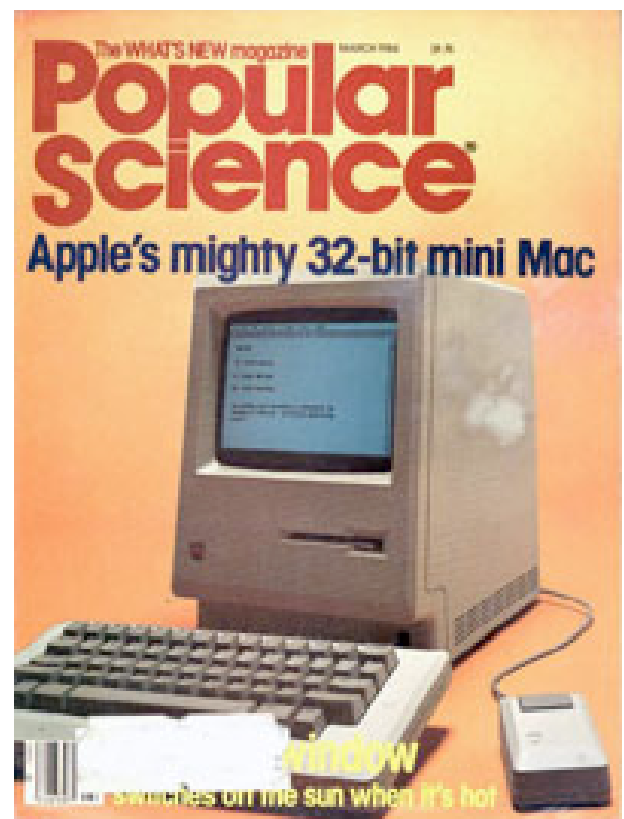
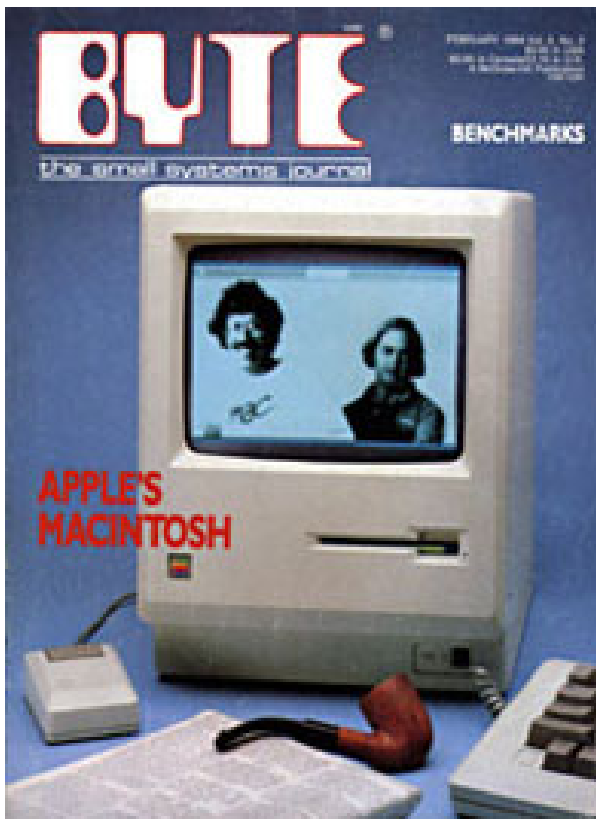
There was an enormous media hype around the Mac introduction. Throughout the months of January and February 1984, Steve gave more than 200 interviews and posed for countless photos. The Mac itself made the cover of 20 magazines. The world kept hearing about the “insanely great computer” and the dynamic Sculley-Jobs duo which was seen as a model for future corporate America. Unlike Lisa, there was also a great emphasis on selected members of the Mac team who were considered key players. These were Burrell Smith and George Crow (hardware), Andy Hertzfeld and Bill Atkinson (software), Mike Murray (marketing), and Susan Kare (computer artist). There was controversy about the choice of some of these people, especially Kare who had been on the team only for six months. But Steve had made his decision.



Left: *Steve and Mac in '84*

Right: *Part of the Mac team*

From left to right: George Crow, Joanna Hoffman, Burrell Smith, Andy Hertzfeld, Bill Atkinson and Jerry Mannock



Turning point

Unfortunately, things didn't go as smoothly as planned.

The first figures of Mac sales looked very promising - as much as 70,000 Macs were sold in its first 100 days. John Sculley then made the decision that Steve would from then on be responsible for a new division, the 32-bit division, that resulted from the merger of the Mac and the Lisa divisions (both computers used a 32-bit processor, which was revolutionary at the time). However, the differences of treatment he kept making between the former Lisa group and the Mac group hurt the company. The Mac people felt they were being underpaid, while the Lisa people were jealous of the Mac team's perks like the 1st class flying tickets or the piano and motorcycle in their building (which were both gifts from Steve bought with his own money). Not to mention the remaining Apple II division, whose product was still paying for all of this and which felt left behind.

In addition, after a few months, Apple saw the number of Macs sold start to plummet. The 750,000 sales for calendar year 1984 which Steve had predicted seemed completely unrealistic. To understand the stall in Mac sales, Steve commanded a massive market research test. What he found out was disastrous:

1) with its 64KB of ROM, 128KB of RAM and its single-sided disk drive, the Mac was simply too slow to support its demanding GUI and use software on a daily basis.

2) talking about software, there was almost none available! No developer had its product ready for the 1984 introduction. And the Mac, which was targeted at small businesses, missed the inevitable spreadsheet Lotus 1-2-3 which was already a standard at the time. People loved the Mac and its graphics but they simply refused to buy it because they didn't see what they could do with it.



3) maybe most important of all, studies of the "mystery shopper" (anonymous investigators asking about the Mac in computer stores to see how it was presented) showed that salespeople kept introducing the IBM PC and its 1000 software first, even if the shopper asked about the Mac.

Decisions were made to counter this: in Summer '84, a national sales force was created to "fire up" the retailers to defend the Mac; the head of marketing Mike Murray conceived a campaign to incite people to try a Mac, called *Test drive a Macintosh*. And a new set of products called *The Macintosh Office* was introduced. But none of this worked. Steve feared that the Mac was going to be a failure.

The company certainly couldn't afford it. As Steve saw it by then it was IBM's fault. And John Sculley's. He didn't understand the computer business!

There were also tensions between Steve and Woz. In February 1985, they both got the National Technology Medal from President Reagan but had trouble hiding their mutual dislike at the event. Then, a few weeks later, Woz officially quit the company and made some severe comments about how the company was being run. Their friendship was over for good.



*Steve shaking hands with President Reagan
as he is given the National Technology Medal*

The departure of Woz was the first in a series of massive defections from the company. Sculley got worried. Along with the disappointing Mac sales, this was a catastrophe for Apple. Both Sculley and Jobs got suspicious of one another. After a series of maneuvers involving marketing honcho Mike Murray and Apple France president Jean-Louis Gassée (who was regarded as the best possible successor to Steve as head of the Mac division), it all came to an end on Tuesday, May 28, 1985. Despite his attempts to convince board members, including Apple cofounder Mike Markkula, to support him and oust Sculley, Steve lost the final battle.

Every single board member voted his removal. In the reorganization plan that would be announced a few days later, there was absolutely no mention of his name.

“At 30 I was out. And very publicly out. What had been the focus of my entire adult life was gone, and it was devastating. I really didn't know what to do for a few months. I felt that I had let the previous generation of entrepreneurs down - that I had dropped the baton as it was being passed to me. I met with David Packard and Bob Noyce and tried to apologize for screwing up so badly. I was a very public failure, and I even thought about

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running away from the Valley.

(...) I didn't see it then, but it turned out that getting fired from Apple was the best thing that could have ever happened to me. The heaviness of being successful was replaced by the lightness of being a beginner again, less sure about everything. It freed me to enter one of the most creative periods of my life.

(...) I'm pretty sure none of this would have happened if I hadn't been fired from Apple. It was awful tasting medicine, but I guess the patient needed it."

(Stanford Commencement Address, 12 June 2005)

This was the beginning of one of the darkest period in Steve's life. He didn't know what would become of him. At Apple, Sculley had moved him to a remote office he nicknamed "Siberia". He felt like he had become an unappreciated pariah.

"There was nobody really there to miss me"

("Jobs talks about his Rise and Fall", Newsweek, September 1985)

So Steve went on vacation. He traveled to Paris, Tuscany, Sweden and Russia (still promoting the Macintosh Office). He asked NASA if he could ride the Space Shuttle - and was turned down.

The perfect company

Then, one day in early September, Steve had lunch with Nobel laureate and Stanford biochemist Paul Berg. Berg talked about his current research about DNA and Steve asked why the scientists didn't use computers to simulate DNA. According to Steve, this is how the idea of creating his next company, NeXT, occurred to him. He wanted to build a computer aimed exclusively at the higher education market.

A few days later (on September 13), he informed the Apple Board of Directors -of which he was still the Chairman- of his decision to form a new computer company. He would take a few "low-level" people from Apple with him and resign as Chairman of the Board. The target market being so specific, the company would not compete directly with Apple, so the Board congratulated Steve and expressed an interest of buying as much as 10% of his new venture.

Here are the people Steve chose to come with him:

Bud Tribble, who was one of the first programmer of the Mac (who was hired by Raskin)

Rich Page and George Crow, two hardware engineers

Dan'l Lewin, the successful *Apple University Consortium* salesman

Susan Barnes, a woman in finance

When Sculley heard these 5 names, he told Steve: "These are not low-level people!" Apple filed a suit against newborn NeXT, claiming that the computer it aimed to build was too close of Apple's own *Big Mac* project, about which its executives had a lot of information because of their former high responsibilities. The *Big Mac* was to be the 3M ma-



*NeXT's early founders
From left to right: Dan'l Lewin, Rich Page, Bud Tribble, Steve Jobs,
Susan Barnes and George Crow*

chine universities had expressed their desire to buy: a computer with 1MB of memory, a 1 megapixels display, and 1 megaflop of power (the ability to perform 1 million operations per second).

Steve fought back on September 17, 1985 by sending his resignation letter to a number of magazines and newspapers and hand-delivered it to Mike Markkula. He then invited the press at his newly-bought **Woodside mansion** and talked about the end of his involvement with Apple Computer. He said to them:

“My relationship with the company is like a first love. I’ll always remember Apple in the same way any man remembers the first woman he’s fallen in love with.”



