Oral History of Steve Blank, part 2 of 3

Interviewed by:
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Hancock: Welcome back to the museum, Steve. It's a pleasure to continue with your oral history. This is Steve Blank and I'm Marguerite Gong Hancock with the Computer History Museum. Today is July 19th, 2019. Steve, I'd like to begin by giving you a chance to share some thoughts. We finished the first session and it's a great time now for you to reflect on maybe something to help synthesize what we might have missed or how you want to pull things together. Let's begin there.

Blank: Yeah. So it's very interesting coming in here to speak. And as I said during our first taping, I'm very honored. But I realized when I was going through my history, from defense to workstations to semiconductors to supercomputers, it actually kind of mirrored the history of Silicon Valley's evolution.

You know, most people today have no idea we started in the '50s and '60s as a center for microwave and defense valley. Most of those driven by Stanford's work for the US military in electronic warfare and electronic intelligence due to the one professor. Who I think the museum understands, but most people don't understand the role of Fred Terman in World War II in actually making Stanford the center of excellence. And the second is the Cold War. And again, Lockheed never seems to figure into Silicon Valley history, but it was the largest employer for electronics. It went from zero in 1956 to 25,000 people in 1965, bigger than Fairchild or anybody else at that time. So, Defense Valley was actually a theme and that was my entry to Silicon Valley and ESL through Defense Valley.

And then semiconductors. It is Silicon Valley, and when I joined Zilog, it was one of the many chip companies that could trace its lineage back to Fairchild Semiconductor, and before that, Shockley. There were 65 chip companies spun out in the first 20 years of it, out of Fairchild and Shockley. And then the rest of my career kind of mirrored those waves of innovation. So that was one thing I just wanted to observe rather than going through infinite detail. But it was a funny parallel.

The second thing was-- and it wasn't obvious to me until I also started reflecting. At least when I was an entrepreneur, most founders of companies were happy to build a better product, not change the world. The mantra was not, "We're going to revolutionize X," it was, "Hey, look what I can do. It's faster, it's better, it's whatever." There were just a few people who had the vision of doing that. That's the ones we write about; Jobs and Gates.

But I will contend they were the exceptions. They were truly visionaries, where the rest of us were product visionaries. They actually saw things much further than we did. And I think that's an important distinction between the whole kind of roster and litany of the evolution of technology versus those who have the radical idea -- remember Microsoft? A computer on every desk. Now we've got a laugh, they're in pockets and watches, and when somebody is watching this, probably brain implants and something else. But back then, this notion of computing, democratized all the way down to a desktop, was a radical idea. And Jobs' idea, once he stole it from PARC, to use a graphical user interface-- he missed everything else he saw, like networking and everything, but he got that. Those were few and far between. And so that was the other observation.

The companies I was in were great product companies, but not vision companies. And probably the other piece is that we really didn't understand, and we'll get to this later about my work, about all the components necessary to translate a technology idea into a business idea. We were still replicating this notion that startups were smaller versions of large companies. So, everything I had done, up until this point at MIPS Computers, was simply we were building smaller versions of large companies. That's what I wanted to get at.

Hancock: Very helpful. Well, I'd like to just follow up to a couple of items before we move forward on the first point about your career moving in parallel and reflecting and impacting the Valley. I think that's one of the things that sets the Valley apart, because there is this special pool of people who have been here a long time who then become advisors and things. How do you see that evolving over time, where people who, like you, have been here long enough to go through different business environments, live through different technologies, change the different models?

Blank: Well, it's kind of interesting. The Valley, for a long time, I think still kind of had this pay-it-forward culture. This culture where if you succeeded, instead of retiring somewhere, you both invested back in your own kind of industry, but you also gave freely to young entrepreneurs. I think the most famous photo somewhere in the museum, obviously, is the one with Steve Jobs with long hair just as he was starting Apple, found Bob Noyce's phone number in the Palo Alto phone book and there's a picture of him having dinner with a bemused Noyce. And hearing Jobs later talk about that dinner, “He was trying to explain stuff to me I didn't get until years later.” That is the bad news about mentoring and coaching is I still remember people trying to tell me stuff in my 20s or 30s I just didn't have the context to understand.”

But the Valley has been very good at that. The canonical Wagon Wheel story-- that is the restaurant where the semiconductor engineers used to meet-- I think typified that. The fab people would go and have lunch there and they'd complain about losing the formula and their yields have gone down. And they'd be talking to their competitors. And the apocryphal story, is one of them was complaining and we don't know why we lost the formula. We've been getting no yields at all this week. And someone from a competitor says-- and remember they were competitors but they all kind of came from Fairchild. They all kind of knew each other. It was a small band of brothers. And back then it was all brothers, no women, would say, "Hey, did any of your women on the fab.." and the fab was women, "..start using hairspray?" And they went, "I don't know. Why?" "Why don't you ask?" And the next day, "Yes. Why?" Well, the hair spray is contaminating the silicon. And so they stopped them from using hairspray. All of a sudden, yields went up. And so that's a story I heard at Zilog in the '70s when we were there. There might be a kernel of truth about that kind of help.

This is way before lawyers and MBA's got imbedded in the business. And I don't know if I'm answering your question, but I think this notion of mentorship is important in your 20s and 30s. And then the sad part is you grow up, and realize you've become the mentors and you're now maybe equal or better than the people who mentored you. If not better, but it's your turn now. And that's kind of a bittersweet transition. I remember going through that. My mentors in my career were-- some of them were positive mentors and I want to point out, at least for me, for people whose behavior or thinking I wanted to emulate or people

whose behavior and thinking-- I said, "I don't want to do it, but I appreciated the yin/yang of the distinction."

One of the first people that made a huge impression on me was Allen Michels, the president of Convergent. And it was a yin/yang, both in his ability to articulate complex things simply and create energy and passion. But he was probably the ultimate dysfunctional human being and had behavior that, unfortunately, at some part of my career, I emulated until I realized this was not productive. Ben Wegbreit, who I talked about, who was my mentor, my peer, cofounder…

Hancock: Multiple times.

Blank: ...Multiple times, taught me how to think. Gordon Bell, who was-- while Ben taught me how to think, which is an incredibly rigorous and analytical process, Gordon taught me to see over the horizon multiple times. And it not that, like, I "Here it is, Steve. Here's how you do it." It was just watching somebody do that. I remember multiple times watching Ben or Allen or Gordon, going, "How do they..?" And then 20 years later, people saying that 'how and where--?' and I realized it's just an accumulation of knowledge.

But watching people whose pattern recognition skills in those areas were a goal for me to emulate and just watching them. And for some people, and I now understand why, they actually took me under their wing. I don't think any of us at that time would ever use the word mentorship. That was not a guy thing you said, but they paid attention to me and actually helped me in my career. And I now understand why, because that's why I do it with the younger engineers and entrepreneurs, because it's a two-way street. That is, mentorship is you're giving as well as you're getting. And so, what they were getting from me was insane, crazy ideas. But once they had one, and they could kind of pattern-recognize like, "No, no, we've done that. Oh, that's a new one." I now recognize that. I didn't recognize that at all at the time. And then besides Allen and Ben and Gordon, Rob Van Naarden, who taught me immense things about how to do sales, which became a good chunk of lean startup later in my career.

Kathryn Gould, was one of the first women VC's in the Valley. In fact, I didn't understand for a decade, early in our relationship where she said, "I never want to be known as the best woman VC in the Valley." And I went, "Why not?" And she said, "I want to be known as the best VC." And it took me to have daughters growing up to go "she got it before almost anybody else". She said, "Those are insults when I get those awards." And she passed on way too early. But Kathryn was a mentor later in my career. And others influence the-- and paid attention to me well past what I deserved. And so, my career as an educator has been part of that, giving back. And I must meet sometimes just with random people who ask. The request list is much bigger than the ones I could serve, but I think that's what makes the Valley culture different. I've travelled to lots of entrepreneurial areas, but in some places, people have their hand out for I'll meet with you if you give me part of your company, or give me this, or give me that. [In the] Valley, at least when I was an entrepreneur, it was freely given.

Hancock: Well thank you. That's a great way to start.

Blank: Did that answer your question?

Hancock: Yes. And I think we're at a good point now to continue. Was there anything else that you wanted to add at this point before we move on to MIPS?

Blank: I think we talked about Zilog in some detail. Did we talk about Intel versus Zilog?

Hancock: No, we didn't. That's one topic we didn't. Let's go back. Let's realign and let's put a bigger context.

Blank: Yeah, so I did two semiconductor companies. Zilog and MIPS. And Intel, you know the Zilog co-founder, Federico Faggin, came from Intel. And I didn't realize at the time what a malevolent influence Intel and Andy Grove actually had on the microprocessor industry. And much like the hagiography that got built around Steve Jobs, the PR machine around Intel, I think did a very bad job-- good for Intel, but bad for the industry and ultimately bad for Intel, in burying the truth of what Intel was about. At first, it was this technology machine, which was genius, genius. But after Bill Davidow's Crush campaign and then the Intel Inside campaign, [it] ended up not to be a marketing campaign but an illegal monopoly machine, where they basically gave illegal kickbacks to computer vendors and shut out ones who wanted to use alternatives like AMD and anybody else. And so Intel's dominance in the second part of the-- or the last quarter of the 20th Century was half technology, but the other half, illegal marketing and sales techniques, which actually blinded them to the innovation that occurred outside.

They missed ARM completely. They missed the low-power microprocessors. They missed mobile. They missed all these things because of their use of things other than technology. They had, like a 90-plus percent monopoly here, thinking that's all they needed to do forever. And I say that having been a competitor to them. And this is not to take away anything from the engineers. But it was not a free marketplace. And because it was such an arcane place or arcane industry, when the government decided to do antitrust against the Intel/Microsoft duopoly, they went after Microsoft rather than Intel because they could understand what software was, and the chip thing was just too difficult.

