Case Study – Palm Pilot

Introduction

The Palm Pilot was the first successful interconnected organiser, heralding the dawn of the billiondollar handheld industry. Palm Computing Inc., with Jeff Hawkins at the helm, shipped the Pilot in April 1996. This nifty device (soon to be renamed the PalmPilot) was small enough to fit into a shirt pocket, powerful enough to store thousands of addresses and appointments, and cheap enough to appeal to a mass market. Within 18 months, Palm had shipped more than 1 million Pilots. Which meant that Hawkins had created one of the fastest-selling consumer-electronics products in history: The Pilot sold faster than cell-phones, pagers, even color TV. It was the fastest-selling computer product ever.

In short, a very small thing had become the Next Big Thing - an innovation that affects how people work and live. And it had come as something of a miracle. Most new-product launches are a wild ride, and they end with a loud crash.

The handheld-computer market has been no exception. Apple spent $500 million on the Newton. Kleiner Perkins Caufield & Byers, the powerful venture-capital firm, funded a startup, called GO Corporation, to pioneer the handheld market. GO spent $75 million - and went out of business. All told, startups and big companies spent $1 billion trying to crack the handheld market. Hawkins and his 28 colleagues at Palm Computing spent only $3 million to develop a working model of the device that would launch an entire industry.

Why did they succeed where so many others had failed? The story of the PalmPilot is the story of one man's obsession with an idea that was bigger than a product, of a partnership between two very different people, of dramatic mistakes and brave corrections, and of sheer tenacity. In that sense, it is a story for our times - a story of the kind of breakthrough that every startup dreams of.

"Has it been worth it?" asks Hawkins, reflecting on a 15-year journey. "As long as I am progressing toward my goals, doing good work, and having fun, then it's worth it. I have no regrets. I have always told everyone at Palm, 'If you're not enjoying yourself, you shouldn't be here.' That's how I run my life. I have never felt burdened by my work."

The Beginning

In January 1992 Palm Computing was born. The good news: Hawkins had an idea and a company. The bad news: He had no plan, no product, no financing, and no partners (except for Tandy, with which he had negotiated a licensing agreement before leaving the company). But he did have a reputation. He met with Bruce Dunlevie, a venture capitalist who sat on the board of Geoworks, a software outfit that writes operating systems for portable computers. "I could tell right away that Jeff was a 'product picker,' " Dunlevie says. "That's someone who is able to synthesize where technology is today and then advance it – someone who knows intuitively what people care about."

Dunlevie's firm, Merrill, Pickard, Anderson & Eyre, bid to be Palm's lead investor. Hawkins also talked with Sutter Hill Ventures, another prominent VC firm. He accepted $500,000 from each of them, plus $300,000 from Tandy. His dream had funding, along with a few partners. Now he just needed a plan and a product.

There are lots of technovisionaries with great ideas. Some of them even convince investors to provide capital to turn those ideas into products. But products don't create breakthroughs - companies do. And great companies need more than vision. They need staying power. They need the kind of flexibility and tenacity that will keep them in the game even as the competition and the playing field keep changing.

Few people have more staying power than Donna Dubinsky, the first executive whom Jeff Hawkins hired - and the most important person behind the Pilot other than its inventor. Dubinsky is Palm Computing's indispensable executive. She's its chief strategist, its top operator, the ultimate hands-on leader - and the perfect sidekick for Hawkins. It's impossible to understand the success of the Pilot without exploring the partnership between these two very different people.

Wrong Strategy, Wrong Product

Hawkins and Dubinsky made the perfect entrepreneurial pair. Together they sat down to create a plan, which they built around a few defining principles: Palm Computing would design software for handheld devices but let other companies build and market them. The software would support general-purpose computers that were small enough to be mobile yet powerful enough to rival desktop machines. Palm's products would target individual consumers rather than business users. And the company would surround itself with blue-chip partners that had muscle in the marketplace.