Steve outside of his Woodside mansion on September 17, 1985

Apple's lawsuit against NeXT quickly turned out to be nonsense: first of all, Steve was being considered a worthless person at Apple. Why would he suddenly become a threat to the company once he left? Secondly, it was impossible for Sculley to charge him for "stealing Apple's confidential and proprietary information" and at the same time encourage him to "continue to bring innovation and creativity to the industry" as he claimed. And it was bad press for Apple to sue its own genitor. However it brought instant media attention to NeXT: if Apple was so afraid of a company that didn't even have a business plan yet, its future would certainly be very bright. As Steve put it:

"It is hard to think that a \$2 billion company with 4,300+ people couldn't compete with 6 people in blue jeans"
(*"Can Steve Jobs Do It Again?"*, NYT, September 1985)

The end of Apple's lawsuit allowed the NeXT adventure to really begin. First of all, as many observers pointed out, the birth of NeXT was quite different from the birth of Apple; Apple's first headquarters were the Jobses' garage. NeXT's first headquarters were Steve's huge (yet unfurnished) mansion. Steve decided that his new start-up company deserved the best in every way. His personal fortune and fame gave him the necessary power to build the perfect company - from scratch.

So four months after its creation, the company settled in one of the Valley's most expensive areas, the *Stanford University Industrial Park* (actually a stone's throw from Xerox PARC), and one of NeXT's first ten employees was a full-time interior designer who furnished the offices with glass walls, beautiful Ansel Adams prints and a common area with hardwood floors that included a kitchen with granite counter tops and a lounge with U-shape sofas that sat 12.



Steve sitting on a sofa inside NeXT's Palo Alto offices



Posing in front of an Ansel Adams print

Steve also decided to spend no less than \$100,000 to commission a logo from Paul Rand, a Yale professor considered one of the masters of design at the time. So, way before anyone had any idea what the NeXT computer would be like, the company got a logo as well as a lengthy pamphlet explaining the thoughts that went through the creator's mind when he drew it. It was Paul Rand who suggested NeXT, with a conspicuous lowercase e, instead of NEXT. News of the design was covered by the national media because everyone was extremely curious to know what the fascinating Steve Jobs was up to.



Paul Rand said the lowercase e could stand for
“education, excellence, expertise, exceptional, excitement, e=mc²”
The logo was said to *“brim with the informality, friendliness, and spontaneity of a Christmas seal and the authority of a rubber stamp”*.

NeXT also differed from other Silicon Valley companies by its original culture and the egalitarian ideal it pursued. It was more a community with members than a company with employees. Salaries were pegged to groups instead of people. NeXT's salary policy until 1986 was quite simple: the senior staff earned \$75,000 annually, and the rest of the company, \$50,000. In addition to standard services, employees were also provided with a health club membership, counseling services and emergency personal loans up to \$5,000.

NeXT's first ambition was to be and remain a small computer company. It was to be solely owned by its employees, located in small offices, and to design and build very few high-quality computers, all in the same area. However this ambition changed in 1987, when Steve realized he would never be treated seriously in the industry if NeXT remained small. He set up to build a billion-dollar company:

“Our smallest competitor is \$1.75 billion these days. (...) We have to get up to a certain level if we want to play in the sandbox”
(*“The Entrepreneur of the Decade”, Inc., April 89*)

What must be understood here is that Steve’s *Reality Distortion Field* never exercised its power as much as during NeXT’s genesis. Everyone wondered what revolutionary product the *wunderkind* was working on, and the secrecy policy was so strict that it remained so for three full years, until the NeXT computer was finally unveiled. And until that day, the machine was not the lure to attract new employees as much as Steve himself was. Accepting to go work for NeXT was considered a *leap of faith*, because you signed up for dedicating your entire life to a company, but without knowing exactly what you were going to work on. Steve Jobs used this extraordinary power to hire the best people. Just like at the time of the creation of Macintosh, prospective hires had to pass a series of test with an incredible number of people.

“You basically had to meet everyone in the entire company and they all had to give you the thumbs-up. It really felt like a fraternity. Everyone had to love you. So the feeling you got was that anyone who got through had to be ‘the best of the best’”
(*an early NeXT employee quoted in Alan Deutschman’s “The Second Coming of Steve Jobs”*)

There was also the pride of being part of a project to serve higher education, to build a computer with the noblest purpose.

The second major step in NeXT’s early history came from a movie. The two first company retreats (the first in Fall ’85 and the second in early ’86) was filmed in a documentary called “The Entrepreneurs” that was aired nationally in November ’86. On this movie, Steve and NeXT’s staff can be seen voicing concerns about the original deadline for the delivery of their computer - Spring ’87, when universities would be shopping around for the year 1988 - and reminding themselves of the message they got from colleges: they had to build a 3M computer for \$3,000. Multimillionaire H. Ross Perot, who had made its money from selling his own company, Electronic Data System (and would later be known for his unsuccessful run for the US presidency), happened to see the program and was mightily impressed by Steve’s fledging company. He made a call: “If you ever need an investor, call me”.

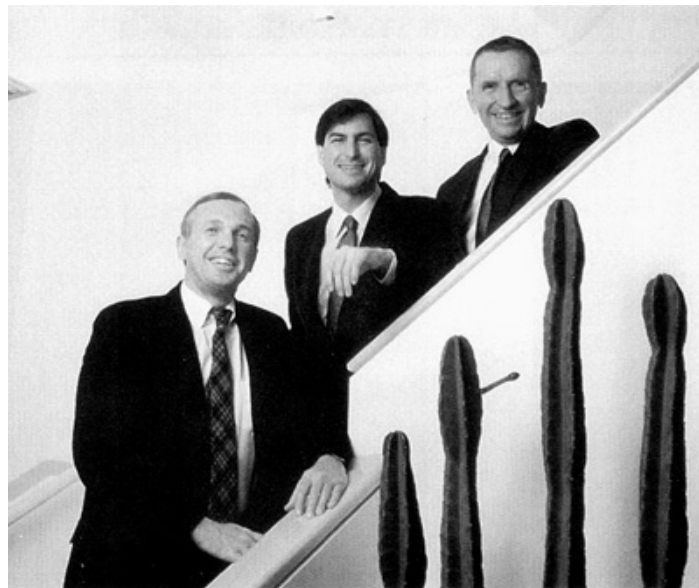


Steve Jobs and Ross Perot in 1987

When Perot made this call, NeXT just happened to have huge capital problems. It was still resting on Steve Jobs' original \$7 million investment, and was running out of money, but yet it was very far from shipping its product. So Steve had started to look for new investors, because he refused to keep on pouring money into the company: he had to share the risk with other people. And a company whose funds would come only from its founder wouldn't look very serious, would it? He had first been turned down by venture capitalists who estimated that his \$30 million valuation of NeXT, a company that had still to release its first product, was way too high.

One can clearly understand how much Perot was under the charm of Steve Jobs by simply acknowledging how much he accepted to value NeXT for: no less than \$100 million! That was more than 3 times the price tag venture capitalists had judged an overestimation (to Perot's credit, it must be pointed out that a few years earlier, he had refused to buy Microsoft - which in the meantime had already become a billion-dollar business).

Perot's investment convinced the prestigious universities of Stanford and Carnegie-Mellon to join in, and suddenly NeXT was valued at \$126 million, with 63% belonging to Steve Jobs. The Board of directors was constituted of only three men: Ross Perot, Pat Crecine - the administrator at Carnegie-Mellon University - and Steve himself. This was heaven for Steve because both men, though much older, were in awe of him and would let him do whatever he intended. This wasn't very good for NeXT's future however.



*NeXT's Board of Directors in 1988:
from left to right: Pat Crecine, Steve Jobs and Ross Perot*

Before switching to something else, it is important to mention a major episode of Steve's personal life. In 1986, he officially revealed he had discovered his biological family. Most important of all, he had found out that his parents married some 2 years after his birth, and that they had given birth to a girl. So Steve was happy to meet his natural sister Mona, who happened to be a writer. She had just published her first novel at that time, *Anywhere but Here* (which was later made into a movie featuring debuting actress

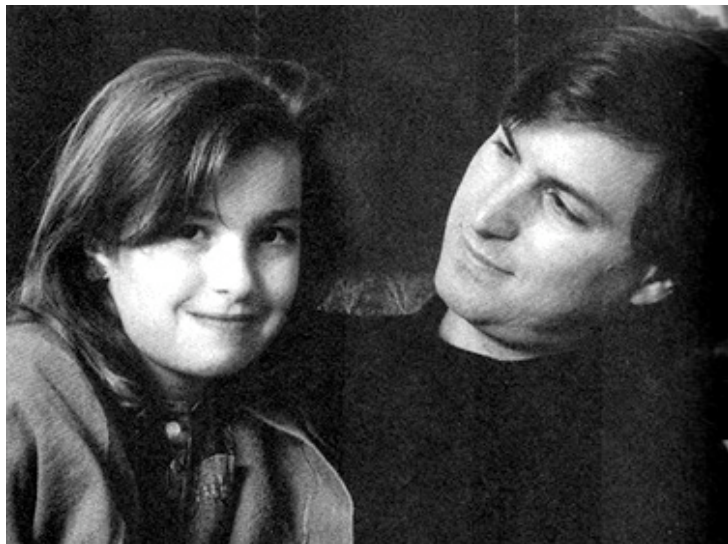
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Natalie Portman). Steve was incredibly proud of his sister's work, and he filled NeXT's bookshelves with free copies of her book.

He also started to spend time with his young daughter Lisa, and took her to NeXT's headquarters from time to time.



*Steve's biological sister,
Mona Simpson*



Steve and Lisa in 1989

The Cube

Progress on the NeXT computer was slow, for the good reason that Steve wanted his perfect company to build a perfect computer. And it wasn't just about the computer: its operating system, NeXTSTEP, was also a real breakthrough in computing. It was based on object-oriented programming, a revolutionary technology that had once again been invented at Xerox's PARC, which allowed programmers to write software in record time. But writing an easy-to-use and powerful OS using such technology, and from scratch, wasn't an easy task.

Steve's idea for the NeXT computer design was that of a cube. Not an approximate cube, a perfect cube whose edges would measure exactly one foot. He hired the design firm that had conceived Macintosh, frogdesign, to work out the details of the Cube's appearance.