The other piece, just to make the point, was that Intel did not invent the microprocessor. There's a good case to say Lee Boysel at Four Phase invented the microprocessor and that Bob Noyce was on the board of Four Phase, saw what was happening with that chipset. And when that was proposed as a project inside of Intel, he said, "Yeah, we know this works. We saw it somewhere else." Four Phase was just using it as an internal processor for a bigger computer they were building. But there was actually a court case in the United States about who invented the microprocessor. So sorry for the soliloquy. You can edit this part out if you want.

Hancock: I think it's an interesting perspective to add in.

Blank: And again, if you read Andy Grove's bio and background, etc., he was a relentless and ferocious competitor. All good for the Valley and good for Intel, but because there were no regulatory boundaries on their behavior, their behavior crossed the line by far, and it continued way past what was reasonable and

even good for the country. We ended up basically shutting down innovation in microprocessors for probably 15 to 20 years because of their behavior.

Hancock: Well with that, that sets the stage for MIPS.

Blank: MIPS was great.

Hancock: Which was great. So let's talk about the origin story of MIPS. The idea, your cofounders.

Blank: Well, so the origin story you're going to have to get from [John] Hennessey, [Skip] Stritter and [John] Moussouris. They were the founders of MIPS. I was brought in by the VC's. I seem to remember having my first interview at-- when MIPS was-- I consider myself either the fourth employee, the 25th employee or never employed. Everybody gets to rewrite history. I've got to tell you a very funny MIPS story. I'll jump to a little further in. So I was the first VP of marketing, acting VP of sales. I left after a year, blah, blah, blah. Years later, I meet Bob Miller, who became the CEO of MIPS for a good long while. And he looks at me and goes, "Really? Were you at MIPS?" And I went, "Well, so much for my place in history." And so as I've gotten older, I now realize, you know, the survivors get to tell the tale. I wasn't the survivor. But the MIPS story was I got hired…

Hancock: The VP of marketing came and talked to you, right?

Blank: Well, this was an argument later, whether I was the VP of marketing consultant, or the VP of marketing. So, in any case, I got interviewed in the Mayfield offices, with Gib Meyers, Grant Heidrich. And then I think Mayfield, Kleiner and IVP were-- and Mohr Davidow it was one of their first board seats. There was Bill Davidow, Sam Colella, Gib Myers, Grant Heidrich. And the guy I thought was the semiconductor guy, until I found out decades later that this was the last semi startup he was on the board of, named Brook Byers. Brook, of course, became famous as the life science guy at Kleiner. It was an incredibly powerful board. And John Hennessey at the time was the junior professor from Stony Brook in computer science writing some book on a new class of processors.

And the notion of MIPS was basically to take the Stanford design that John and his team had done in nMOS. But was a new concept in architecture instead of these cluttered instruction sets. Timeout, let's go all the way back to the basics and try to do one instruction per cycle. And he already had a chip design, so let's go fab[ricate] that design. And Skip Stritter came from Motorola where he worked on the 68000, I believe, with Nick Tredennick. [John] Moussouris had worked with John Cocke on the IBM 801, so it was a very powerful technical team.

And my job was, "Go find some design wins." Okay. For what? And also try to understand, and this is the first part of what eventually became some of the lean startup techniques. I still remember being tasked to find out some technical features and needs of customers. And this is where I got it wrong -- got the methodology wrong. We could still argue whether I got the technology right. They were trying to figure out, because it was a new architecture, "Should the chip do little-endian or big-endian? What should the byte order be?" I was tasked to kind of go out and find that out. And I remember talking-- that is one was

like-- should it emulate DEC byte order or IBM byte order, So what was the byte order? And go figure out whether it was little or big. And I went out as a good marketeer and got the sum of the customer feature requests. And the answer was “both.” Now, in hindsight, I would smack anybody-- the job of an early-stage marketeer is not to collect the sum of the feature sets. It's to do the minimum feature set and figure out what you're going to trade off.

But I came back and said, "Oh, we should do both." Well, the chip guys said, "Yeah, it's only another 1,000 gates." And the compiler guy goes, I think it was Larry Weber, said, "Are you out of your mind? Do you understand what this is going to do to decades of computer software?" And I'm like, "No, not really." And they implemented the little-endian and big-endian flag, and you could blame that feature in the MIPS architecture on me. But my job was to go out and essentially not only create a larger-than-life view of this startup who, back then-- and this was our collective mistake -the only place we thought that you could have a MIPS chip, because of its performance, was going to be in computers. Not as peripherals, not as anything else. And who else was selling microprocessors? Intel. So obviously, Intel was our competitor. All in hindsight, we maybe should have thought about an ARM strategy rather than a direct, head-on strategy, right? Hindsight is wonderful, but that was one thing that was intuitively obvious. There's the market, let's go for it. And so I did a couple of things. Number one is how do you get noticed when Intel, even then, was the 800-pound gorilla.

Hancock: Dominant player.

Blank: No one had heard of us, and IBM's 801 RISC project was secret. How do you do this? So I decided to go after the industry analysts on Wall Street who followed Intel. And I started telling them about this secret-- not-MIPS company, but about the secret IBM project, that was going to put them out of business. And all of a sudden, analysts were now interested in RISC, not because of the startup, but because of IBM. And so I would say, "Oh, and by the way, there's one commercial vendor that's going to be selling this stuff as kind of an arms merchant to everybody else." And so they started asking Intel in the analysts meetings, "What about IBM and this startup called MIPS?" And all of a sudden people started talking about our company in context with IBM. And of course, we got a visit from IBM security going, "How did you know?" And Moussouris must be-- it was just me making up this positioning.

Our first real deal was-- and by the way, back then I still remember, MIPS-- the whole company could fit in John Hennessey's 1964 Chevy as we drove around Silicon Valley. I mean, that was all of the company. And first visit I took the whole team to, and I had done a couple of meeting with was with a company called Prime Computer, which back then was kind of a minicomputer company. They were getting into computer-aided design as well as some vertical markets. And the head of engineering had come from DEC, where he ran the semiconductor division, a guy named Andy Knowles. And I remember we came in with overheads and here’s our performance. And Andy must've been a real old guy. He must've been 50. But I remember maybe he was actually my age now. But he was nodding off in the meeting until-- I forget whether it was Hennessey or Moussouris -- put up the performance slide, 10X a VAX.

Hancock: 10X?

Blank: 10X. A VAX was the kind of standard benchmark back then. And I remember Knowles' head literally snapped back up and said, "Son, if you could do that, you have a deal." That was the moment I thought that MIPS became a business. So, of course, they just wanted to buy the silicon that they were going to embed in their own workstations, which were going to be their next generation. And there was a guy who works for Andy named Glenn Halio who was the VP of engineering. And Glenn said, "No problem. We could build the stuff. Give us a prototype board." And we were also thinking about building boards kind of as a demo and maybe even be able to sell the board as well.

Well, six months later they run into trouble and they now need to buy complete systems from someone else. Well, how is that going to happen? So, let me just back up a couple of months. Besides calling on Prime, I said, "Hey, there's this other new startup in Silicon Valley who's building innovative stuff. It's called Silicon Graphics. And Hennessey goes, "Oh, I know Jim Clark." What he didn't tell me is he and Jim Clark had gotten into some pissing contest at the time, and at least at the time they didn't like each other.

But okay, and we went over to see SGI, and maybe we could get a design win there. And SGI had just gotten a new president-- I think it was [Ed] McCracken, and had a new VP of engineering, Howard Washington, who looked at the MIPS chip and said, "No, we've already kind of settled on a Motorola 68000". I was so desperate for a win I convinced the MIPS guys, "We should offer SGI an unlimited license to all our technology if they would give us 100 grand and five engineers to help us do the UNIX port. Unlimited use of MIPS technology forever internally. And they passed on the deal. So just hold that thought.

So that was an early-- now we get Prime, and Prime is excited to be a customer, but they can't build their own workstations. So, who do they decide to contact? SGI. And so Prime calls SGI and says, "We'd like to buy your workstations." But that 68000 chip, no. We want a MIPS chip in it. And so, SGI had to, in fact, adopt MIPS now as a customer. And that deal we offered them, completely off the table. So SGI ended up five years later spending 300 million dollars to buy MIPS for a deal that they could have had for $100,000 and five engineers. And the reason why you never have heard this story is it was the same board members, Kleiner Perkins and Mayfield, that were on both boards. And there was no way they wanted the story known anywhere else. You're hearing it for the first time.

Hancock: This is new to me.

Blank: New to me. So I was there. I was there when we made the offer to SGI, and I was there when..

Hancock: What year was that? Do you remember?

Blank: So I was there in '84, so it was some..

Hancock: Had to be that fall?

Blank: Yeah. Sometime in '84. So the first-- in history, the first meetings were with SGI. Literally when I hadn't even left the Valley, is "Let's get a lighthouse customer. SGI sounds great. Gee, John, you have this relationship. We can go meet with the president and VP of engineering without 20 preliminaries. They're small enough to make a decision." And they did. “We're not interested.” And it was the Prime deal that forced them to adopt the MIPS architecture. And they had the opportunity to own the technology.

Fast-forward. SGI did this twice in my career. My second time this happened with SGI is-- and I'm jumping way ahead as we started a company called Epiphany. And one of the cofounders, a guy named John McCaskey, who was director of marketing [at SGI], who built-- and I'll tell the story later in detail-- who built, essentially, the first revision of what I wanted to build in epiphany. He built it as an internal product [at SGI.] And so I got John to quit his job and I said, "Why don't you ask them to license the software? Because John, if we could take your software, we get a real head start." And I said, "Well, tell them if they'll invest for a couple million bucks, will give them unlimited use of the software we design, back." And the VP of marketing or the VP of sales that McCaskey worked for said, "Screw you and screw the company you're going to. Take the goddamn software for free."

