



## Stanford eCorner

### Palm's Approach to Elegant Design

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Despite Microsoft's desire to crush the fledgeling Palm Pilot in the 1990's, Jeff Hawkins, Palm's former Co-founder and now the Founder of Numenta, decided to battle on a ground where the behemoth from Seattle could not compete: In the field of elegant design. Hawkins' focus was to make the product as beautiful as possible, and they hired acclaimed design firm IDEO to design the Palm IV. Not only was it easy on the eyes and easy to use, but it was the first consumer product with a lithium battery, and the first to use glue, rather than screws, for seamless closure.



#### Transcript

The question was, how did I get involved with IDEO for the Palm, and then how did that influence the product? Let me tell you a funny story about this. So Ed Colligan, who's now the president of Palm, and was the VP of Marketing early on at Palm. We were starting to work on the Palm Pilot. The Zoomer was a failure. We're starting to work on the Palm Pilot and he said we have \$3 million and 27 people, and all of those people are software people except me. I was the only guy with any hardware background. And I said we have to build a physical piece of hardware. We need an industrial designer. Yeah, the guys at IDEO are too expensive. So Ed takes the Yellow Pages, opens up to the industrial design firms and he says Palo Alto Design.

Call them up! So he calls up this company called Palo Also Design and these two guys, Malcolm Smith and the other guy, they're in Palo Alto, and they're like this kind of like - but at the time, how do I say this not in derogatory sense? Well, it wasn't a high-end shop, OK? Let's put it that way. Two guys, we'll build something for you. So we started with the original design of Palo Alto Design Group, really on the cheap. We paid them in stock. It's like, we have no money. Can you design it for us? And they did. Now when we came around to doing the Palm V - and this is a very interesting story. So we've done the Palm Pilot and the Palm Treo and we were being very successful. And Microsoft decided that they were going to kill us. They literally - that Steve Ballmer guy, he talked to you last week, right? He got up there in front of some sales companies.

You know these guys Palm? They put big circle around us, like the target. We're going to kill these guys. We will kill these guys. I started getting these condolence notices. Saying I'm sorry Jeff, what are you going to do? And then Microsoft is creating this thing, what was it called? The Window CE thing? I forget what it was. They started using the word Palm and we sued them and got them to stop it. They said, "What are we going to do?" And they started saying it's all about the software, it's all about the software, because that's all they did, right? At that time, Microsoft, just did software. We're going to have 25 licensees and all the software and these Palm guys are dead because all they're doing is hardware, they're just one vendor hardware. And we're having pressure, by the way, from other people to, like, basically get in to with Microsoft. And I said no way! I said we can compete.

I said, "What we have to do, is we have to do what Microsoft can't do." I said Microsoft can't build a beautiful product. They don't build products. They build software. And that's not even very beautiful. But they don't build the product. They've got these Taiwanese guys building the product, and I said, so we're going to build a beautiful product. And that was the genesis of the Palm V. I said that's the most important thing. So what we did at that time is we can't afford to spend some money on it, not that IDEO is too expensive, but they're a high-class shop. So we're going to engage IDEO, and I'd worked with some of the

principles earlier at GRiD at a company called Matrix Design, which had been folded into IDEO, so I knew about them.

And I had worked with Dennis Boyle and a team there doing the Palm V and it was a great product. It was beautiful. It was super successful. Now I'll tell you an interesting story about this. When we're designing the Palm V, really one of the most successful consumer products of all time, there was a lot of pressure to put new features in the software. Because Microsoft was piling on all of these features which really weren't important, but they're piling all these features. And I said, "Look, if we put a lot of new features in the software, then people will not pay attention to the industrial design." The reviewers will say, "Palm introduces four new features. Microsoft introduces 45 new features. We lose." So I said if we have no new software features, they can't write that story. All they can write is, "Palm introduces a beautiful product, Microsoft products still look awful." Right? And that what's happens.

I had to fight this huge battle internally because all we cannot do is - I said look, trust me on this one. We're just going to focus on the beauty of the design; that's the whole thing. It was not just elegance all around, not just the physical beauty but the way it worked and so on. And we just focused on that. That's what we did and in turned out we just blew out an order. Their 10% market share went to 5% at Microsoft. It was very, very successful strategy. Anyway, so we started working with IDEO. Occasionally we would work with them depending on the product because they're really good at certain things. But, you know, if you're doing a quick turnover product or something like that you don't really need to use them.

But they were great for bringing totally new ideas. The Palm Pilot was the first product ever to have a lithium ion battery in it. It wasn't removable here and no one was comfortable doing that because no one had done it before. And so everyone said oh, we can't do this. Why not? So we went and visited the battery manufacturers. We talked to them. They were uncomfortable but they couldn't tell us why it wouldn't work and then we did some tests. I did some test at home. I said I'll take a bet it's going to work, meaning that it would burn up and it wouldn't die. Basically that the battery life would be suffice for the life of the product, and so that was the first time that was ever done.

It was also that product had no screws in it; it was glued shot. And this was to make it look pretty. And there was no reason to open it up since you're not going to take the battery out. And at the very last moment the manufacturing guys got cold feet and they said, "Oh my God, we can't glue it because we can't glue it; that's too dangerous. What if they leave it on the dashboard and it gets hot and the glue melts and it opens up because these are thermal plastic glues?" And so they were going to reset the launch of the product by about four months to redesign it with screws. And so this is where your passion comes to play, right? So I go in there and I said what do you mean a reset for four months? We can't afford four months. And so I said tell me the problem. And I basically went back to my childhood. And as a child I looked on boats and we have shops. I practically lived in a shipyard.

I looked at glues a lot, I used to have 55-gallon drums of polyurethane foam in my kitchen. And so - I'm not joking! So I said I know glues. There is a glue that would work here. Let's get 3M on the phone right now and we're going to talk to the one person in the world who knows what glue to use. Yeah, we're going to get the white glue and we're going to ship this thing and we did. And it worked fine! There was never a problem with the glues.