The NeXT Cube

And indeed, the NeXT Cube was of striking elegance, yet the design choices had some terrible effects on its manufacturing as well as its production costs. The use of magnesium, the black color, even the shape of a cube with perfectly right angles were as much factors that led the manufacturing cost of the Cube to be ten times as high as originally expected.

Talking about manufacturing, one decision that Steve made and was very costly to the success of the NeXT computer was to build it in an in-house automated factory, the same way Apple had done it with Macintosh. Just like the computer it would produce, the factory had to be perfect: it had to be as fully automated as any factory in the world, and based on American soil (which was not to be disapproved by patriotic Ross Perot). Steve insisted that his computer would have to be manufactured “untouched by human hands”. In addition to the assurance of a high-quality product, in-house production was a way for him to make sure there would be no breach in NeXT’s secrecy policy - about which he cared more than anything. The NeXT factory was built in Fremont, the same town that hosted the Macintosh factory.



*Steve Jobs and Ross Perot in 1987
as they make plans for NeXT's new factory in Fremont, CA*

Finally, one of the NeXT Cube's major flaws was its storage technology. It used a magneto-optical drive, an unfinished technology being developed by Canon. Steve hated floppy disks, and he bet everything on this drive, by making it the only way to move data in and out of the Cube and to store data within. This would prove to be a very expensive choice.

The result of all this is that the Cube's unveiling date was constantly being put off, and its price was constantly climbing. By the fall of 1987, there was still no working prototype to be shown to the academic world, which was starting to get impatient. And the more it waited, the more it would be tough for NeXT to release a successful product: unlike the Macintosh's release in 1984, in 1988, most universities and students already owned a personal computer.

Right before the unveiling of the Cube, there were two major "sugar highs" in the history of NeXT, that made the company feel very self-confident about its future whereas it should have been worried in a big way. First, a deal was signed with Steve's former archrival, IBM, for a possible future licensing of NeXT's software, NeXTSTEP, for PCs (IBM had started to get concerned by Microsoft's emerging monopoly due to the success of PC clones). Secondly, a new investment worth \$20 million from Canon, for the privilege of selling NeXT computers in Asia.

Then, finally, came the day of the unveiling: October 12, 1988. It seemed like the whole world was looking at NeXT, impatient to finally learn about the new creation from Steve Jobs. The excitement had built up to such a level that an East Coast reporter went as far as saying:

"Missing this would be like missing Thomas Edison unveil the phonograph. I don't want to tell my grandchildren I was invited but didn't go"
(*"The NeXT Generation: Stars Trek to SF"*, San Jose Mercury News, October 1988)

The media hype was so high that when a NeXT marketing person called the Wall Street Journal to purchase an ad, the person on the other end replied "Why bother?"

The show took place at San Francisco's Davies Symphony Concert Hall. Steve, who stayed on stage for nearly three hours, started his speech by the words:

"I think I speak for everybody at NeXT, saying it's great to be back." (*Applause*) "I think together we're going to experience one of those times that occur once or twice in a decade of computing, a time when a new architecture is rolled out that is really going to change the future of computing. And we've worked on this for three years. It's turned out in-cre-di-bly great..."
(*quoted in Randal E. Stross' "Steve Jobs and the NeXT Big Thing"*)

The show ended by a duet between the NeXT computer (to show off its astounding sound capabilities that were made possible by its breakthrough DSP -digital signal processor-chip) and a violinist from the SF Symphony Orchestra, who played together Bach's A Minor Violin Concerto.



The press conference following the NeXT Cube's unveiling on October 12, 1988

The show was so well orchestrated that the audience, filled with experts and industry analysts, didn't even realize how bad some of the news Steve had delivered were. First, the software that the Cube would use, NeXTSTEP, was very far from release and would not be ready before another six months. Secondly, the price of the Cube was a lot higher than expected, a whopping \$6,500, more than twice the maximum universities had agreed to pay! Altogether with the \$2,000 laser printer and an additional \$2,000 to \$4,000 for using a traditional hard disk (which would turn out necessary because the optical drive was so slow), the total cost of the NeXT system was above \$10,000!

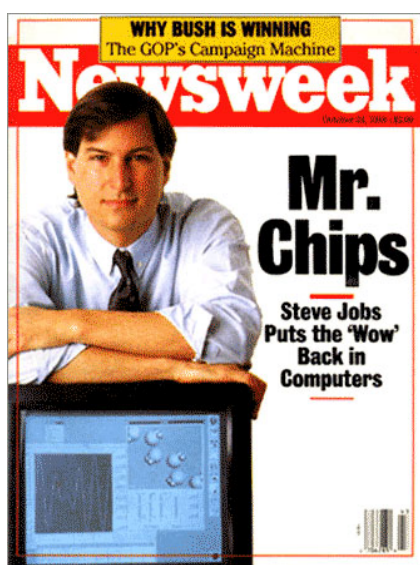
Disappointments

Given this figure, it is no wonder that the NeXT Cube was a commercial disaster. By the time NeXT salesmen tried to sell it to universities, students had taken the habit of studying in their dorm room, with their own personal computer (most often a Macintosh). It was out of the question for them to get back to computer labs or libraries, to use public computers. So universities saw no reason to buy a lot of NeXTs. As for the students, it was no question for them to pay such a large price for a monochrome computer that had almost no useful software, whereas the Mac and its hundreds of educational programs sold for almost ten times less.

Very few colleges bought NeXT Cubes, and they bought them in small numbers. To give you an idea, in 1988, the biggest sales in higher ed were made at Cornell University - with 30+ machines, Allegheny in Pennsylvania - 22 (but 138 more would follow), and MIT, with 20 computers. The NeXT factory, which could produce up to 10,000 Cubes a month, was turning them out at the rate of 400 a month!

It became quickly apparent that NeXT had to broaden its target market to make money. So in March 1989, the company announced it had completed a deal with Businessland, at the time the nation's largest computer retailer, to allow sales to the non-education market. The base price of the NeXT computer that Businessland sold was \$9,995, even higher than the price for higher education. Although Businessland tried as hard as it could to sell NeXT Cubes, it failed.

The funny thing about NeXT is that despite its catastrophic results, since it was a privately-owned company, it didn't have to release its numbers. Therefore, very few people had an accurate idea of how bad the company was doing. They were also misguided by the optimism of investors, like Canon who purchased a 16.67% share of the venture for \$100 million in June 1989, making NeXT's nominal market value raise to \$600 million! However at the time the company only had some 200 employees and no revenue to speak of.



Steve Jobs on the cover of Newsweek after the release of the NeXT Cube

Businessland's estimate was that it would sell \$150 million worth of NeXT Cubes, i.e. from 10,000 to 15,000 machines. By the end of 1989, however, it had sold a grand total of 360. The numbers were so painful that NeXT's employees joked they were expressed in units of thousands and had had three zeros lopped off. The NeXT factory was now running at... fewer than 100 Cubes a month, 100 times fewer than it was capable of. However NeXT kept on spending money. In 1989, the company moved to new quarters in Redwood City, along the San Francisco Bay. The construction of these greatly expanded facilities was as extravagant as their predecessor's. Steve ordered the elevators to be removed entirely to be able to build wide staircases, including one designed by world-famous architect I.M. Pei that appeared to float by invisible means. The furniture included marble in the dining area, \$2,200 chairs and \$10,000 sofas in the common areas, and \$450 phones in every offices, each connected to a T1 line.



Left: *Steve posing in front of the I. M. Pei-designed stairs at NeXT's new Redwood offices*

The NeXT slab

In January 1990, Steve decided to react to the Cube's miserable sales. He asked his senior staff whether it was the right product, to which Dan'l Lewin replied they had to build a new, \$3,000 machine. This was the start of *Warp 9*, a crash program to redesign the Cube and have a new machine ready for Fall '90.

The following month, the same Dan'l Lewin was the first of the 5 cofounders to leave NeXT. Steve Jobs had replaced him as the head of marketing in July '89, and he had got tired of the so-called *Hero-Shithead Roller Coaster*. This was an expression NeXT's employees used to describe their boss's way of treating them. He would first use flattery to hire them, and once he succeeded, call their work "shit" (Susan Barnes called this the

“seduce-and-abandon mode”). Steve supposedly alternated praise and humiliation all the time. It was his way to make employees give the best they could to the company, because once they had been congratulated, they would do anything they could to make it happen again.

This highly-criticized method did prove effective, however, because, in what seems a remarkable achievement in high technology, NeXT did release its new computer in September 1990.



The NeXT Station

“This is it, the future of NeXT” said Steve to the Davies Symphony Hall audience as he showed off four black computers: a faster Cube, an even faster Cube with enhanced color capabilities, and two of its new “slab” computers - a monochrome NeXT Station which sold for \$5,000 and a NeXT Station Color, for \$8,000. The master showman also shared the spotlight with Lotus’s president, whose company had decided to release their new spreadsheet program exclusively on the NeXT platform. This program, called *Lotus Improv*, was supposed to be a so-called *killer app* (an app that in itself was worth buying the computer that would run it): it was a new spreadsheet on which you could use plain English in formulas instead of cell numbers (e.g. $A2=B3-C3$ could be replaced by Profits = Receipts - Expenses). Lotus Improv, Steve decided, would be bundled with any new NeXT machine.

The partnership with Businessland soon ended, as the giant retailer collapsed in 1991. The new marketing strategy was to use 100 small independent computer dealers all over the United States, each selling NeXT’s machines with a measure of exclusivity in their immediate environment. NeXT also started expanding internationally: it made its European debut at the 1991 CeBit trade show in Hanover, Germany, the largest trade show in the world. Soon, the company signed up 100 separate European dealers, each pledging to invest \$1,000,000 setting up sales, training and support. There was also an increase in Japanese sales through the deal with Canon. By mid-1991, 50% of NeXT’s sales were made outside the US.

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The new computers and the new strategy brought hope to the company, whose revenues for year 1990 were only \$28 million.

There were also big changes in Steve's personal life. On March 18, 1991, he married Laurene Powell, a Stanford MBA student, at Yosemite. The plain ceremony was conducted by Zen buddhist Kobin Chino, Steve's guru whom he met with in the early 1970s (and who was the one who encouraged him to start Apple instead of becoming a Zen monk). Laurene gave birth to Steve's son in September of that same year, that the couple named Reed Paul (in remembrance of Steve's *alma mater*). The initial birth announcement read:

"Laurene and I were blessed with a child, a boy, as yet unnamed; new product names are hard..."