Well, three and a half years later, we had a bigger market cap than SGI, and I sent that VP of sales our red herring. So, they did that twice in my career. They passed on it. And it's a truism in the Valley. You hear the story about HP passing on Apple when Wozniak was there. Or the business school professor who gave the FedEx founder a “B” in his class. And we all laugh about that. It turns out that's a mistake, and that's a mistake we don't teach well. Is that disruption never comes with a memo. It really doesn't. So, we laugh. How come they didn't see X? Nine thousand, nine hundred and ninety-nine people wouldn't see X. The world doesn't come with a, "This is where everything changes" moment. Because most visionaries are actually hallucinating. Right? Just a few of them are actually seeing through the fog. And we really have a hard time. VC's who have been in this business for 75 years, most of their investments fail.

Hancock: Still.

Blank: Still. Think about it. It's a hits-based business, just like entertainment. Hollywood has been making movies for 150 years. People have been writing songs for thousands of years. We can't figure out, still, what's 100-percent hit rate. Some people have better hits than others or better pattern-recognition skills.

So I say this only back to, well, I laugh about the SGI stories getting it twice in a row. It's just worth mentioning as an interesting part of history, not because I thought they were idiots. I thought they were idiots for other reasons later on in their corporate history. But anyway, back to MIPS. So MIPS was a lot of fun. I got to see, unlike Zilog, where I joined later on, as employee 90 or something. I was on the ground floor watching them use the first or second generation of silicon design tools and Ed Hudson designing and doing circuit layout. And Steve Przybylski writing compilers, and I mean it's just like right there. And it was wonderful. I still remember Les Crudele, who was in charge of design automation for the company, somehow pissing off… or Moussouris pissing him off so much that Les chased Moussouris around the boardroom table and he was physically going to tackle him and beat the crap out of him. I

mean, it was like-- and the whole company might have been 12 people at the time. It was just a wonderful time.

And then we hired a new CEO. We had an acting CEO named Bob Wall, who was the adult supervision for the VC's. And this was a really interesting time, because Moussouris had concluded that nMOS was the world's stupidest idea to [use to] commercializing chips. And that's when the world was going from nMOS to CMOS. And Hennessey was, "No, we got a working chip." And Moussouris, god bless him, saw the future even more than Hennessey did and said, "No." And that was a big technical discussion, way above the pay grade of not only me, but of Bob Wall, our acting CEO. And of course, our VC's, who-- yeah. We funded you guys. You figure it out.

And I don't remember how it got resolved. But I think that's what made the company-- I mean, there are multiple critical decisions in architecture and the rest. But I still remember that was Moussouris' major contribution. He would go off later to do a startup called MicroUnity, which -- you should get him in here for an oral history. Amazing story of failure and redemption. For years we thought of him as the Flying Dutchman of Silicon Valley, and then he settled a patent lawsuit with Intel for over close to half a billion dollars.

But anyway, the MIPS story was quite interesting. And we hired a CEO named Vaemond Crane as our, finally, professional CEO. And after, I don't know, a couple weeks or a month, Vaemond comes in and calls me into his office and says, "Steve, let's talk about what your job is and what you been doing." And he lists all the amazing things that I've done and it's great and yeah, I'm here, I'm at Prime, I'm all over, I'm calling on X and Y." And he says, "That's great. You're just throwing shit against the wall." And I went, "What? This is what startup founders are supposed to do, or as a head of marketing." Again, there's no sales. I was the head of sales, though I didn't even think of myself as the head of sales – just get design wins. He said, "There's no strategy. There's no context. You're not explaining to people what you do. No one could figure out how to scale what you're doing, etc." In hindsight, he was absolutely right. He said, "We're going to hire a VP of marketing and we're going to get, obviously, a VP of sales as well." And I was speechless. I mean, it's like I was god's gift.

Hancock: You were this fireball, right?

Blank: I was a fireball. Just a fireball. And I was having a great time, too, but it was like your wife saying, "I'm leaving." Like, "What?" And I don't know. I somehow regained the power of speech and said, "Well, can I apply for the job?" And god bless him, I didn't understand what a great thing he did, because I always thought he was a jerk. And he might have been as well, but he said, "Well, why don't I get you a coach and we'll see what happens." And he really did. He hired a coach for-- had lunch with me multiple times. And this is what a dick-- excuse the expression-- I was. I couldn't hear a thing. I know we went to lunch. I know I had a coach who had gray hair who was trying to teach me stuff. And I was still so angry and so righteous in my indignation, I couldn't hear a damn piece of advice. And I think it took me a decade or two to admit that.

But there was a bigger, bigger lesson that took me much later to learn, which I think is universal. Number one is that companies go through different stages of growth. And this is a story that's repeated in every startup everywhere. The founders are not necessarily equipped to-- after you find product/market fit, are you the right person to grow? You might be a great hunter, but can you now plant the fields and sow the crop? Maybe not at the time. And was I capable of scaling the department? Possibly, but that's-- I had no one to coach me. That was the phase. Stop doing this and start building this. So number one is there are stages of growth which I call search, grow and then execute. You've got to know which stage you're in and you've got to have an honest assessment of what your skillset is, what are you good at, what do you love to do, etc.?

Number two is when someone tells you you're not qualified or you need to go, you go through a whole set of-- gee, you lose your title. This kind of means something to you. You lose a sense of community. You lose a whole series of connections. And so really it was a sense of loss I was pissed about, not-- but I could never have articulated, and there was no literature on any of this at the time. Oh, startups are smaller versions of large companies. So therefore, you have failed at your job rather than your job has just evolved and where's your skillset. Does that make sense at all?

Hancock: That's a really powerful idea, that companies go through different stages and they may evolve so that their executives or their leaders may not be the right fit.

Blank: And worse is when you're told that, there's this sense of not just you're being fired from your job, but the sense of loss and disconnection of "I'm not good enough". No, you were great. It's just like you're not great for this stage. It's not about you. It's about the job has evolved, but it's still this loss thing.

Hancock: So how did you deal with that?

Blank: Oh, I was an asshole. I quit. And that's when I found out, "Oh, you weren't really the VP of marketing, you were just a marketing consultant." I never went back to look at my deal. It was like, "Oh, yeah. I guess I was hired as the marketing consultant, so we still argue whether I was even an employee of MIPS. Excuse me, John Moussouris and Stritter, like, you wouldn't have had a company if I wasn't there. But history gets rewritten and I had a great time. And I thought those guys deserved every accolade they got for changing the history of computing and microprocessor design. Hennessey, of course, went off to be head of the Department of Computer Science at Stanford, and then eventually probably the greatest president Stanford ever had in terms of being the right guy at the right time both in fundraising skill. More importantly, capturing this technology wave that the valley went through during the dot-com bubble and during the first decade of the 21st Century.

Even when he was just at MIPS, we had a nickname for him. I don't know if he ever knew it. It was "the junior VC." We thought John was so articulate he was going to become a venture capitalist. He clearly had much bigger plans in mind and he deserved everything he did and all the accolades he got, Moussouris and Stritter also. Just sometimes you read about founders who didn't carry their weight. Listen, all those guys argued with each other like they were going to kill each other every day, but it was probably the best microprocessor team ever assembled. Les Crudele, then Todd Basche came in to build

systems and boards. John Mashey, did the UNIX system, Larry Weber for compilers. Just a Who's Who list of who went off to do spectacular stuff. So I enjoyed the company, I learned a lot. I learned a lot of the stuff I did, and I learned a lot about in hindsight, I would tell you I didn't learn a damn thing when I quit, though I got fired. But over time it was actually quite a powerful lesson about both company growth stages and this notion of loss and how do you deal with employees who don't grow or need to grow and how do you manage that.

Hancock: So on that second lesson, I'd like to ask a follow up. So many people, one time and sometimes many times in their career, face devastating changes and some don't either have the resilience or the insight to face them and move beyond. Any tips on how to do that? It's very difficult.

Blank: Not only is it difficult, you hear all these stories couched in different languages. "The VC stole my company!" I used to identify with all that stuff, and by the way, there are VCs who will steal your company. And some of them are criminals. But a good part of that story is, no, you don't get who you were at the time and what they were trying to tell you. I certainly didn't. This is about both age, maturity, and now we've learned a lot as a Valley but it's still something that no VC will tell you.

Think about it. If you're a founder of a company, so whose money are you going to take? The VC who tells you we're going to replace you when you find product/market fit or the one who says, "Hey, do a great job. Work your ass off, we're right behind you," until the day they're not. And so, it looks like VCs are stealing your company. Actually, what's happening is your interest and theirs have just become unaligned, right? They're aligned when you're creating ever-increasing liquidity potential. They have a business model as well and as long as your business model and theirs are aligned, you're like in charge. The minute it's unaligned, you're a disposable item.

They might like you personally and maybe put you somewhere else, but they're never going to tell you, "No, no, no. You're skill set is just great over here." I think as we've gotten more mature in the Valley and have learned more things to actually give names to these transitions and stages, we should be doing collectively a better job in teaching and coaching and providing support. Still a failing of, I think, venture capital because there's not a lot of collective upside for them to do that, but I think we can now do a better job of explaining it.

Hancock: And it's the role of organizations at our universities, museums, maybe, and other places?

Blank: Yeah, universities, museums, coaches, etc. The Internet changed everything in terms of available information, right? When I was an entrepreneur you were limited by your coffee bandwidth. <laughs> No, seriously, to collect data and you happen to be lucky because you were in the region where the data existed. There were no books, there were nothing. Now there's infinite information, so if you want to find out about these stages you could type, "getting screwed at my startup" or patterns. You could at least get that from bloggers and other entrepreneurs and yes, universities. But you don't even need to take a class or be at Stanford. Yes, maybe there's a session at the Computer History Museum. But now there's an entire cloud of information. In fact, nowadays entrepreneurs have so much information the problem is how to sort out which is valid, which is not, which applies to you. Oh, wait a minute, they're writing about

hardware and software but who is writing about life sciences? It's hard to imagine, but VC firms used to do both in the same firm. It's inconceivable now.

Hancock: NEA [New Enterprise Associates]?