It was a carefully crafted plan. And every principle in it was wrong. Palm survived because it was lucky enough to be second on the market, smart enough to recognize the gravity of its mistakes, and lean enough to reinvent itself before it ran out of cash. "I was intent on raising plenty of money and spending it as slowly as possible," says Dubinsky. "At Apple, I saw how being 'overcapitalized' gave you the freedom to make mistakes."

Hawkins and Dubinsky were mortified when Apple announced that it would release the Newton in August 1993 - two months before Zoomer shipped. Palm's strategy was to get Zoomer into the market first, to create a buzz, and to follow quickly with upgrades and improvements. But Newton stole Zoomer's thunder - and saved Palm's bacon. Precisely because Zoomer arrived after Newton, it was spared all the ridicule heaped on Apple's PDA. Who wants to kick the second lousy product to appear in a new category? And in Zoomer's wake came a wave of equally uninspired offerings - from Hewlett-Packard, Sharp, GO, and Toshiba. Zoomer got lost in the shuffle.

"The entire market was lousy,'' Dubinsky says. By the end of 1994, she estimates, venture capitalists and consumer-electronics companies had invested $1 billion in the PDA market - and no one had anything to show for it. Most companies now opted for one of two courses of action: Either they went out of business (like GO, which had liquidated by 1994), or they stubbornly persisted (like Apple, which kept introducing new versions of Newton).

Palm Computing took a different route. Sure, the company had misfired badly. But thanks to Dubinsky's frugality, it still had enough cash to reload. So during the spring of 1994, Palm conducted in-depth surveys of the hardy souls who had actually purchased Zoomer. What these people said opened the company's eyes. More than 90% of Zoomer owners also owned a PC. More than half of them bought Zoomer because of software (offered as an add-on) that transferred data to and from a PC. These were business users, not retail consumers. And they didn't want to replace their PCs - they wanted to complement them. People weren't asking for a PDA that was smart enough to compete with a computer. They wanted a PDA that was simple enough to compete with paper.

The findings were too radical for Palm's partners. The alliance split apart. Jeff Hawkins split off - into a whole new product space. "Jeff basically went off on his own," say Ed Colligan, who joined Palm as its marketing manager in June 1993. By August 1994 - less than three months after Hawkins began rethinking the market - Palm Computing had a mockup of its new device. The product would fit in a shirt pocket. It would run on AAA batteries. It would offer four core functions: a calendar, an address book, a To-Do list generator, and a memo-writing feature. It would sell for less than $300. It was a marvel of elegance and simplicity.

The product got a code name: Touchdown.

New Product, New Company

It's one thing to learn from mistakes. it's quite another to persuade investors that you can get things right the second time. "We had been working on this product for two years," says Hawkins. "Donna, Ed, and I really believed in what we had come up with. Touchdown was it. But the market kept getting worse and worse."

The time had come for another course correction. It began in a conference room next to Bruce Dunlevie's office at Merrill Pickard. Dubinsky and Hawkins arrived dejected. They told Dunlevie that they finally had the right product, but that their previous partners wouldn't get behind it. Dunlevie - soft-spoken, circumspect, bookish - listened, gauged their despair, and said, "Stop complaining. You know how to do this, right?''

Hawkins said he thought so.

"Then do the whole product,'' Dunlevie told Hawkins. "Just go out and do it.''

It was radical advice. Dunlevie was arguing that the company couldn't redesign its product unless it reinvented its business model. Palm would no longer be just a software company. It would be a self-sufficient company that designed, built, and marketed Touchdown. "I didn't think that doing the whole product - both the hardware and the software - was an option," Hawkins says. "It was expensive. I was a young guy. I had never thought about doing anything that big alone."