Laurene Powell-Jobs

Steve also started to make his now-teenage daughter Lisa part of his new family. According to everyone at NeXT, Steve's new fatherhood changed him in profound ways, including some positive effects on his behavior towards employees.

As far as the relationship with IBM was concerned, things quickly turned bitter. Remember, in 1988, when the Cube was unveiled, Jobs had promised he would cooperate with IBM to have his NeXTSTEP software running on an IBM-compatible machine. In 1990, the partnership was officially cancelled. There were many reasons for it to end, including:

- 1) NeXTSTEP was hard to adapt to IBM's own version of Unix because it was technologically far ahead of it

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2) NeXT didn't prove very cooperative because it refused to let IBM engineers use the latest versions of their software.

Steve was still suspicious of the giant IBM:

"I'm not stupid enough to give you everything I have, when you have 27,000 salespeople"

(quoted in "Steve Jobs and the NeXT Big Thing")

As a consequence of this, IBM turned to Apple and signed an agreement for developing a new object-oriented operating system, based on the same principles as NeXTSTEP.

1991 turned out to be another disappointing year. After the Q1 results, which showed NeXT had once again failed to achieve profitability, Ross Perot and Canon started to get more involved in the company and to criticize some of Steve's decisions, like the in-house manufacturing. In May '91, Jobs hired Mike Slade, a former Microsoft executive, to take charge of the Marketing Dpt. He pointed out that NeXT should position itself in the workstation market, not the personal computer market, and that therefore its main competitor was Sun Microsystems.

NeXT Software, Inc.

NeXT's revenues did increase in Q2 1991, reaching \$46 million. The problem was that NeXT kept losing money as much as ever, in part because of its distribution via boutique dealers. By the end of the third quarter of '91, NeXT's sales fell almost by 50%. This was enough for Perot who discretely left the very small club of NeXT's investors. His departure, along with the cancelled agreement with IBM, made Canon the one and only remaining possible savior of a company that was bleeding money. The Japanese accepted to put in \$10 million, then another \$10 million, then another \$20 million... afraid they might lose all of their original \$100+ million investment. In all, NeXT had blown through \$250 million of investment capital and was still financially very unhealthy.



But of course, no-one knew about it. Because of Steve's optimistic announcements, Wall Street investors thought NeXT was a success and they were begging Steve to let them invest in it. On October 31, the news of NeXT's initial public offering was made. It let NeXT's employees dream of better tomorrows once again. However the IPO never materialized.

Barefoot Steve Jobs in his Woodside mansion with Bill Gates in 1991

However none of this proved sufficient in making NeXT a lucrative business. Increasing pressure from many executives in the company was put on Steve Jobs to abandon NeXT's hardware operations. It was obvious to many that the only way NeXT could possibly succeed was by licensing its software to other manufacturers. The era of proprietary technology, where a single company provided both hardware and software - the way Apple had always done it - was thought to be over. Steve, who delighted in designing beautiful computers, who loved spending time in NeXT's high-tech factory, who called himself a "product guy", refused to give up hardware. However, he did accept to license NeXTSTEP.

The announcement was made in January '92, at NeXTWORLD Expo, in San Francisco. During the keynote, Steve talked about the development of NeXTSTEP 486, a version of NeXTSTEP that would run on Intel's 486 IBM-compatible chips. However the OS wouldn't be ready before another nine months. He also announced NeXT's total sales in 1991, which were worth \$127.5 million.

Two months later, Steve hired a new COO, Peter van Cuylenburg, as part of a deal with Canon. Van Cuylenburg had to deal with the many problems the company had to face, like the delay in the progress on NeXTSTEP 486 which would not be ready until 1993, forcing potential customers to buy NeXT's expensive hardware to run NeXTSTEP, and the constant bleeding of money, which was compensated by an ultimate investment from Canon, which put in \$55 million (and forced Steve to invest \$10 million). The company was doing so bad that it kept losing its most precious executives: Mike Slade left, followed by cofounder Bud Tribble (who in the meantime had married cofounder Susan Barnes, who herself had resigned one year earlier). The exodus continued with the VP of sales Todd Rulon-Miller, quickly followed by early cofounder and hardware manager Rich Page. George Crow was the only original cofounder remaining.



*Steve with Sun Microsystems' boss Scott McNealy.
The cubes they are holding represent their support of object-oriented software.*

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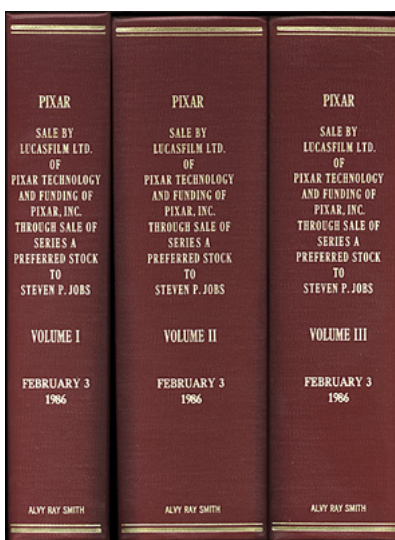
Then came the greatest outrage: Van Cuylenburg betrayed Steve. Exactly the way it had happened at Apple with John Sculley 7 years earlier, the COO contacted Sun's Scott McNealy and proposed that Sun should buy NeXT, kick out Steve and install him, Peter, as head of the company. McNealy's sense of honor had him make a phone call to Steve to inform him of the perfidy. Van Cuylenburg was promptly escorted to the door, but this episode put Steve even further into depression.

On February 11, 1993, Steve Jobs officially confirmed he had given up and shut down NeXT's efforts in hardware. The company had morphed into a software business, NeXT Software, Inc. 300+ of NeXT's 530 employees lost their job on that day, and the high-tech factory was inherited by Canon, which sold all of its content - Herman Miller chairs, NeXT Cubes and other unused laser printers - in a memorable auction sale in September '93.

Pixar

It is now time to talk about Steve's other company, the one that would save him from his career's nadir: Pixar Animation Studios, Inc.

The story of Pixar began in 1985. At the time, it was a little group of almost 50 people, most of them with very advanced degrees, who had been working together for 15 years, moving from one multimillionaire's lab to another. They all shared the same common ideal: computer animation. When Steve paid them his first visit, they were owned by Lucasfilm Ltd. When he saw the high-resolution graphics that were displayed on their computer displays, Steve was stunned. He even compared this to the reaction he had had a decade earlier at Xerox's PARC. He agreed to purchase the fledgling operation from George Lucas, who asked for \$30 million. However, desperately needing money because of his divorce, Lucas continuously diminished his price and, after having tried other investors, finally signed a deal with Steve in February 1986, valuing Pixar at \$10 million.



Received of Steven Jobs
Pixar, Inc.
By *[Signature]*
President
By *[Signature]*
Vice President

Received of Pixar, Inc.
Lucas Film Ltd
By *[Signature]*
Douglas Johnson, Vice President

One of the checks that was used for Steve's purchase of Pixar

At the time Steve bought Pixar, the little company (which at NeXT was referred to as “the hobby”) was headed by computer scientists Alvy Ray Smith and Ed Catmull, and former disney animator John Lasseter.



From left to right: *Alvy Ray Smith, Ed Catmull and John Lasseter*

Steve dedicated little time to Pixar: graphics just wasn’t his expertise. Besides, Pixar’s offices were “geographically inconvenient” for him because they were located north of the SF Bay. Steve visited Pixar’s facilities no more than five times between 1986 and 1992.

Pixar’s leadership in C-G animation was never contested. As early as 1986, they sold their own computer, the *Pixar Image Computer*, which was a \$135,000 graphics station, but could produce the most advanced 3D animation at the time. To show off its power, the Pixar team made the short film *Luxo Jr.* (see [its page on Pixar’s website](#)), which was first displayed at the Siggraph computer animation trade show, and got so popular that it was nominated for the 1986 Oscar of the best animated short film.

Steve’s involvement with Pixar was limited to the monthly visits that Alvy Ray Smith and Ed Catmull made to NeXT’s headquarters in Palo Alto, then Redwood. He would concentrate on the company’s strategy, especially in marketing, an area the engineers knew almost nothing of. However the expensive Pixar computer never met success: only 120 of them were sold throughout 1986 and 1987. This wasn’t enough to fund the 120-employee company that cost more than \$10 million a year.

Steve was concerned about Pixar’s perpetual loss of money, and he threatened many times to shut down John Lasseter’s animation division which he considered useless. However he changed his mind after the team’s latest movie, *Tin Toy* ([Pixar](#)), won the Oscar for best animated short film in early 1989.

This success however didn't make anyone willing to buy Pixar's computer. So throughout the course of 1989, Steve decided to cut the hardware business, and fired almost half of Pixar's workforce. The only people left were the animators and the software engineers. Pixar's new goal would be to sell software, its award-winning 3D animation software, *Renderman*.



In July 1989, John Lasseter's new short film, *Knick Knack* ([Pixar](#)), was another great success at the Siggraph convention. Pixar started to gain more attention from animation colossus Disney, which tried to hire John Lasseter back. But he refused: he needed his engineer colleagues to do great work. So in Summer '90, Pixar started talks with Disney about making a 3D-animated feature film. However the talks stalled and nothing happened.

Steve saw no end to Pixar's difficulties - including the departure of long-time president Alvy Ray Smith - until May 1991, when Disney contacted him again for the making of a fully-animated feature film. He went to Los Angeles and met with Disney honcho Jeffrey Katzenberg, with which he signed a deal that saved Pixar: a three-picture deal, given that the first movie would be made for \$15 million. Pixar could also keep 12.5% of the profits made from ticket sales. The work on *Toy Story* could begin...

Toy Story

In January 1995, after almost two years of retreat from the public scene when he spent most of his time with his 2-year-old son Reed, Steve finally saw what a crucial decision he had made when he had bought Pixar. The media attention that would soon be focused on what had always been his "other" company could give him a way to redeem his career.

"That was the moment Steve realized the Disney deal would materialize into something much bigger than he had ever imagined, and that Pixar was the way out of his morass with NeXT"

(Ralph Guggenheim quoted in Alan Deutschmann's "*The Second Coming Of Steve Jobs*")

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Steve started to get more and more involved with Pixar from that day on. However he could never fully exercise his power there the way he had previously done at Apple or NeXT, because all of Pixar's employees were faithful to one man, John Lasseter, the creative genius behind *Toy Story*.