Blank: Right, right, but every firm used to have life science partners and the hardware and software partners. Did I answer your question?

Hankcock: You did.

BLANK: Sorry, that was MIPS.

HANCOCK: That was MIPS.

BLANK: And so, by the way, it [MIPS] did end up giving Intel a run for the money, and Bob Wall, I think, was a pretty good CEO. But in hindsight, I'd say they could have been ARM. And given the things that Intel was willing to do to win… I don't think people appreciated it at the time… the depths and the level they went to. So probably, knowing with a hundred percent hindsight, we should have, in fact, gone into different spaces. That's the one I kick myself. I mean, we probably could have been in printers, and I don't mean that's the business that would have excited people, but we could have found some other architectures. Instead we decided to go where real men build faster and bigger things rather than real men build low power things.

Hancock: Well, let's continue now onto Ardent.

Blank: Ardent.

Hancock: You've reunited with Ben.

Blank: And Allen Michels.

Hancock: And Allen Michels.

Blank: Holy cow!

Hancock: Now's the time to talk about the origin of this and the decision to band together with them for Ardent. This is the mid '80s if you could place us there.

Blank: 1985.

Hancock: Perfect.

Blank: So I leave MIPS. I'm out consulting with a friend of mine, Glen Miranker, at the time. Glen was wonderful, hardworking guy. He was an early employee at Valid Logic where my ex-wife had worked. And Valid, I'm sure some of your readers of this history will know, there are three companies that pioneered

electronic design automation: Daisy, Valid and Mentor, and Valid was one of those players. Glen had played a key role there and had left, and we had become friends and we were consulting in New York.

I got a call from Ben Wegbreit, who I had worked with and for at Convergent who said, "Allen and I and a couple others are starting a new company. We want you to come and be our head of marketing." "Okay, sure, but I'm in New York with this guy you should really meet named Glen Miranker," and so, "Yeah, bring him along." So we all meet in Ben's house. Ardent, which was originally called Dana Computer[1], started in Ben's bedroom thinking about what we should build. We didn't even know what we should build, and have a couple of fun stories about how to figure out what product. We had no idea it was going to be a supercomputer.

Hancock: So how do those conversations go?

Blank: Well, the good news is the conversations really didn't go in the building, they went out of the building. So Rob Van Naarden, who was at Convergent, and I got sent out to fly across the country and start talking to people about what might be possible and our first idea was to build something that – I don't know if people remember -- HyperCard.

Hancock: Oh, yes.

Blank: It was kind of a multi-media internet without the net. Kind of a software product that Apple had come out… building some hypertext product with some net connectivity. There was a professor at Brown University, a well-known graphics guy named Andy van Dam, and van Dam was working on something like this and why don't we go see van Dam. So we flew across the country and got van Dam excited. Because Rob was Dutch and van Dam was Dutch, they spoke in Dutch and that kind of got them excited. But van Dam was thinking about going to this supercomputer company, and this kind of got lost in the mist of time, but just as we had gotten Andy excited, we got a call from Allen Michels and he says, "Never mind. We're going to build the supercomputer." <laughs> And we go, "Wait a minute. We got this guy recruited," So alright, back home, they convinced themselves that real hardware guys will build bigger hardware.

Hancock: Bigger and faster.

Blank: And so a couple of people passed through kind of interestingly. One is – I'm blanking at his name — who did the Titan machine at DEC. It was supposed to be their mainframe follow on to the PDP-10. He's now a VC [Forest Baskett.] At Greylock or NEA? [at NEA] So he was part [of the company] for a week, and then got into a fight with Ben or Allen and then he got canned. Then I saw Gordon Bell walking down the streets of Palo Alto and it turned out he was out in Palo Alto for a board meeting with TechKnowledge. Who was the computer science professor who did AI in the '80s, head of the department at Stanford? I'm blanking on his name.

Hancock: Ed?

[1] Because Ben's house was on Dana street.

Blank: Yes.

Hancock: Feigenbaum

Blank: Ed Feigenbaum. He was on Ed Feigenbaum's board, and I had known Gordon because by the way, Gordon Bell was the impetus for MIPS starting. The MIPS chip was first kind of inspired, at least the history I heard, by Gordon convincing either Stritter or Hennesey and Moussouris that he needed a high-power piece of silicon for this computer company he was building when he left DEC called Encore. So MIPS was going to be the Encore processor initially and by the time MIPS had formed and started, Encore had imploded or something else had happened, but that's where I first met Gordon. In fact, I remember my first meeting with Gordon at MIPS was as a potential customer. I didn't quite understand the relationship, but this old guy pulls up in a Porsche and I went, "I like him already." <laughter> Somewhere in Massachusetts. That was my first memory of meeting Gordon and I said "Who is this guy?" and they went, "You don't know who Gordon Bell is?"

So anyway, back at Ardent, so I bring Gordon over and Gordon worked at DEC and Allen Michels and Rob Van Naarden and a good chunk of now the Dana Computer founders knew Gordon and talked him into being associated with the company. It was actually kind of this great pickup team. There might have been, I don't know, 10 or 15 of us who were founders who still didn't know what we were going to do.

I remember going to Kleiner Perkins, and they had an office in the city, and I remember just sitting there watching Allen talk, and they went, "We don't care what you're going to do. We want to fund it and here's ten million dollars," <laughs> and Allen turned them down. <laughs> It's like now, but back then it was insane. Because Convergent had— had it been sold? I don't think so. It was still going on a $400 million company, which went from zero to whatever. It was one of the hot startups in Silicon Valley for hardware systems at the time. Also, a completely dysfunctional, crazy place but he [Allen] had a reputation of building things that succeeded.

Hancock: So how did that work? When you think about founding teams and patterns, typically there's two, three strong people that come together.

Blank: Yeah, this was just take the entire crew. I've got to tell you a Convergent versus Ardent story, which again, I did process a decade later and became a key part of the Lean Startup methodology. At Convergent Technologies when I joined, they originally decided--that is… Convergent came from Allen Michels and Bob Garrow leaving Intel, where they were responsible for development systems and Garrow was the inventor of something called the Multibus, which was kind of a standard computer board interface. They thought, gee what a great idea. Why don't we build single board computers we could sell to other computer manufacturers? Did I tell you this story?

Hancock: No, not yet.

Blank: So at Convergent, the first pitch that Allen went out with as kind of a sales guy before he hired anybody, tried to sell this new idea of a microprocessor on a board that could be designed in by other computer companies. It's called an OEM product. Here, we'll give you the board and you can design and

build a new class of computers, and as Allen told the story, it's like, "Yeah, you know I went in and they said," Great! We'll take five," and he said, "Five thousand?" "No, we'll take five. We need to prototype. You don't have an enclosure, do you?" "No." "You have an operating system?" "No." "You have any languages or apps?" "No." "So, we need to do all that so we'll redesign your stuff but thanks for the idea. We'll take five." He went to another company. "How many will you take?" "Three." "Three thousand?" "No, we'll take three." Same story. This goes on and on, and says Allen he goes to Burroughs and Burroughs says, "We'll take five," and then it gets to the, "Do you have an enclosure?" "Absolutely." "Do you have an operating system?" "Sure. "A real-time operating--?" "We have that." "Do you have languages?" "Which ones do you need? Oh, we have those too." "Do you have apps?" "What do you need? Word processor? We have a word processor."

He goes back to his co-founder Bob Garrow who says, "Allen, we don't have any of that stuff." <laughs> Back then you don't buy that off the shelf. And Allen goes--either Bob told him or Allen knew--where do you get this? The only people on earth who have any of this stuff is Xerox PARC.

So Allen hires Ben Weigbreit, who ran the advanced systems division at PARC. He brings all the software engineers who built the operating system, the word processor and all the other things that made Convergent a system.

Couple of lessons and one funny story. What Allen did at Convergent was the classic thing we now call "customer discovery". That is, he had a hypothesis about the product he would build. But he was actually listening after a while, like no one was interested. What is it that you would need? And they weren't asking for something that was off boresight, they were actually asking for something that was dragging him into the future. That's not like build something very different. It was actually build something more, extend your vision. And Allen was good enough to actually understand this and this was a key. He wasn't the VP of sales, even though he was acting as it. He was a founder and it's only the founders who can take that discovery and pivot the company. So Allen was capable of convincing his cofounder that we need a bigger vision, and I heard the story because the company had just gone from a board company to a computer company. The paint was still wet on Ben and the software team when I got there, and why I tell you the story is what happened to Ardent.

So at Convergent, Allen was the desperate, hungry founder who was agile and tenacious. At Ardent, Allen was the very successful CEO who just brought over 15 people, including sales and marketing and everything else. He tasked us to go out of the building and so Rob and I were now building a supercomputer— more stories attached to that— go out of the building and listen to customers tell us what they really need. Well meanwhile Allen's raising money at an absurd valuation from Kubota and other people, but he had already told them, "Here's what we're building," and we come in and say, "Hey, Allen, here's what we discovered and here's what people would really buy." "Yeah, well you say that again, you're fired. I already sold Kubota on this idea." Is that distinction clear?

Hancock: Oh yeah, yeah very clear.

Blank: While we were founders, we were not really founders. We were like second tier. The only person who could make that decision was sitting inside the building not getting outside [Allen.] The only

customers he was talking to was the money, while we were learning from customers what we could have built. The irony of course….Gordon` Bell, who had now left and went to the National Science Foundation to run their first computing directorate, was trying to tell him, “Steve, SGI is using your MIPS chip and the floating point processor,” and it was SGI who actually built the real thing that ~~MIPS~~ [Ardent] should have. There were all kinds of lessons and signals. And meanwhile Miranker and Jon Rubinstein, both of whom went off to a great career at Apple and Jon was the CEO of Palm. And John Sanguenetti, who also went off to do some great stuff in EDA [Electronic Design Automation], were building a vector unit that was just kind of unmatched. Actually, it kind of sucked.

