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Fire in the Valley, Third Edition

The Birth and Death of the Personal Computer

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Third Edition

Fire in the Valley

The Birth and Death of the Personal Computer

Michael Swaine and Paul Freiberger

Foreword by John Markoff, *The New York Times*

Edited by Brian P. Hogan

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The Big Turnaround

> *When Steve came back to Apple, he told me that Microsoft had won the PC battle and that was irreversible, over and done with. But he thought that if he could get Apple healthy enough to persist until the next major tech dislocation, Apple could win at that.*
>
> –Andy Hertzfeld

Apple was a company in dire trouble, struggling very publicly for survival. Its already small market share was eroding, developers were building applications for Macs second if at all, the stock was dropping, and nobody seemed to have a plan for changing any of that. In 1996 *Business Week* headlined Apple's troubles as "The Fall of an American Icon."

But Apple wasn't simply short of cash. It was in an existential struggle to rediscover its identity and to find relevance in the market.

Even before the Mac, Apple had distinguished itself from the rest of the market by virtue of a greater emphasis on design and graphics and top-to-bottom control of the computer's hardware and software. But Apple's "thinking different" was a double-edged sword. The design sense and the coherence of a single-source model were advantages. But the proprietary approach frustrated third-party developers and premium pricing kept Apple's market relatively small. Apple had defined itself as a niche player in a market that was increasingly nicheless. Microsoft had kept improving Windows, to the point where most consumers couldn't see much difference between a Mac and a PC—except for the price. Windows was undermining Apple's positives, and the negatives were looming larger.

Retaining its identity and relevance were *both* critical because while an Apple that tried to be a me-too company would fail, so would an Apple that remained marginalized by its increasingly undesirable differences.

Apple also suffered from internal problems, including lack of focus. "[John Sculley] never really did any technology transitions," Chris Espinosa recalls, "and Michael Spindler had so many long, flat gestation periods, investing in everything, that he starved everything and nothing ever really took off. I think…that they thought too strategically and too abstractly about technologies and markets, and they took their eye off the ball of 'real artists ship.' That what matters is the product that you put into people's hands." Jean-Louis Gassée concurs: "They had the wrong leadership in software. And also the culture had become…for a while it had been soft."

But leaders can lead only in a receptive environment. "John Sculley did a lot of great things," Espinosa explains. "He came into a company that was headed south fast, and he got it on a firm bearing. One of the problems with Apple from 1985 through 1997 when Steve came back is not that we had poor leaders. It's that we had extremely crappy followers…the culture of Apple had been designed to follow Steve, and Sculley wasn't Steve."

But Jobs, too, had changed in the intervening years.

Espinosa was leery of Jobs when he returned: "I remembered my experience on the Mac team fairly vividly, and frankly, I didn't really want to create it again. So I hid out in developer tools."

But Espinosa soon found that he, at least, needn't fear Jobs's outbursts. "He was extremely congenial [to me]. I kept hearing the terror stories of the elevator interviews and the screaming fits, which were the good old Steve. But I got the general feeling that those were kind of for show—that it was him exercising reputation maintenance. You know, that used to be an uncontrollable part of his character, and I got the feeling, in later years, that it was an act that he could put on when he needed to. I saw much, much more of the gentle, appreciative, wistful Steve in his later years."

Most crucially, Jobs had become more effective. The Pixar success, and his role in supporting the Pixar crew and then in negotiating deals for their work, had impressed observers. And there was the money: billionaires tend to be taken seriously. "He was," Espinosa points out, "the most successful studio CEO since Samuel Goldwyn."

Legitimacy

But as much as Apple and Jobs had changed, the industry had changed even more.

When Jobs left Apple in 1985, the personal-computer market was less than a tenth the size it would be by 1997, when he returned.

Remember that Apple ad welcoming IBM? It was the one that began, "Welcome, IBM. Seriously." It got some attention when it ran in 1981, acknowledging that IBM's entry brought legitimacy to the personal-computer industry. What wasn't widely recognized even at the time was that the ad channeled an edgier ad from an earlier era. When IBM entered the minicomputer industry a generation earlier, Data General CEO Edson de Castro commissioned an ad that read, "They Say IBM's Entry into Minicomputers Will Legitimize the Market. The Bastards Say, Welcome."

That ad never ran, but the sentiment was clear. De Castro was saying that Data General didn't want to be legitimate. It didn't want to be IBM. That's akin to what Jobs was conveying in 1984, when he told the Mac team, "It's more fun to be a pirate than to join the Navy."

But legitimacy had won out. There were no more bastards, no more pirates. At least not making personal computers. As a consequence, the computers themselves were becoming commodities.

It seems rapid in retrospect but felt slow as it happened. The GUI—created at PARC, brought to market by Apple, and made essential by Microsoft—made computers easy enough for anyone to use. The electronic spreadsheet, created by Dan Bricklin and Bob Frankston and made essential by Lotus, became the killer app that got personal computers into every business. The IBM name, as it had before, made the purchase of personal computers justifiable to the corporate numbers people. Personal computers had achieved legitimacy.