*The Pixar staff in 1995.
John Lasseter and Steve Jobs are on the couch in the foreground
and Ed Catmull on the chair on the right.*

It's at this time that Steve started to build up a plan that would prove to be one of his most successful career moves. He planned to take Pixar public. But he didn't want to do it on a random date: Pixar would enter the public market in late November, a couple of weeks only after the Thanksgiving release of *Toy Story*. This way he would take full advantage of the media hype and glamour that only Hollywood could produce.



Steve under a huge Luxo Jr., Pixar's symbol

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It was decided that 6.9 million shares would be sold to the public. John Lasseter was given 800,000 shares, and Steve kept 30 million shares, or 80% of the company, for himself - given the original introductory price of \$14 a share, it translated into respective wealths of \$11.2 million and \$420 million.

Everything went as planned, and even better than that: *Toy Story* was a critical success and earned as much as \$29 million in US box office receipts during its opening weekend. On November 29, the trading of Pixar's shares was officially opened at Wall Street. The new introductory price had been set at a higher \$22 a share. In 30 minutes, it raised to \$49. Steve Jobs was suddenly worth \$1.5 billion.

After this *tour de force*, which gave Pixar a financial strength it had never before enjoyed, Steve came back to Disney to re-negotiate the deal with the big chief Michael Eisner. With his remarkable salesmanship, he negotiated a landmark deal for his company: in exchange for five more movies for Disney, Pixar would get:

- 1) a 50-50 share of production costs and revenues
- 2) creative control over its movies
- 3) equal billing: the Pixar logo would appear as large as the Disney logo on any promotional item, and it would remain onscreen for the same amount of time.

The following year, in 1996, Steve set up brand new facilities for Pixar in its home town of Emeryville, California. This was maybe the only field where he could exert influence on the company's life, other than distributing pay checks. However he couldn't make Pixar's employees agree on his novel idea for encouraging interaction between coworkers: putting only one single bathroom in the complex. For 400 people. It would have to become the central place for meeting and mingling... That concept, however, never materialized.



The entrance to Pixar's studios in Emeryville, CA

The return to Apple

Before talking about Steve's return to Apple, it is necessary to analyze how the company had been doing during its absence.

Remember, when Steve left, Apple was having a hard time trying to sell its latest generations of machines, Macintosh and Lisa. Ironically, the Mac took off like a rocket a few months after Steve's removal, and thanks to a project that almost only Steve had supported: the Laser printer. See, the GUI (graphical user interface) showed all of its power when it became possible to use WYSIWYG (standing for *What You See Is What You Get*) software. Combined with the Laser printer, such software would let you print exactly what you saw on the screen of your computer.

Just like the GUI, the mouse, Ethernet networking, and object-oriented programming, the Laser printer was invented at... Xerox PARC. The scientist who developed it, John Warnock, left the PARC to create his own company, Adobe Systems Inc. 2 to 3 weeks after the creation of Adobe in 1983, Steve Jobs, against the vast majority of Apple's executives, canceled Apple's internal project of a Laser printer and bought 15.9% of the startup. This would turn out to be Apple's salvation: it allowed the creation of a brand new market, desktop publishing. For many years, only the Mac could provide the WYSIWYG experience. It became the standard choice for creative professionals (and is still today). However, as we know, the Mac's success came only after Steve's departure.



*Steve Jobs with Adobe's founders
Charles Geschke and John Warnock in 1984*

The years that followed were the most profitable for Apple during Steve's absence. Half of the \$2,000 Macintosh's price tag was pure profit.

However John Sculley had not anticipated the emergence of a threatening rival: Bill Gates' Microsoft. Remember, Steve had been increasingly suspicious of this software developer whose only product when he started to work for Apple's Lisa and Macintosh projects was DOS, the operating system that was used on the IBM PC. He was right: Gates used his privileged relationship with Apple to steal some of its latest technology and de-

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velop a GUI of its own, *Windows*, that would run on top of its archaic MS-DOS (which was actually derived from Tim Patterson's QDOS, the *Quick and Dirty Operating System*).

The problem was that IBM, unlike Apple, had chosen to allow cloners to compete with it on the hardware market. What Big Blue had not anticipated however was that cheaper clones would soon destroy the domination of its PC. New companies like Compaq and its portable PC, or Dell, started to appear and got a larger and larger share of the PC market.

The deal between Microsoft and IBM allowed Microsoft to license DOS to this new competition. So, even though it wasn't making any money from the IBM PC sales, Bill Gates actually became the richest man on the planet by selling DOS to all the other PC manufacturers.



Bill Gates in 1992

As IBM watched his partner getting bigger and bigger and its market share diminish, it got frightened and started work on its own operating system, that wouldn't be allowed to run on PC clones, called OS/2. In response, Microsoft started work on Windows. The OS/2 project and the big difficulty IBM experienced to develop it was actually the reason it had approached Steve Jobs' NeXT to use NeXTSTEP, whose technology was decades ahead of the one used by Microsoft.

As for Apple, they sued Microsoft for copying the "look and feel" of its Macintosh operating system. This was a difficult issue, especially since Apple itself could have been blamed for copying the look and feel of Xerox's SmallTalk system a decade earlier. Apple

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eventually lost the lawsuit, which allowed Microsoft to continue the work on Windows. In 1990, it released Windows 3.0 of which 30 million copies were sold in its first year.

Then in August 1995 came the *coup de grace* for Apple. The release of Windows 95, which combined DOS and the user interface program, was a huge success for multibillionaire Bill Gates. 110 million copies were sold in just 2 years, setting it as the PC industry's standard.

Apple's marketshare fell down to around 4%, making it an almost small player in the market it had created! Its annual sales had gone from \$11 billion to \$7 billion, and during calendar year 1996, it had lost \$1 billion. In February 1996, *Newsweek* even made its cover with the headline "The fall of an American icon". Everything seemed to be over. What had happened? In fact, it all seems to come down to the loss of its spirit, of its soul, which was incarnated by... Steve Jobs.



Apple had forgotten what had made it successful: its innovative force and the bold aesthetics that came with it, the hip image of its leadership, and its public aura of nonconformity and creativity. It had all started with John Sculley:

"What can I say, I hired the wrong guy. He destroyed everything I'd spent 10 years working for. Starting with me, but that wasn't the saddest part. I would have gladly left Apple if Apple would have turned out like I wanted it to."
(Steve Jobs talking about John Sculley in "Triumph of the Nerds")

Sculley was forced out of the company in 1993. He was followed by two even more uncharismatic leaders, Michael Spindler and Gil Amelio. Gil's plan to save Apple was to make it compete on the workstation market with Microsoft's Windows NT. Failing to complete its own server system, Apple's only choice was to buy it from another company. The first choice had been to buy BeOS, from Jean-Louis Gassée's Be. If you recall, Gassée was the Apple France manager who was picked by Sculley in 1985 to run the 32-bit division in place of Steve Jobs.

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Then it occurred to the Apple's board that they had another option: buying the struggling NeXT Software, Inc. They understood the public relations value of having the founder go back to the company as well:

"I'm not just buying the software. I'm buying Steve"
(Gil Amelio quoted in Alan Deutschman's "The Second Coming of Steve Jobs")

Negotiations started in December and then, on December 20, 1996, Apple officially bought NeXT for \$430 million. Steve had become an informal adviser for the company.



Apple's CEO Gil Amelio with Steve Jobs on December, 20 1996

One week later, on January 3, 1997, Gil Amelio unveiled that Apple's results for Q4 1996 were disastrous: their sales had fallen down 30% from Q4 1995. Things didn't improve and a quarter later, they announced a loss of \$708 million for Q1 1997, making the total amount of losses under Gil's presidency a whopping \$1.6 billion. The board ousted Amelio on July 9, allowing Steve to undertake a palace coup.

He purged the board of old ineffective members like the everlasting Mike Markkula and installed new people, most of them from the high tech industry, including one of his best friends, Larry Ellison from Oracle. And he of course joined the board as well, as the CEO of Pixar.

The iCEO

The announcement of the changes at Apple were made on August 6, 1997, at MacWorld Expo in Boston. Steve unveiled the names of the new board members, and then dropped the bomb: Apple was going to partner with its archrival, Microsoft. The room went *wooooh* when they saw Bill Gates' face appear in Orwellian proportions on the stage's screen. The partnership included: the end of every patent lawsuit between the two

companies, a 5-year commitment for Microsoft to keep releasing updates to the Mac version of its Office software in exchange of Apple making Internet Explorer the default browser on its Macintoshes, and a \$150 million investment in Apple from Redmond (in the form of non-voting shares).



Orwellian Bill Gates and a tiny Steve Jobs at MacWorld Boston 1997

On September 6, 1997, Steve Jobs officially became the interim CEO of Apple Computer, Inc., the company he had founded more than 20 years earlier. He took drastic measures to make Apple healthy again. First off, he started to ingurgitate an extraordinary amount of information about the company, getting to know every project it was working on and every services it provided. He was micro-managing at a very high level. His first impression was that Apple got lost by working on too many products. Gil Amelio had cut the number of R&D projects from 350 to 50. Steve cut it from 50 to a dozen. He brilliantly understood that for Apple to succeed, it had to focus on a very small number of products, but they had to be *great* products.

On the Apple campus, the return of Steve Jobs had great effects on the everyday life. He enforced new rules, like non-smoking and the banishment of pets. He installed a brand new cafeteria with food caterer *Il Fornaio* from Palo Alto, whose menus included tofu most of the time. He also started to apply what had been one of his most important policies at NeXT, that is, the secrecy policy. He put up a poster in his office from the WW2 era stating that “Loose lips might sink ships”.



Posters from the Think Different campaign

The first measure visible to the public eye that Steve took was to launch a new ad campaign that would later be recalled as the *Think different* campaign. The purpose was to take full advantage of the Apple brand name, and no product could be seen on any of the ads. They pictured photographs of geniuses of modern times, implying that Apple, the innovative, unconformist company, was back ([see the video here](#)).

On January 8, 1998, one year after his return at Apple, Steve announced at MacWorld Expo in San Francisco that he had made the company profitable again. Thanks to his spending cuts and the success of its high-end G3 computers, it had made a \$45 million profit in the last quarter of 1997.