Well, we forgot about vector scalar startup time and Amdahl’s Law. But they learned a ton about building vector units, which they would go use at Apple to build the first vector units for graphics pipelines. And Nvidia is a direct descendent to everything that got learned about a vector unit being applied to graphics. It’s a big idea.

The Ardent architecture was the first time a graphics pipeline was put through a vector unit, and that can be traced to Miranker and John Worley and other architects. There’s something spectacularly unique about that architecture. But meanwhile we were just ignoring what our customers —- some people were saying, “We’d buy it as a server,” some were saying, “Can you focus on the graphics?” There were a lot of stories from customers about how this could have been used, but at least my memory is we were constrained by cash. We were bounded by what we had told our investors and we were basically no longer taking input. We were tasked to get orders, and so I was not only in charge of marketing, I was also in charge of the benchmarking group and [to show] how serious the benchmarking process was, Cleve Moler, the co-founder of MATLAB worked for me.

Hancock: Oh, hey. It’s very serious. <laughs>

Blank: So, we can make a benchmark do anything. Unfortunately, the machine couldn’t do anything but the benchmark. Cleve and his team and Randy Allen, who wrote the vectorizing compiler, also could do anything. But, unfortunately, the machine in real performance…. Also because we just didn’t have experience in understanding the subtleties of-- Amdahl's law was probably the biggest killer, which said even if you did a hundred percent vectorization, most problems are dominated by their scalar component.

For cost reduction we used the MIPS chips but we left out the MIPS floating point coprocessor, again for cost, which would have given us an enormous advantage in terms of speed. So eventually after I left, the VCs, investors tied two rocks together to see if they would float -- Stellar and Ardent. I have to tell you though two marketing stories about Ardent. One was, these were supercomputers but they had graphics units so think of an SGI tied to a mini Cray.

Hancock: That's a good visual.

Blank: Which it turns out is a Venn diagram with a null set <laughter>.

Hancock: So much for that product market fit, right? <laughs>

Blank: Right. It was like a floor wax and dessert topping all rolled into one. The market wasn't large. Two things: one is I knew nothing, and in fact no one else in the company did, about supercomputer markets. So how do I find out who those customers are? There were mini supers, Alliant and Convex at the time, but again, the 800-pound gorilla was Cray, and Cray published a glossy [magazine] every month that described supercomputer applications and interviews with their customers on how they were used. And I go to a trade show and I see one of these magazines.

This was before the Internet and I go, "Are there back issues?" "Oh, yes," and literally I ran to a phone, no Internet, called up Cray, gave them my credit card number and by the time I got back to Ardent I was reading through a stack, making an Excel spreadsheet of every industry, every whatever, discovered my vertical markets and then did the following. I realized that if we were going to have a chance in hell, everybody else was flogging iron, that is, trying to sell hardware, Convex, Alliant, etc., but Cray actually understood something that was subtle, but what they knew, was that people weren't buying iron. They were buying acceleration of applications as a series of vertical markets.

Hancock: As a tool.

Blank: As a tool. I didn't know shit about those markets, so I read those magazines. This is what was great about me in Silicon Valley. I loved getting smarter. My head's exploding here, and I know nothing about these verticals, so all of the sudden I kind of like say, "Alright, we're in five verticals," finite element analysis, seismic data processing, reservoir simulation, three or four others I don't remember.

Hancock: Computational chemistry.

Blank: Computational chemistry.

Hancock: Reservoir simulation.

Blank: Oh, there you go, alright.

Hancock: Computational fluid dynamics.

Blank: Yeah, oh, CFD was the other one.

Hancock: Okay.

Blank: Right, so I decide I need vertical marketers, domain experts in each one of them, and here was the insight I had, which I still think was a pretty good move. Yeah, you could teach marketers like me some of the science and domain, but it would take me forever. But you know what? Marketing, yeah you could get an MBA but that's bullshit. I could teach how to be a good marketer within six months or at least the basics of blocking and tackling if you're articulate and smart and you want to learn. So let me find the best vertical people in those markets and I flew around the country and I hired Tom McMurray out of Boeing—I think Boeing—at the time for computational fluid dynamics. He was doing both helicopter design and Navy submarine stuff and Tom went off, of course, to Sequoia and did a bunch of startups as VP of marketing and then to Sequoia and now is retired on his Sequoia bubble money. Rune Eliasen for

finite element analysis, was head of General Motors, FEA Group. I took him out of there and then he went off to do a set of startups. Who did some of the others? I don't remember.

But the one person I couldn't find because it was boom time in Texas, was I couldn't find somebody who was doing reservoir simulation and seismic data processing and that was a pretty esoteric field. I was going to the geophysical shows in Denver and everywhere else and I decided, okay, it's an important enough market. If I can't hire somebody, I'll do double duty as that job. I went down to Houston and got to know the Houston geophysicists and it turns out there was a petroleum area library in Houston. I booked a hotel for a week and I read the library. I'm not telling you I learned anything but I learned enough marketing buzzwords and I'll prove it to you.

This is one of the high points of my career. Somehow, I got invited down to give a brown bag lunch talk about the use of supercomputers in reservoir simulation at Chevron's La Habra research center in Southern California. So I go down and I give this talk, and it was a fairly esoteric talk about reservoir modeling and state-of-the-art, and the head of research at the end… and I'm like dying because if they ask too deep of a question it's all going to explode.

Hancock: Scratch below the surface.

Blank: Right. But they asked some questions and I knew like was Euler methods and I could kind of sketch a couple …. I was pretty good at understanding--. I'm not sure am I using the right words. I had no idea what it meant but they were nodding. And here was the kicker. I saved this card for my entire business career. The head of research for Chevron comes up and says, "You know, this is the first time a computer company doesn't send the goddamn sales and marketing person. I'm glad they sent an engineer. If you ever want a job at Chevron Research, here's my card." And I saved that card, not because I was qualified for anything other than maybe to write their data sheets, but for me it was the epitome of marketing bullshit had just been reached, <laughs> and I don't know if we ever sold them any computers but I had that business card for the next 15 years.

But none of that helped the company because, as I said, we were making the null set. Not because of the lack of hard work– and again, you should ask Miranker and Rubenstein who might violently disagree – but we really didn't quite understand product/market fit on the architecture level. We didn't understand how important Amdahl's law was. We didn't understand how deep the vector registers needed to be for even the vector problems. We didn't understand how small that market was, how important performance was.

There's one last Ardent story. The only possible win— and this was just a crazy hairball Steve idea— was back then the US Government was funding supercomputer centers at national universities. It was a national program out of NSF giving huge money. Essentially it was a subsidy to Cray, because that was the only thing they were buying. Pittsburgh had one, San Diego had one and now there was another bid out for another supercomputer center at the University of Pittsburgh and I proposed, why don't we bid on it? "Why don't we bid on it? It's written for Cray."

I proposed, well no, why don't we convince people that instead of having this batched Cray system, for the same price they could have 150 Titan workstations on everybody's desktop, which in hindsight was actually a pretty damn good idea. If the machines actually would have worked, it would have even been better. But if we would have won the bid, it would have been great. It was crazy, but we went after it. And we lost. They spent $35 million for that Cray. And I don't think that would have saved the company, but it would have been transformational to the fact that this notion of distributed supercomputing, which actually SGI pioneered for a while, actually we would have probably had another wave in the company. And I never forgot that loss.

Fifteen years later I'm retired, Epiphany goes public, and I notice …maybe it was 16 years later … an article in CNET about the Pittsburgh Supercomputer Center is putting their Cray on something called eBay [selling it] for parts. I bid on it and won. I spent $35,000 to ship it to my ranch so I could pee on it, and I did. <laughs> And I had it for about five years until I got a call from Cray, who wanted to buy it back for spare parts. I did, and I didn't tell them that they needed to check one of the processor bays. So I called that closure.

Hancock: <Laughs>

Blank: And by the way, seriously you can Google "Steve Blank Cray supercomputer eBay" and the story is still around.

Hancock: That's an incredible story, Steve. That's closure.

Blank: That's closure.

Hancock: You had your own way of doing it. <laughs>

Blank: It was actually quite good. I had seen it before but I forgot. If you've ever seen pictures of Cray, and I think the museum has one—

Hancock: We do.

Blank: --you don't understand that in the basement was a motor generator set that was bigger than the machine so it was one trailer shows up with the computer and the other trailer, which I hadn't planned for <laughs>--thank God the barn was big enough—-was for the motor generator. I had people after I bought it emailing me, "Oh, I wrote the compiler, would you like to get the machine running?," and I thought, I'd be the only farm in the country with its own Cray. <laughs> I said, "No." I just kind of let it sit and we kind of protected it but I did urinate on it once just to make the point.

Hancock: Any other barn stories?

Blank: No.

Hancock: Any barn burners that we want to-- <laughter>

Blank: No, none that I care to share, sorry. That was Ardent.

Hancock: That was Ardent.

Blank: Ardent was great. Allen Michels and I got into a fight about something and I eventually quit, but it was an insanely driven company. People worked their rear ends off. And again, Allen created the sense of urgency. He set up Stellar, which was our east coast competitor, with Bill Poduska as kind of the straw man. He would even come in and say, "Well I have somebody who was looking at Poduska's parking lot on Saturday and it was full. Only half of our staff showed up." Years later I found out he was just bullshitting. He had no idea. <laughs> I mean, it was that kind of environment.

Hancock: While we're telling stories, there was this story just about the culture and there was a note here about him spray painting deadlines on bare walls for the whole company to see.

Blank: That was at Convergent.

Hancock: At Convergent, right.

Blank: Allen would spray paint deadlines, literally with a spray can. But the last story about Ardent. It was actually one of the most painful parts of my career. As you can tell, there were lots of painful parts. Lessons for me had to imparted by a two by four because I did not pay attention, only in hindsight. But this one happened at the moment.