And what was legitimized was specifically *personal* computers. Putting a computer on an employee's desk required new thinking about job requirements, budgeting, internal tech support, maybe even new desks. It challenged entrenched company thinking.

But by 1997 that battle was won. The legitimization of the personal computer, ironically, even drove IBM out of the market. Although IBM had legitimized the business by entering it, "then the dragon's tail flopped," as Jean-Louis Gassée puts it, "and IBM got maimed." IBM had more experience selling computers than anyone else, but it was experience in selling computers one at a time, experience with premium pricing and with strong support. None of that matched well with selling generic boxes off the shelves at Walmart.

In the interim, while the market was expanding by a factor of ten, Apple's market only tripled. Apple executives could do the math. They were trying to keep the company relevant. Chris Espinosa was there through it all, and reflected on it later:

"I remember [John Sculley] talking about 'technology S-curves'.... The idea was that a technology would have a long, flat gestation period and then a sudden period of hypergrowth, and then it would top out as the market got saturated or the technology got mature. And at that point the technology in the market would really cease to be interesting, and if you were a company that had bet everything on that technology…you were eventually going to get picked to death by the clones.

"So in order to be a constantly innovative company, you needed to stack up those S-curves. While you had one product that was in a vertical growth period, you had to be developing other products in that long, slow, flat gestation stage that would take off on the next S-curve.

"That was his theory," Espinosa concludes. "He couldn't implement it."

The iCEO

In this environment began the turnaround year for Apple. Most of the changes Jobs implemented had been planned on Gilbert Amelio's watch, and many had been the ideas of chief financial officer Joseph Graziano, but Jobs made them happen. He shut down the licensing program, which had come too late and had allowed clone makers to cut into Apple's own sales, as Gassée had feared. Jobs laid off employees, dropped 70 percent of the projects, radically simplified the product line, instituted direct sales on the Web, and stripped down the sales channel.

Most of the decisions ruffled at least some feathers, but one move shocked the Apple faithful and drew boos from the crowd when it was announced at Macworld Expo in January 1997. As Jobs stood on stage, the face of Bill Gates appeared on the enormous screen behind him, looking down like Big Brother in the movie version of George Orwell's *1984*. Jobs announced that Microsoft was investing $150 million in Apple. Jobs recovered by assuring the crowd that it was a nonvoting stake. The investment gave Apple an infusion of needed capital and the good public relations of the endorsement of Microsoft, but Microsoft exacted a heavy price: the rights to many Apple patents and the agreement that Apple would make Microsoft's web browser its browser of choice. Microsoft was enlisting Apple in its war to control the key software used to browse the Internet.

In the same year that his image was looming ominously over the Macworld show, Bill Gates started the William H. Gates Foundation with an initial investment of $94 million. Later renamed the Bill & Melinda Gates Foundation, Gates's further investments soon grew it into one of the largest private foundations in the world, focused on enhancing healthcare and reducing extreme poverty internationally, as well as expanding educational opportunities and access to information technology in the United States.

Within three years Gates would step down as CEO of Microsoft, turning over the reins to his old friend Steve Ballmer. In the ensuing years he would ease himself out of any role at Microsoft to devote himself full time to the foundation. But in 1997, Gates still seemed like the enemy to the Apple faithful.

Despite the plan laid out in the earlier Macworld keynote address, Jobs didn't retire the Mac operating system. Instead he folded the NeXT technology into an improved OS that was still Macintosh. It would be easy to think, knowing Jobs, that the whole NeXT acquisition had been a Machiavellian scheme, but it wasn't that simple. Jobs was not at all convinced that Apple could be saved when he sold NeXT. He unloaded the 1.5 million Apple shares he got in the NeXT deal cheaply, convinced that the stock wasn't going up. "Apple is toast," he said to a friend in an unguarded moment. But within months Apple had gone from a zero to a one in Jobs's mind, and he threw himself into saving it. The board was willing to give him anything he wanted, repeatedly offering him the CEO job and chairmanship. He turned them down but still ran the company dictatorially, inserting himself into any department at any level he thought necessary, under the title of interim CEO. He wasn't getting any significant compensation and, having sold his Apple stock almost at its lowest point, wasn't getting any financial benefit from Apple's success, either.

Merging the NeXT operating system with Apple's was an extremely complicated and chancy endeavor, like fixing an airplane engine while flying. And it took time: it was three years before what was called OS X finally came out.

Meanwhile the hardware line was also being revamped. Conceding that personal computers had become commodities, Jobs embraced that model and used commodity features to sell computers. The iMac and the new desktop Mac computers that came out in 1998 and 1999, designed by Jony Ive, brought color and a sense of style to computers to a degree that had never been attempted before. The market ate them up. The iMac not only sold well; it became the best-selling computer on the market for several months running. Apple began making consistent profits again, and analysts pronounced that the slide had been halted and Apple was a good investment once more.

Jobs was remaking Apple into a company that had at least a chance of surviving in a market hemmed in by consolidation and cloning, heavily commoditized, being reshaped by cyberspace, and dominated by Microsoft and Windows.