Steve at MacWorld SF '98, announcing he's made Apple profitable again in just one year



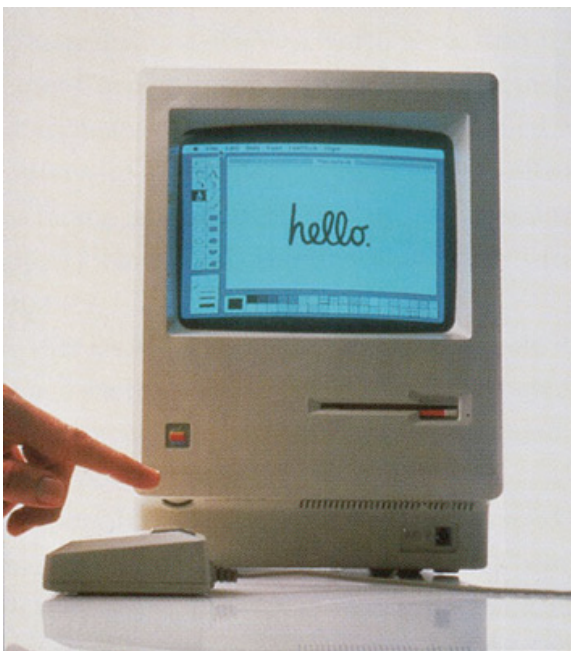
Turnaround

Steve's biggest coup was yet to come. One of the few projects he had agreed not to shut down was that of a personal computer with a sleek breathtaking new design approach, called the iMac. The iMac's looks had been conceived by British designer Jonathan Ive, who would soon become head of the Apple Industrial Design division.

iMac designer Jonathan Ive

In addition to its revolutionary design, whose main characteristic was that it wasn't beige, Steve had put his personal touches to the computer: he insisted that there be no fans and no floppy disk drive, just like he had the floppy drive removed from the NeXT Cube and the fans from the original Macintosh. The iMac was to be an all-in-one computer, just like the 1984 Mac. The i in iMac stood for Internet, because the computer guaranteed easy and fast access to the World Wide Web.

The iMac was unveiled on May 6, 1998, in the same auditorium where the 1984 annual shareholder's meeting had been held, at Flint Center in Cupertino. This choice was of course not random: it was a clear indication that Steve was back with an insanely great computer. In case you were not sure, the iMac displayed a huge picture saying: *Hello (again)*, the same that had been used with Mac 14 years earlier (without *again* of course).



Steve and the iMac saying "hello" like the original Macintosh

Apple sold 278,000 iMacs in its first two months and over 2 million in its first two years. It was the clear signal that Steve's management was the right path for Apple to follow.

The product strategy had evolved to a very simple one. In fact, it was down to a single square matrix. Apple would release four products: PowerBooks, Power Macs, iMacs and iBooks. When iMac was introduced in 1998, the Power Mac and PowerBook line-ups had already been revised. They kept being updated and on January 5, 1999, Steve announced two major steps in its computer design. The beige Power Macs were replaced by a stunning translucent design recalling the iMac, the iMac which itself was now available in five colors. This move made the iMac a cult object and a symbol of late 20th century design.

	Pro	Consumer
Desktop	Power Mac	iMac
Portable	PowerBook	iBook

Apple's product matrix



The new iMac line-up unveiled at MacWorld SF '99

In July 1999, at MacWorld NY, Steve announced the long-awaited and much-specified Apple consumer notebook, iBook. iBook was based on the concept of an iMac to go, and, just like iMac, it was a stunning success. It was during the same event that Steve announced AirPort, making Apple a pioneer in Wi-Fi (wireless networking) technology. A year earlier, it had pioneered on the iMac another new technology that has now become a standard: USB connectivity.

Steve also used the MWNV '99 keynote to demonstrate its incredible showmanship and the ability he had to play with his public image by inviting onstage Hollywood actor Noah Wyle, disguised as the iCEO himself. Noah Wyle had played Steve's role in a TNT movie about the birth of personal computing called *Pirates of Silicon Valley*.



Noah Wyle as Steve Jobs...



...idem



Steve & the original iBook

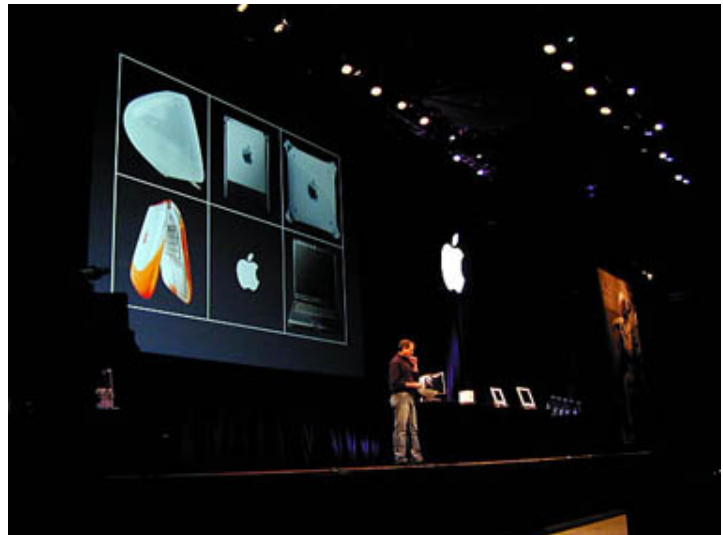
While the product matrix kept being updated and Macs sales numbers kept increasing, it became more and more obvious that Steve's interim role was nonsense. Nobody contested his leadership of Apple. In the meantime, Pixar had slowly become the most successful animation studios of all times, with the release of two more major hits for Disney: *A Bug's Life* and *Toy Story 2*, the sequel to its first 3D feature film. So on January 5, 2000, at the very end of its MacWorld Keynote speech, Steve announced that he was officially taking the title of CEO of Apple. The crowd responded with cheers and a standing ovation. Many observers noted that unlike the previous zenith of his career, at the Macintosh unveiling on January 24, 1984, where he had taken all the credit for the design of the machine, this time he dutifully thanked every Apple employee for their hard work, and called them the "most talented people on the planet". In fact, ever since he has come back at Apple, Steve always ends his keynote speeches by a round of applause for the Apple staff. Learning from his failures at NeXT, it seems he has gained more maturity and modesty.



Steve officially becomes Apple's CEO in front of a cheering crowd at MacWorld 2000

As he was taking over as Apple's CEO, Steve also changed a little of his financial habits. Even though he insisted on keeping his \$1 annual salary (just to be able to apply for the company's health plan), he accepted two gifts from the board of directors: options on 10 million shares of Apple stock (worth hundreds of millions of dollars) and a much-talked Gulfstream V private jet, worth \$110 million.

2000 would be another milestone year for Apple in many respects. To start with, it was the year the company would announce the extension of its product matrix with a computer with a revolutionary design, the G4 Cube. It was an 8-inch cube that was as powerful a Power Mac tower. To anyone who knew Steve's history, it was an obvious reference to one of his most beloved project, the NeXT Cube. The comparison proved to be right, because the G4 Cube shared many of its ancestor's characteristics: yes, it had a stunning design and embarked state-of-the-art technology, but it also was not targeted at a very specific market: it was too expensive for the lambda home or education buyer, and could not be expanded enough to satisfy pro customers. So the G4 Cube ended like the NeXT Cube. It was a flop and remained in Apple's line-up for just 12 months.

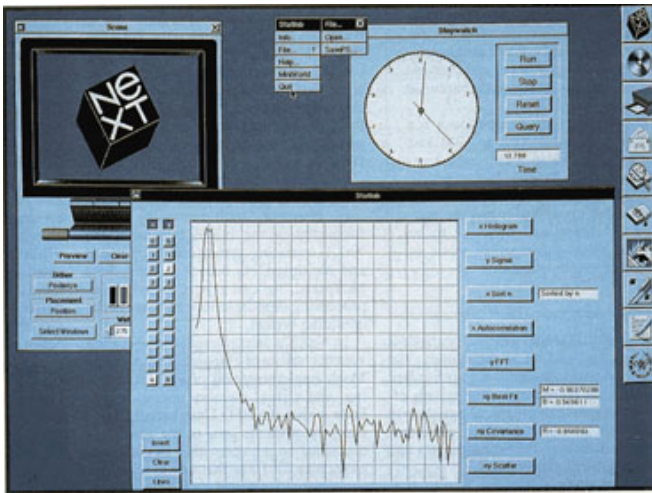


Left: *Steve with his cherished G4 Cube*
Right: *announcing the extension of the product matrix at MacWorld NY 2000*

More importantly, it is in January 2000 that Steve showed the first glimpses of Apple's next generation operating system, Mac OS X. Mac OS X was the future of Apple. It was based entirely on the technology Steve had brought from NeXT -along with his new executive staff including hardware manager Jon Rubistein, marketing leader Phil Schiller and especially Avie Tevanian and Paul Serlet, the brilliant software engineers behind the development of NeXTSTEP. Mac OS X was thus a very powerful OS with all the great NeXTSTEP features it inherited from its UNIX foundation, like multi-processing and protected memory, yet it was as easy to use as the good old Mac OS (and NeXTSTEP itself). But maybe the most striking feature of Mac OS X was his new user interface, called Aqua. Taking full advantage of the increase in computer power and the solid graphics foundations of OS X, it provided the user with a never-seen-before experience of com-

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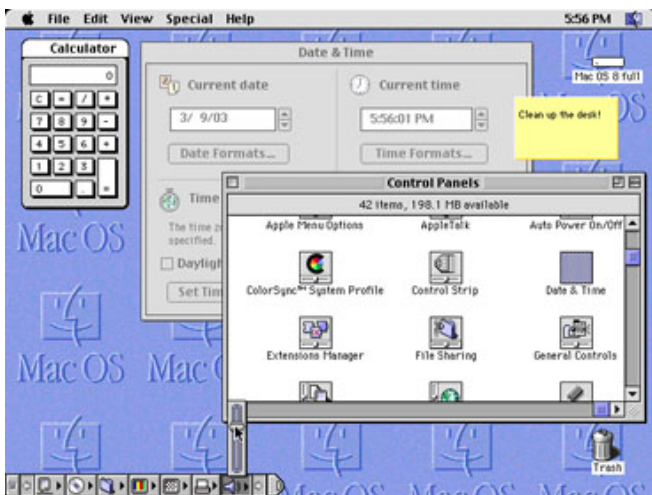
puting. It was a beautiful interface. Pictures speak better than words for that matter:



1989: NeXTSTEP 1.0



1995: OpenSTEP, the last version of NeXTSTEP



1998: Mac OS 8



2001: Mac OS X 10.0 "Cheetah"

Finally, it is in 2000 that Apple's new overall strategy really took off. The idea is this: the 80s had been the era of productivity computing. Everyone bought a computer for using spreadsheets and databases. Then in the 90s came the era of network computing. Everyone bought a new computer for gaining access to the brand new "information highway", the Internet. In the early 21st century, we were entering a new age of computing: that of the *digital lifestyle*. The digital lifestyle was the convergence of new devices - the digital camera, the digital movie camcorder, the digital music player - around the one object that would give them meaning, the personal computer, which Apple viewed as the *digital hub*. This strategy had been elaborated in late 1998 and at the time nobody took it seriously. Yet the realization of this prediction in the early 2000s proved that Steve's visionary status was not an invention of the media.