This is the beginning of Ardent and as I described the founders were really experienced. These were not 20-year old kids. Not only was it ex-Convergent people but ex-DEC people, who had worked in various areas. I remember we're having what's called the system planning meeting. We're planning features, and the company must now be 20 or 30 people. I have to bet the whole company or most of the senior people were there, and I'm the VP of marketing and I kind of know what some of this stuff is and could kind of follow the conversation. But it's a fairly detailed conversation and now they get into our graphics subsystem, what should it be. Back then—we don't even think about this now, our iphone has it— but should it be 8-bit graphics, 24-bit graphics? Should it have an alpha channel? Back then, all that required additional hardware, and it wasn't silicon-- it was boards worth of stuff.

I'm just listening, and this meeting's been going on for 45 minutes, and I'm the VP of marketing and I haven't heard the sound of my own voice. Gee, I kinda miss the sound of my own voice, and so I piped up and I still remember What I said, "Absolutely you ought to have an alpha channel." I still remember the moment, and Allen Michels turned to me and said, "What did you say?" and I still remember out of the corner of my eye Rob Van Naarden going, "Nooooo," and me going, well obviously he's really interested in my opinion. I don't remember anything after that other than I just must have expounded for like five or ten minutes. And then he did a typical Allen Michel's thing, but it had never happened to me directly. It was in front of a room of people I immensely respected. He started screaming at me at the top of his lungs, "You know, you don't know an f-ing thing about what you're talking about. There's a room full of people in here who have spent their careers building these things, selling to people who actually know stuff. You don't know shit about what you just said. You're a disgrace to the profession of marketing. Get

the hell out of my building." And I thought that meant "you're fired.' Jon Rubinstein, who was there, still a good friend, said, "You went so pale," and I could imagine I did because I felt like I could walk out underneath that closed door. I felt that high! Then he said, "Get out of my building," and "Take Van Naarden with you and don't come back until you learn what customers really need."

Lean startup methodology started that day - with that smack, that humiliation. He was absolutely right. Right? Think about it. What the f-ck did I know? My title said VP of Marketing. Obviously, they were waiting for my opinion. No, they weren't. They were waiting for some real facts from outside the building, and I didn't have a single one. I did have, maybe, a more considered opinion than just a regular VP of marketing, but you know what? That ended my day of, "I want to hear your opinions," What I really wanted to hear was, "Well we could have your opinions, but it would be great if it was actually beaten against a set of customer facts and you could interpret what they mean for us or present them to us, but you have no data,

So, we spent three months outside the building gathering data and doing these things. And remember my story about Allen ignoring them? But at least that's where I learned the value of not just pitching a product but trying to understand deeply how do they [potential customers] work? What do they do? How do they use computers? Where would this fit? etc. That's where some of the vertical marketing stuff came up as well. That was a real change in both my career, and I think that moment affected the entire Valley 30 years later, because the lean startup started that day.

That changed my career as a marketer. I went from a typical "I write data sheets" and "I do great theater", - to deeply understanding what is the role of marketing, at least in an early stage venture. Which is thanks for your opinion, but I now kind of divide it into, are we doing a faith-based enterprise or a fact-based enterprise? We could do either one, right? We could build it on faith, but it would really help if we were having a discussion about facts. And we had none. So that was a transformative moment. There was a lot of transformative moments in that company. It was a great time. It was the best of times and the worst of times.

Hancock: I'm still digesting that moment but you've just told it, but really to get out of the building and to listen and to move to facts.

Blank: And to be fair, when I've written and blogged about this, it was very interesting to read the responses. Most people said the guy was crazy, I would have quit. Why did you stand for that abuse? And it was more about– it wasn't about him. Allen was an abusive, dysfunctional CEO, but at his core, he had some great insights, and also about me at the time. I knew I was a great VP of marketing, but I thought much more of myself than I really did and there was no other way at that point in my life to have gotten me to listen. If someone would have kindly suggested, "Steve, perhaps you ought to--." Yeah, that's nice, let me go do some of theater stuff.

But until that message was delivered in that way for me at that time… Now it's like, "you'll go to jail for that or company gets sued." But at the time, who I was and my personality, that was about what was required to make a major, major transformation. Not just some minor, oh this is nice to do. Because after I came back from the field, it was like coming back from four years in the Air Force. I was transformed with the

power of understanding about customer needs and desires. Not that that-- just to be clear, the goal, which Allen got wrong, was not to generate a giant feature list of here's what customers asked for. The real goal of getting out the building, which he didn't understand, was to actually inform the founders' vision. That's different from lets generate a giant focus group and here's the feature set, which is what I did at MIPS with the little-endian and big-endian. That would come later. But that was a key moment.

Hancock: Thank you. Is it time to talk about Super-MAC?

Blank: Yeah. Though I think there was Pixar in between.

Hancock: Oh, that's right.

Blank: Right? So Pixar was a..

Hancock: Let's make sure we get with this.

Blank: So that was probably one of their hardest stories, but that one was good enough, I think. So I was kind of like in between companies again. I don't know how I got connected to Pixar.

Hancock: You really don't remember?

Blank: I don't remember if it was a recruiter or something, but they really weren't looking for a full-time employee and I didn't want to work-- they were in San Rafael and I had to commute up there. So I'd go up three days a week and it was this bizarre company. But it made sense at the time because they were building an advanced graphics system called the Image Computer. They weren't doing commercials or any of that stuff. They had left Industrial Light and Magic. Ed Catmull, Alvy Ray Smith were the cofounders, to take this piece of hardware they had built to accelerate image processing.

And given my work at Ardent, it was a perfect match. And the head of sales, I forget [his name] at the time, they didn't really have a head of marketing. So I came in to consult about-- I forgot what I did there and made a lot of money doing not much for them. But got to know Alvy [Ray Smith] real well. I don't think Ed remembers my name. But I do still remember Alvy. And I think my claim to fame was Alvy was working on software called Iceman at the time, which became, I think, a Microsoft product later on after he got written out of history. But I remember convincing him to stop writing the software on this Image Computer, which back then had 128 megabytes of memory, and try to use it on a Compaq. And I remember getting him the first Compaq 386 and having him move software onto that. He kept complaining about, "I can't believe people.." yes, Alvy.

And I also remember an Alvy story of when Adobe started coming out with Illustrator and other apps at the time. This is probably '88 or '89 or somewhere around there. He looked at Illustrator and I still remember his face. "I can't believe it's a product. All it is is B-splines. I invented this." And then looking at Photoshop. "That's my alpha channel." And I don't know if I tried to explain it to him, but at least for me, it was the difference between engineering and marketing. Right there, and they're like, "Well, I invented."

Yes, but someone else figured out how to package it, put a user interface on it, and make it a product that not only the gods could use, but almost mere mortals could use. And Adobe did a spectacular job of taking basic technology and actually repackaging it in a form that graphics artists could use.

And John Lasseter was starting to do commercials then. So, Lasseter was there, I knew Ralph Guggenheim. In fact, I still see Ralph. Ralph now teaches with me in some of the lean startup classes I teach at Stanford. Some of the others. And that just went on for a while. Nothing particularly extraordinary.

Hancock: Are there any specific projects that you worked on?

Blank: They had this secret project with Disney, which I think was Sherlock Holmes, and then one of the scenes from Star Trek. And then they were going to animate the beginning of an animation. I do remember what tough financial straits they were in. Of course, Pixar had been bought by Steve Jobs, not knowing what it was going to become. And I do remember Jobs kept borrowing money from banks.

I was friends with their CFO at the time, I don't remember his name, who kind of described their situation as Brazil. I said, "Well, what do you mean by Brazil?" He said, "Well, just like Brazil, who's borrowed so much money that the banks won't let it go into default because it would bring down the banks," he said, "Pixar owes so much money to the banks, they don't want to call in the loans either. Because it would embarrass them and Steve." Steve was doing Next at the time.

And so Pam Kerwin came in as the full-time VP of marketing. She was, from everything I've heard from people who knew her, spectacular. And she looked around and essentially went, "What are you doing here?" And I went, "I don't know either." And ended the relationship, but it was just fine. I thought she did a spectacular job. Of course, Pixar and Jobs-- and they just had come out, or while I was there, came out with Tin Toy. Think of it as a demo reel of what was possible for what eventually became Toy Story. But they were talking, at least Lasseter, even when I was there they were talking when I was there about this idea of movies. I've got to tell you, I was laughing. Because it wasn't that movies were impossible, but the amount of computer horsepower at the time was just incalculable. I mean, you just did the math. But eventually, the math and the computing, much like everything about computing, caught up with what was needed.

Just a spectacular group of guys and women there. And unfortunately, and as the history is pretty well known now, Alvy got into a pissing contest with Steve Jobs. As Alvy was probably the last guy to put up with bullshit, and Jobs most of the time, half of it was bullshit and half of it was reality. and [he] challenged Steve's bullshit level and got fired and written out of history, much like Federico at Zilog.

So kind of a Silicon Valley trend of getting rid of founders, but also then rewriting them out of history. But I think Alvy had an equal role to Ed at the time. Though Ed did a job I never would have believed, growing into the role at a scale appropriate-- talk about growth. So watching the Ed Catmull I knew from the side, to the Ed Catmull today, who's kind of an industry icon of running Pixar, just unbelievable. I think like John Hennessey. Just watching those people grow up. And so that's probably the only Pixar story.

But it was great to just see the graphics and the problems and where the industry was at the time. And again, the transition from Ardent was pretty easy, because I understood high-performance graphics. Mike Kaplan at Ardent had built the graphical language that was equally, or probably as good at the time as RenderMan. So I was familiar with graphics programming languages as well. I was familiar with high-performance graphics engines and pipelines and the Image Computer and the Ardent machine were kind of like trying to solve the same problems. In fact, Ardent probably had a better graphics engine that could scale. So then I was recruited from Pixar to-- or Pam came in and I was looking for a job, but I remember being recruited to SuperMac. And that was..

Hancock: Was it '88?