Which didn't mean that Palm would build factories and warehouses, or hire hundreds of salespeople to call on retailers. (Indeed, as amazing as it sounds, the company hired just one new employee in 1994.) Instead, Hawkins and Dubinsky assembled a dispersed team of hardware-design and contract-manufacturing companies, each of which brought resources to the table. They paid the companies with modest sums of cash, lots of stock options, and the promise of future glory. "We created a virtual company,'' Hawkins says.

But one challenge couldn't be solved virtually: marketing. How was Palm Computing going to push Touchdown into the retail channel? How was it going to change the minds of consumers? Ed Colligan sums up the dilemma: "We had a killer product. But the market was a dog. And we had no money to fund a launch. What were we going to do?''

Dubinsky figured that Palm needed $5 million to bring Touchdown to market. Her plan was to raise up to $2 million from a new corporate partner, to collect matching amounts from venture capitalists, and to leverage the partner's marketing power to crack the market.

Almost randomly, Dubinsky ran through a long-forgotten list of potential partners, looking for even the most remote synergies. One name jumped off the page: U.S. Robotics. In less than five years, the fast-moving modem maker had seen its revenues skyrocket from $50 million to almost $900 million. Dubinsky knew that U.S. Robotics, based in Skokie, Illinois, was looking for a foothold in Silicon Valley. And she had previously identified the company as a potential partner in the development of a modem for Touchdown.

Dubinsky called a friend in investment banking who had worked on USR's initial public offering, and the friend arranged an introduction. Hawkins and Colligan met with Jon Zakin, then the vice president of business development for U.S. Robotics.

Dubinsky followed up with a phone call. Zakin said he wanted to do business. Dubinsky suggested that U.S. Robotics invest $5 million, and Zakin agreed to consider the offer. Then both sides agreed to meet in Palo Alto, California within two weeks.

Zakin still seemed enthusiastic when the Palm team sat down with him in late September. In a second meeting, he was even more upbeat. But he never mentioned the $5 million offer. Dubinsky felt flummoxed - though not for long. That night, Zakin called with a different offer: What if U.S. Robotics bought Palm Computing?

She called Hawkins to discuss the pros and cons. "I was worried about another company imposing its will on us,'' Dubinsky says. "But U.S. Robotics had cash, a great reputation with the retail channel, manufacturing strength, and global presence. And Touchdown was at a turning point. Was it going to be another nice gadget that failed? Or would it be the start of the next generation of computing?''

For $44 million in stock, Palm Computing became a division of U.S. Robotics. Within six months, after fighting to ensure that Palm's 28 employees were suitably compensated and after ironing out hellish details about who would control manufacturing, Touchdown crossed the goal line - under its new name: the Pilot.

U.S. Robotics initially wanted Palm to abandon Flextronics and manufacture at its facilities in the U.S. Palm insisted that such a change would disrupt the schedule and that the U.S. Robotics facilities were unsuitable. In a compromise, Flextronics would manufacture in Singapore and ship units to Utah for packaging (in U.S. Robotics facilities). By early February 1996, the Flextronics plant in Singapore had started to produce the first 10 000 units. As the first units arrived in the U.S., a string of problems started to emerge. Ironically, if Palm had been able to keep their original plan of just using Flextronics, these faults might not have been picked up prior to customer shipment.

Zoomer was a distant memory. The Pilot was a smash. The first units shipped in April 1996. "By midsummer, we couldn't build enough of them,'' Colligan remembers. "Customers were stamping their feet. And we weren't just selling to geeks in Silicon Valley. We were selling all over the place.''

Sales dropped off over summer, but recovered in the run-up to Christmas. By the time the 1996 Christmas season was over, Palm had reached over 70% market share in the US, winning over 20 'best product' awards on the way.

Case prepared based on:

- *Dillon, P. (1998) "The Next Small Thing", http://www.fastcompany.com/34312/next-small-thing, Fast Company, 15.*
  (The text presented is basically a short version of the text of this article)

- *Institute for Manufacturing, Cambridge University, "Case study – Palm Pilot" .*
  (Additional information was retrieved from this article to complement the previous reference)

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