However at the time, Apple's primary mission was to build computers and develop its operating system. Apple turned to software developers like Adobe and asked them to make software that would run on their Macs and would let people take full advantage of the emerging consumer digital devices by making the dream of the digital hub come true. To its great astonishment, most software companies refused, judging the vision was wrong and the Mac market was too small anyway.

(talking of Adobe) "They said flat-out no. We were shocked, because they had been a big supporter in the early days of the Mac. But we said 'Okay, if nobody wants to help us, we're just going to have to do this ourselves'"

(Steve Jobs in "How Big Can Apple Get?", Fortune, February 2005)

And they did: it was the birth of many great applications called the iApps (which are now part of the iLife suite): *iMovie* (1999) for editing digital movies, *iDVD* (2001) for burning DVDs to share these home-made movies, *iPhoto* (2002) for organizing and sharing digital pictures, and of course *iTunes* (2001), the digital music jukebox.

The iPod revolution

In 1998, however, Steve didn't expect the digital hub to expand around music: he thought the next big thing was going to be desktop video editing. He even compared it to the desktop publishing revolution. That's why the first iApp Apple released was *iMovie*, not *iTunes*, that's also why the new generation of iMacs were called the *iMac DV* and they came with FireWire connectivity to plug digital movie cameras in. When the Napster phenomenon erupted in 2000, Steve realized he may have been wrong this time:

"I felt like a dope. I thought we had missed it. We had to work hard to catch up."

(Steve Jobs in "How Big Can Apple Get?", Fortune, February 2005)

To gain some time, Apple bought SoundStep, a fledgling start-up that was working on a digital jukebox project called SoundJam. Its founder, Jeff Robbin, had been working for the Cupertino firm a few years earlier and was glad to have a chance to come back. He became in charge of the team that, only 4 months later, released the first version of *iTunes*, which Steve Jobs showed off at the next MacWorld Expo in January 2001.

But the biggest coup was yet to come. Even before *iTunes* was released, Steve asked Robbin and his *iTunes* team to work on another new project, that of a portable digital music player. Apple's market analysis had shown that, unlike the markets of digital cameras and digital camcorders, the MP3 player market was quite a horrible mess, with miserable product and no clear market leader. Apple felt it could seize this opportunity to enter the market in a big way with an elegant and easy-to-use device that would be the ideal companion to its own music software, *iTunes*.

The hurriedness to bring this new product to market was so high that, once again, Apple had to turn to outside engineers. It hired Tony Fadell, a young engineer who had started work on such a handheld music player. Once hired, he decided to base his new design on the work that had already been done by a small California-based design firm, PortalPlayer. Steve convinced the firm to work full-time for Apple and shut down its existing customers, which included IBM and a dozen Asian manufacturers. He was very interested in PortalPlayer's work because they already had a working operating system for their music device. It took all of Jonathan Ive's design team collective genius to transform the germ of this music player into the stunningly beautiful cigarette-box size iPod that Steve had the privilege to introduce to the world on October 23, 2001, just in time for the holiday season.



iPod creator Tony Fadell



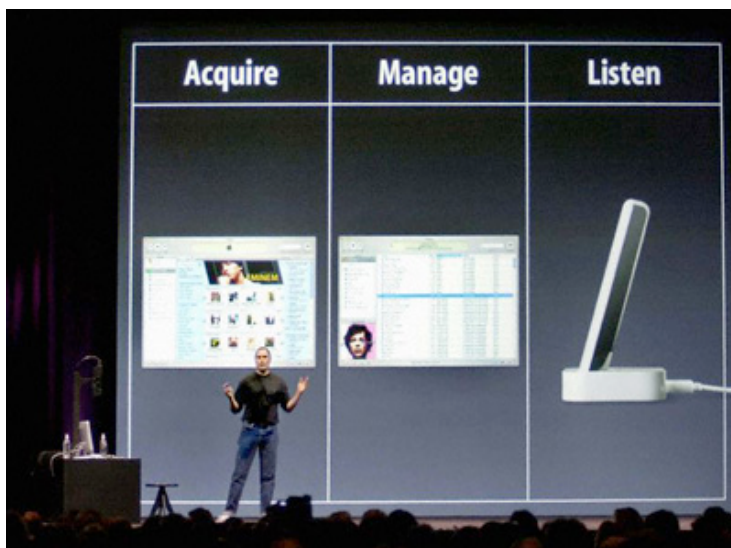
Steve Jobs and the original iPod

The player, which carried “1,000 songs in your pocket” for \$349, was widely acclaimed for its breathtaking easy-to-use interface and scrolling wheel, its compactness, as well as its large hard drive capacity. But it remained reserved to Mac users. Not for long: in July 2002, iPod (which now could host 2,000 songs on its 10 GB hard disk) was available to the *Dark Side of Computing*, the Windows world.

Everything went very fast from then on. Sales started to take off: 140,000 iPods were sold in Q3 2002. 200,000 in Q4 2002. 336,000 in Q3 2003.

But it was only the beginning: in April 2003, Steve unveiled what the iTunes & iPod division, now run by Jon Rubistein, had been working on for the past year: the iTunes Music Store. The iTMS was the first online music store that had achieved to get the blessing of the *Big Five*, the five largest music labels (Sony, Warner, EMI, BMG and Universal), partly for the same reason that Lotus had let Improv be bundled with NeXTSTEP back in 1990: given Apple's small marketshare in computers, their risk was quite low. They agreed that Apple could sell songs for just \$0.99 and whole albums for \$9.99.

In addition, Apple already mastered the technologies needed to run such an operation thanks to its own online computer boutique, the Apple Store, as well as its large [movie trailer download website](#).



Steve Jobs unveiling the iTunes Music Store on April 28, 2003

The iTunes Store was a great success from Day One. In 8 weeks, 5 million songs were sold, and 8 other millions were purchased in the following 15 weeks, bringing the iTunes' share of the legal music downloading market to 70% - while it was only available on the Mac! The labels were seduced and they agreed for the big move: on October 16, 2003, only six months after its introduction, the iTunes Music Store became available for PC. Steve called the PC version of iTunes the "best Windows app ever written". It instantaneously became the #1 online music store and still enjoys today an 80% marketshare, having sold 850 million songs by early January 2006. European stores opened in June 2004 and a Japanese store opened in August 2005.

A strong store is of course a consequence of an ever-growing iPod marketshare, which is now around 75% of all MP3 players, with a total number of iPods sold of 42 million in January 2006, 32 million of which were purchased throughout the year 2005.

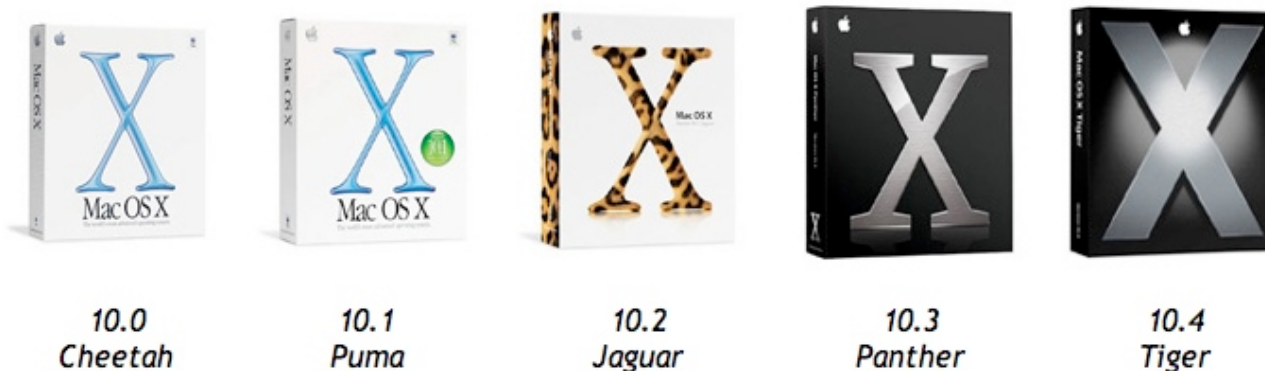
Latest developments

Apple

The purpose of this website is not to go into details about Apple's latest products so I will stop talking about them from then on. Only a few dates are worth noting:

March 24, 2001: the day Mac OS X's first public version, code-named *Cheetah*, became available. Although it had many flaws, they were quickly corrected in the following versions, each of which added dozens of new features to the system: Mac OS X 10.1 (*Puma*) on September 25 2001, Mac OS X 10.2 (*Jaguar*) on September 18 2002, Mac OS X 10.3 (*Panther*) on October 24 2003 and the latest version, Mac OS X 10.4 (*Tiger*) on April 29, 2004. Mac OS X 10.5 *Leopard* is due to be released in 2007.

The evolution of the species: *Mac OS X through the years*

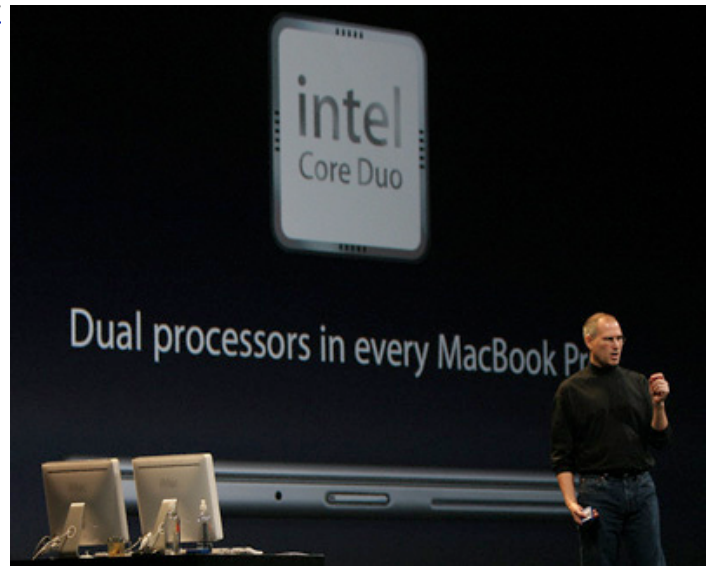


May 15, 2001: opening of the first Apple Retail Store. Ironically, retailing is the solution that Steve brought up in May 1985 to remedy to Apple's problems, a suggestion about which the board disagreed before it sided with John Sculley. Apple's retail operations proved very successful, and there are now 135 Apple stores in the US (as well as a few flagship stores in the UK and Japan), which welcomed 26 million visitors during the holiday quarter of 2005.