Blank: Must've been around '88, yeah. And SuperMac, I'll just summarize the company. And I still use the phrase. It was fifth in a group of three. It was an early pioneer. A guy named Steve Edelman and Stuart-- I'm blanking on Stuart's last name—[Klein] was the cofounder of first add-on disk drives for the Macintosh and then add-on graphics boards. And then also add-on software. And so it was a potpourri of stuff. And I forget why, they had gone bankrupt and then Sigma partners had bought them out of bankruptcy. They were now re-staffing the management team and the founder was no longer in charge.

Edelman was one of these angry young men who are going like, "Oh, you guys don't get it." There's lots of Steve stories I'll tell in a second. And Mike McConnell had been recruited out of ComputerLand to be the CEO and they were looking for a VP of marketing. And so I get interviewed and get hired.

So back to SuperMac, I don't remember the interview process, but I think I remember interviewing with Mike, who I loved. Just the sweetest. Then I realized later on he was into Est, so he was clearly centered. Mike was just a great human being. And then meeting the cofounder and I went-- or the founder, Steve Edelman, I just worked for crazy people. And then Mike had to reassure me, "No, no. Steve has been removed from the management chain." And I went, "Oh, man." And listen, this is not a diss on Edelman's technical skill or even more so his insight. It was just that I was getting a little tired of dysfunctional behavior, even though I was now a practitioner of a good chunk of it. It was like you kind of grow out of wanting to be the abused child and you kind of go, "You know, this seems to be a pattern in Silicon Valley companies." But I actually joined, A, because of Mike. And B, because they were fifth in a group of three, literally. I mean, they couldn't have screwed it up any more. Except they had the pipeline of some great products and I realized what I could probably do there.

And so I just thought, you know, Edelman actually had some stuff going on in engineering that was interesting and Mike was a reasonable guy. And I met the head of sales, who was like, "Who are you and why are you there?" but that's the typical cats and dogs, which came into an interesting story in a minute. So I accepted the job. Or I came over to accept the job, and that's when I should have known I was in for something a little more interesting.

So I went in the lobby. I'm literally there to sign my offer letter. Mike's busy, so they come out to literally bring me the offer letter. And my soon-to-be VP of marcomm comes out and says, "Look, I know you haven't started yet, etc., but we have the most urgent issue for marketing. We need a decision before you

start." "Okay, what is it? Is it about strategy? Like we're getting killed at--" we had, like, six percent market share and there were only, like, three companies in the graphics board business. I mean, we had other businesses as well, but this was the one which we kind of bet on our future. And I'm thinking, "Is it our graphics strategy? Is it about some ad campaign?" And she pulls out two logos. To me, virtually indistinguishable from each other. Goes, "We're about to spend $50,000 dollars on a new logo design. Which one do you like?" And I look at these two and from maybe-- and she literally says, "No, no. You've got to look at the little kerning on it." And I went, "We're spending--" I still remember. Fifty thousand dollars was a lot of money at the time. And this was the typical impolitic me. And I said, "if this is your biggest issue, I would actually go back to your desk and update your resume."

Because that's what I encountered when I came in, which was 14 hard-working people completely confused about what the role of marketing is. And it was like day one. I've got 14 people in a company burning cash, spending millions of dollars a year on marketing that was obviously having no impact. To me, the ultimate impact of marketing, which you have to kind of remind marketing people, is not the products you're putting out as a marketing department. The metric for marketing is sales, not marketing.

And that was just a foreign-- "Well, we're doing our job." Like, "No, you're not." You're just using the wrong KPI or OKR. So I go in and I truly don't understand the consumer retail space. I don't understand their customers. I just knew they had great product and if they have great product, I could figure out-- I really like the channel. I'll figure this out. I know nothing about consumer retail.

So the first story about marketing at SuperMac is I go to 14 people, "Hi, I'm Steve. Well, maybe folks could tell me about our customers?" Because I'm now starting to like this notion of maybe we should know about customers. And 14 people told me probably 15 different stories. "Our customers are X. Our customers are Y. Our customers are here." And I'm even more confused than when I asked the question. And I still remember this meeting. It was not inquisitory. It was just like, "Educate me." And I said, "Well, when people buy this stuff, how do we know who bought?" "Oh, we get registration cards." And I had been a consumer of a Mac and I knew you filled out-- instead of the internet fill-outs or something, it was literally a piece of paper with a postage reply stamp, you dropped it in the mail and you got some-- who knows? Nothing. But at least the company gathered data. And so I said, "Do we have any customer registration cards." And someone, I still remember a brightly, spritely young woman jumps up and says, "Yes, we have lots of them." "Great, well, what do they say?" "Well, we haven't read them." And I said, "Can you go get them?" And they were piled up on one of these lab carts. I still remember shoeboxes of thousands of unread, untouched, unloved registration cards. And they literally wheeled them out to this meeting. And I'm sitting there just dying, going, "We've never-- anybody talked to…?" And I nicely kind of dialed back what I really wanted to say and said, "Thank you. Can you wheel that into my office."

And so I put up on my door, Steve's hours, nine to ten. That’s it. And from ten to six o'clock every day for the next two and a half weeks, I personally called 350 customers. I put together a questionnaire, I would learn what right questions to ask, etc. And out of those 350 customer interviews, I wasn't out of the building but I didn't have time to-- I made a couple of stops in the computer retail stores in the Bay Area, but I really wanted to talk to customers. I discovered that we only had one mainstream customer. I mean, we had lots. We had 15, we had 30 types of people using it. But the majority of our customers were

people who were color graphics professionals. People who were trying to get work done to deliver graphics on a Macintosh computer. And instead of thousands of things, they were only using four key applications; Photoshop, Illustrator, something called PageMaker, Quark, and maybe there was one other. But that was it. They weren't using 5,000-- that was it. And that was about 80 percent of people. But when I was asking them what do they care about, well, lots of stuff. Well, what do you care about most? Performance. Why do you care about performance? Well, back then it's hard to believe, but to move a 24-bit color image across the screen actually took-- like you could watch the pixels redraw. And so the faster it was, the more money they could make. And then I said, "Well, what's performance worth?" And they said, "You don't understand. We'd pay anything."

Hancock: Light bulb went on.

Blank: And I go, "What?" That's an IPO answer. When you hear someone say, "We'd pay anything," I went, "Say that again." And I heard that, and then I would kind of-- and then I heard it and I'd kind of, "Well, what do you mean?" And so, well then, you bought a SuperMac board. How did you hear about it? Now I want to know about our great marketing. Was it our ads? Was it our campaigns? "Oh, no, I went in to buy a Radius board[2], but the salesman convinced me to buy a Super--" Turned out sales was spiffing or paying off the channel. Nothing marketing was doing was affecting anything. And then I asked, "So how do you hear about new products and new boards?" Thinking there must be a million channels in the Mac business. There was a lot of noise. "Oh, we read the reviews in Mac User, Mac Week or Mac World." And? "No, that's all we read." Okay, you going to any trade shows? "Oh, Mac World and Seybold graphics." Anything else? "No." So now all of a sudden I've got a marketing department in 50 trade shows, trying to do PR in 17 magazines, had no idea who their customers are.

And three weeks after I come out, I go, "Here's what we're doing for the next three and a half years. We're focusing on color desktop professionals. Our marketing is focusing on performance. I mean, it was like it all came out of customer data. So I did a couple of things in that company. One is, in the meantime I'd gone around to the heads of all my departments. PR, product marketing, trade shows, etc., and said, "What's your job?" And the tradeshow person said, "Well, Steve, trade shows. I set up the booths." I said, "No, but what's your job at the trade show?" "Well, I make sure the booths are manned." I said, "Well, in the department I'm running, I don't give a shit who runs the trade show or-- we're going to have union people to set up the booth. Your job is to create end-user demand and drive the demand to the sales channel." "Oh, no, I set up the booths." Okay, PR, what's your job? "Oh, when the press calls, I answer the phone." Okay... Anything else? "No." So I had a whole bunch of people who were confused about their functions in marketing. And then I realized it wasn't their fault. We just had not told them what the function of marketing was.

So our staff meetings changed rapidly. Number one is everybody understood, those that were left. Out of 14, I got it down to four. And then I rebuilt it later on to, like, 30, for a couple of other things we did. But number one is we didn't understand the role, the mission, the intent of marketing. Right? There was no mission, there was no intent. So number one, marketing's role was to create end-user demand and drive

[2] [Interviewee's note] Radius and Rasterops were the two competitors in the Macintosh color graphics board market

it to the sales channel. Number two is to educate our channel. And again, it was an indirect channel, so the education was difficult. Why our products were better than our competitors', and to help position our products in that channel. And then three is to help engineering understand customer needs, desires and wants, etc.

It was pretty simple. If you're not in line with any of those three, you either need to get on that job or get a new job, because those are the only three things that marketing's supposed to do. And to just get it down to, like, even a single line. In a classic sales and marketing organization or sales and-- with marketing and everything, it's cats and dogs between sales and marketing. Because marketing people think that they're the pointy end. And I said, "No, the job of marketing is-- see that office over there? Yeah, everybody see his name? He's the VP of sales. Our job is to make him the richest person in the company. He's on commission." What I didn't tell the rest of my staff is, "But I had negotiated a great stock deal." And so unless we made him the richest person, we weren't going public. And we had just had our second child at the time at home, and Alison, my wife, turned to me one evening and said, "I sure hope there's an IPO in store, because we're down to our last 15,000 dollars."

So I was kind of motivated at SuperMac. And so this was the first time I started turning this into a machine, not driven by tactics but driven by strategy. Strategy on customers, strategy on figuring out the role of marketing and the relationship to the rest of the company. And then building a team that could focus on executing that.