June 6, 2005: during his keynote speech of Apple's Worldwide Developers Conference 2005, Steve announced one of the biggest move for Apple, which is, the switch from PowerPC chips (the G3 and G5 chips were built by IBM and the G4 by Motorola) to Intel chips. Intel was seen as the enemy when Steve returned to Apple, and he is now considered the company's savior. One of the reasons this switch was decided is that Apple's engineers could simply not put a powerful but way too energy-consuming G5 processor inside its PowerBook and iBook portable computers. The whole of Apple's product line will be using Intel processors by the end of 2006. The move has already started with the introduction of the first Intel-based Macs at MacWorld 2006 this last January: an iMac using Intel's Core Duo and a pro notebook, called MacBook Pro, which is the successor of the venerable PowerBook G4.



Steve Jobs with Intel's CEO Paul Otellini



Steve Jobs unveiling the MacBook Pro at Macworld SF 2006

October 12, 2005: after the unveiling of the 5th generation iPods, featuring video capabilities, Steve announced the opening of the iTunes video store. From this day on, you could buy not only music videos but also TV show from the store, for just \$1.99. The first TV shows available were the biggest shows in the US, *Desperate Housewives* and *Lost*, both of which were made by ABC, which was owned by Disney. On that day, Disney's new CEO Robert Iger was welcomed on stage to talk about the deal, not failing to mention his current negotiations with Pixar (see below)...
The iTunes video store now features shows from more than TV stations, including ABC, NBC, USA Networks, ESPN, MTV and The Disney Channel...



Steve introducing the iPod video in October '05



January 9, 2007: in accordance with rumors that had been going on for more than three years, Steve unveiled at Macworld SF the iPhone, a state-of-the-art mobile phone combined with a widescreen iPod and a portable full-featured Web browser. In addition to the Apple TV, a video system allowing you to watch your digital media on your widescreen TV, the iPhone embodies Apple's new vocation as a full-blown home electronics company, which started with the iPod. In a highly symbolic move, Steve Jobs announced at the end of the keynote that the company was dropping the "computer" in Apple Computer, officially becoming "Apple Inc."

Thirty years after its foundation, it is clear that a new page of Apple's history has been turned, and the future looks bright: with market dominance in legal music downloading and MP3 players, as well as a competitive lineup of personal computers running the world's most advanced operating system, Mac OS X, and a world-famous leadership in innovation, the "fruit company" appears stronger than ever.



Apple Inc. succeeds to Apple Computer Inc.

Pixar

While Steve dedicated most of its energy to Apple, his "other" company, Pixar, proved even more successful in its own world. Each one of its new feature films: *Monsters Inc.* (2001), *Finding Nemo* (2003) and *The Incredibles* (2004) was a blockbuster by Hollywood's standards: *Monsters Inc.* reached over \$100 million at the domestic box office in just 9 days, and *Finding Nemo* \$70.2 million in its first weekend!



Monsters, Inc.



Finding Nemo



The Incredibles



Cars

Pixar's latest feature films

The Pixar deal with Disney for 5 animated features was to end after the release of *Cars* (2006), and Steve had to re-negotiate the contract. He wanted Pixar to own its next movies as well as *The Incredibles* and *Cars*, plus a higher share of the movies' profits. He wanted to “rent” the Disney marketing machine but not be dependent on the Disney company.

However Disney's CEO Michael Eisner disagreed upon his terms and in January 2004, after ten months of tensions and increasing frustration, the negotiations ended.

Steve's opinion about Disney was quite clear: he didn't want them to own any of Pixar's movies because it would allow them to make sequels:

“We feel sick about Disney doing sequels, because if you look at the quality of their sequels, like *The Lion King 1 1/2* and their *Peter Pan* sequels, it's pretty embarrassing.”

He declared Disney could no longer create great movies, it was only good at marketing them.

“The truth is that there has been little creative collaboration with Disney for years. The collaboration we do have with Disney is centered around the marketing of the films, not the making of them.”

He added: “We think the Pixar brand is now the most trusted name in animation” (which is true).

The success of *The Incredibles* thus became extremely important to Pixar, as the movie came out at a time where the animation studio was looking for another company to distribute its work. And it was a success: it won 2 Academy Awards and brought in \$261.4 million from the US box office.

However, Pixar re-opened its negotiations with Disney in 2005, as The Walt Disney Company got itself a new CEO, Bob Iger. As you've read above, Iger was instrumental in agreeing to sell its ABC and Disney channel TV shows on Apple's iTunes online video store. It was the official start of an appeasement in the relationship between Steve Jobs and Disney.



*Steve Jobs & Disney's CEO Bob Iger
at the opening of the iTunes Online Video Store*

The biggest and most unexpected news was yet to be announced: on January 24, 2006, Disney announced that it would acquire the Pixar Animation Studios. The price tag was set at \$7.4 billion (or 2.3 Disney shares for every Pixar share). The Pixar honchos were assigned new roles at Disney: Ed Catmull became President of the new *Pixar & Disney animation studios*, John Lasseter its Chief Creative Officer as well as Principal Creative Advisor at *Walt Disney Imagineering*, and Steve himself was appointed to Disney's Board of Directors (as a non-independent member). Steve officially stated that:

"Disney and Pixar can now collaborate without the barriers that come from two different companies with two different sets of shareholders. Now, everyone can focus on what is most important, creating innovative stories, characters and films that delight millions of people around the world."

(official press release)

Personal life

One of the most difficult episode of Steve's life occurred in the midst of the turnaround of his very busy career. Let's hear him talk about it instead of describing it:

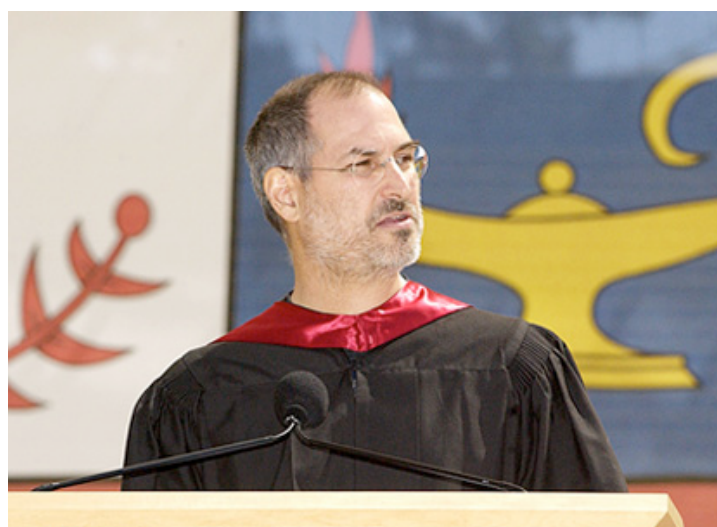
“About a year ago I was diagnosed with cancer. I had a scan at 7:30 in the morning, and it clearly showed a tumor on my pancreas. I didn't even know what a pancreas was. The doctors told me this was almost certainly a type of cancer that is incurable, and that I should expect to live no longer than three to six months. My doctor advised me to go home and get my affairs in order, which is doctor's code for prepare to die. It means to try to tell your kids everything you thought you'd have the next 10 years to tell them in just a few months. It means to make sure everything is buttoned up so that it will be as easy as possible for your family. It means to say your goodbyes.

I lived with that diagnosis all day. Later that evening I had a biopsy, where they stuck an endoscope down my throat, through my stomach and into my intestines, put a needle into my pancreas and got a few cells from the tumor. I was sedated, but my wife, who was there, told me that when they viewed the cells under a microscope the doctors started crying because it turned out to be a very rare form of pancreatic cancer that is curable with surgery. I had the surgery and I'm fine now.

This was the closest I've been to facing death, and I hope its the closest I get for a few more decades.”

(Stanford Commencement Address, 12 June 2005)

The news of Steve's cancer was made very public (he even released a letter to all Apple's employees on August 1, 2004 – downloadable on the website). It resulted in the sending of letters of compassion and kind words from the entire world, as well as raised concerns about Steve's succession as the head of Apple and Pixar.



Steve Jobs during his Stanford 2005 Commencement Address talking about his personal experience with death

Conclusion

After having read this long biography yet very short account of Steve's career, I hope you get the feeling what an incredible man he is and why he is worth the building of a website! An orphan raised in a modest background, his flair for business and passion for technology have allowed him to reach fame and fortune in his early 20s. Some people denied his ability to envision the future of technology and have attributed this success to *being at the right place at the right time*, others said it was all because of his silver tongue, yet he has proved them wrong many times over with Macintosh, Pixar, the digital hub strategy and the iPod.

His most highly criticized flaws are also his strongest assets: his drive for perfection, his refuse of compromise with products as well as employees, his undeniable business skills, his love of aesthetics. He has left an indelible mark on every one of the three companies he's founded: one has failed, the two others have become giant successes and corporate icons, but all were recognized as being at the edge of innovation in their respective fields.

Steve has also learned from his failures and has gained maturity. Isn't it ironic that it is the *enfant terrible of Silicon Valley* (as he was often called) who never graduated from college who was honored to pronounce the Commencement Address at Stanford at age 50? His speech has circulated all around the globe as an example of wisdom...

While many would have given up after the two successive downfalls he's endured, Steve Jobs has made his way back to the top with his characteristic intensity and force of will, and with astonishing success: twelve years ago, he was a technological outcast, and he's now considered one of the most important personalities in the world.

Is it luck? Maybe. His charisma, his *chutzpah*? It sure is. But especially the extraordinary amount of talent and genius of a man who has never ceased to impress the world, and is not willing to stop.

To be continued...