So number one is, to attend my marketing staff meeting, you had to take two of those registration cards every week and call them. And it wasn't just you were going to call them, you were going to report on that in the meeting. And we'll just pick one. You could have two, but I don't care if 15 people hung up on you, you needed to call two. And just make sure you weren't making it up, I was going to randomly call some of those people back. And then only one person did that and they were-- I was just a real jerk about this because I was on a mission. I fired people publicly for violating these rules. And pretty soon, we got down to a machine where no one was confused why they were coming to work. And if you didn't like that-- I mean, it wasn't like I was a jerk about you've got to work hours or what, but it was more about, like, we're aligned for a job here. And we now know what the strategy is. So our conversations were not about, "Oh, give me your status," it's about, "Tell me about our customers." Right? And then tell me about what you need from each other to go work on the mission? The mission for marketing was not only those three things, but everybody in marketing could tell you what the profit and revenue numbers needed to be, and we understood how lead generation was tied into revenue, and how profitability was tied into the right mix of graphics boards all the way down until my lowest employee understood top to bottom.

So it was like the most efficient, killer department I had put together. Not because I was smart, but because I had learned a lot of the tactics and it is getting-out-of-the building stuff at Ardent was now starting to gel about how powerful that could be. And I'll give you an example.

Once I discovered about who our customers were and understood that we needed to win in Mac User, Mac Week and Mac World, I realized we had no campaign to do that. So we got a new PR agency, a woman, a small agency, Laurie McClain. Just a great partner. And Laurie and I, first of all, because these

reviews were so strategic, I built a war room with every publication, every editorial calendar, every review coming up, every whatever. So that when you walked in my room, it's the first thing you saw. Who was assigned and what we were going to do, etc.

But the first thing that was required was to get them [the magazines] to start thinking about a standard set of industry benchmarks that didn't exist. Because performance, I discovered, was everything. None of the magazines were reviewing stuff on any standard benchmarks. There weren't any. And so, I asked our engineering group, "Did we benchmark our stuff." And we actually had built some very fast stuff. I'll tell you that story in a second. But yeah, we have some benchmarks and they make our boards look good. Yeah, but are they really kind of good-- what would they do on our competitors? "We've never run it on our competitors."

Well, we got their boards in and we really did kick their butts, and they were on real applications, not synthetic benchmarks. So we had Photoshop and whatever. So we made a test suite, but then I realized that if I was going to take this to the publications, there was no way they were going to adopt SuperMac's benchmarks. So I created an industry group called the Potrero Benchmark Group. No one noticed we were on Potrero Street. And it had a PO Box. And so I went up to [talk to] the editors, I remember going up to Mac Week and my marketing person said, "This'll never work." And Laurie just kind of said, "It might." So, we basically told them the story about, "Look, you don't even know who your customers are. Here's what we found out." And I gave them our survey data that these customers, who were buying these kinds of Macs, cared about graphics performance. And too bad there isn't a standard benchmark except for the Potrero Group. And they went, "There's a standard benchmark?" I said, "Well, yeah, we have a copy and, "well, can we get a copy?" "Well, I don't know. We'll see if I can get you connected to them." Repeat at three or four magazines.

The entire industry adopts our engineering group's benchmark. And it wasn't like we cheated, but it actually was the first synthetic benchmark, which means it was a combination of Photoshop and Illustrator or whatever that had the right mix of what was there. And so that was one. And so now all of a sudden, we start looking good. And number two is each of these magazines had labs that tested graphics boards. And they would ask for your boards a week or two ahead so they could set them up. We're talking about benchmarks.

Hancock: So we're talking about benchmarks here.

Blank: So the last thing we did after Potrero is-- so the magazines who want these boards, weeks before, and I realized,"Oh, and none of the vendors could participate in the benchmarks and what have you. I was pretty anal about this. These were strategic wins. You win a benchmark, all of a sudden, sales went up. It was a direct correlation. And we had never won anything. I mean never anything. I mean, it's like how can we screw this up worse? Now, in fact, I think I had set it up with the right benchmarks, but I didn't want to leave anything to chance. So, we would send them our board three days before, and we would forget to send them any of our cables. Then the night before, they're setting up their benchmark stuff and I'd have my product marketing person sitting by the phone and we'd get the obligatory call. "You forgot your cables." "Oh, I happen to be passing by your place. Why don't I just show up with a cable?"

And they'd bring pizza and beer. And they'd help them run the benchmark. We won 14 in a row. Fourteen in a row. And again, we weren't cheating, but it was a machine. Because I had discovered that this was a strategic air supply to positioning sales and demand creation, and hell if I was going to leave this to chance.

The other story about SuperMac, and then I'll leave it. One of the reasons I joined was Steve Edelman had designed a next-generation series of graphic boards that were going to come out whose architecture looked spectacular. Had a plugin socket for different accelerators and was going to be great. And okay, crazy, but good architecture.

I get to the company, Steve is now out of engineering and kind of like running around. And the new engineering VP comes in and says, "I've got good news and bad news." I said, "Well, give me the bad news first." Remember those ten new graphics boards we were going to get? Edelman's architecture? We can only deliver one. I went "what?!" Our competitors have a whole suite. Our stuff is obsolete. This is way before any of the strategy stuff. What's the good news? Well, the one board we can deliver will be the fastest graphics board by a factor of ten. Oh..Okay, so they have one board. And it's like $4,000. And everybody else has boards from, like, $500 bucks to $4,000. And I'm going, "I joined the wrong company. I'm screwed.." And I asked him about ten questions. No, no, this is all I can deliver-- the architecture doesn't work. The plug-in thing won't work. But we can make this one work and this is all we can get out. And it was-- I think it was, back then it was Brian Apgar or Jay Torburg who was VP of engineering. I still remember the conversation. I mean, we had a good-- I usually had a great relationship with the heads of engineering. I go home and you know, we're out of money. The company is like-- and I go back in the next day into I think it was an engineering staff meeting. And I go, "Can you slow the board down?" … "What do you mean can I slow the board down. I told you it's the fastest." No, no. Could you slow it down by ten percent. "Well, yeah. We could stick a ROM in there with extra wait states. Why?" Well, and then can you make another one and slow it by 20 percent? "Well, yeah, we can do that, but Steve, it's the fastest board. It costs a lot of money."

So you can imagine where the conversation goes. Can you slow it all the way down? The limit was, like, 85 percent. It couldn't go any slower and then everything would get out of sync. I said, "I want a family of boards." But Steve, the cost, the bill of materials is, like, 1,000 dollars or 1,500 dollars. You're going to have to sell it for 3,000 dollars. I said, no I'm not. So I made them make me a family of boards and then created two or three different packaging styles. And took my competitors' product lines and bracketed them in price-performance with each of those boards. I then convinced my CFO that if I was right about forecasts, the blended gross margin-- and here I am panicking, did I get it right. And in fact, I had to get up one night, because I remembered I got a cell in the spreadsheet wrong and, oh my god, it was gross margin… And it was wrong. But in fact, it was wrong in our favor and the gross margin was even better. And it was like panicville. And people are going to figure out that this is just a ROM change? No one ever figured it out. It was great. So out of one desperation product, we had a Thunder series, the Spectrum 24 series, it was the same board. That's the difference between engineering and marketing.

One last SuperMac story. This is a testament to, again, the great engineers who I worked with, Peter Barrett and Randy Ubillos. Apple had just come out with QuickTime, which was the first time video can be

played and used on computers. Right? Bruce Leak and his entire team who we would run into later, did an amazing job. But there was no real way to get video into a computer. Apple had expensive equipment, but there was no cheap board to do that.

And Peter Barrett and Steve Edelman had gone over to Apple and seen this. And I don't know how it happened, but literally within a week, Peter Barrett threw together a piece of hardware that was, like, you can sell for 300 bucks or 500 bucks, that we called the Video Spigot. It was the video input board. But it was the cheapest thing ever out there. And the first time I showed our sales reps some video on a computer, and it was like-- and now I still-- it's a postage stamp, 320 by 240, eight frames per second-- but it was—

I still remember it was a jaw-dropping experience that only five or ten years earlier we had green screens with white characters. And now we're seeing moving [pictures]. It must've been the like first time someone saw a movie in a theater. I still remember how transformative that felt to see that. And I knew that this would be spectacular as a product because the salespeople kept stealing the demo boards just to show-- because Peter had made a little Star Trek or something video on a floppy disk, because he also wrote a compression algorithm the first-- what was called codec, called Cinepak, was written by Peter Barrett to run on this board to compress videos that went in. And I told manufacturing, we need to build 1,000 of these a month. And that was, like, the sum of all our graphics boards. They go, "Steve--" and in fact, the more I got closer to releasing this board, I said, "We're going to need to build 10,000 of those." And they said, "Steve, you're crazy." And of course, it took off. We must have sold half a million of these boards.

Now, here is the kicker. Rightly so, Mike McConnell [our CEO] and manufacturing were worried that all these boards were going to come back because once you've got video into a Mac -- it's impossible to remember, but there was nothing you could do with the video at the time. There were no video editors. There were no tools. And so people were going to send this back. And so I did my typical get out of the building and talked to customers. Did you buy the board? "Yes." Did you install it? "Yes. Oh, it was easy." Did you get video-- "Oh, it was great." What are you doing with it now? Ninety-five percent, "Oh, it's in our drawer." It's in your drawer? "Yes." Are you using it? "No." Were you unhappy with the purchase?" No, it's the greatest thing ever.

I discovered the novelty effect, which was, “I bought a novelty, it actually did everything it said. I was incredibly happy. Thank you very much.” Now, the side-effect was, because there was no editing software, Randy Ubillos, who was a software engineer at SuperMac, we still had a software group at the time, decides to write a video editing package, which became-- what did we call it? I forget what its original name was.[ReelTime] But it comes bundled with some of our graphics boards. We built bigger boards called Digital Film. And Randy got recruited by Adobe, because we sold the software package. Oh, we called it ReelTime. And ReelTime became Adobe something [Adobe Premiere.] And Randy went off to build video editing packages for Adobe. And then he went to Apple and ran the entire video product line for Apple computer. But it all started at SuperMac with the-- with Edelman's vision. With Barrett’s codec and hardware and Randy Ubillos. So that was a great run. I had a great time.

Hancock: And so the arc of the company, great run, great growth IPO.

Blank: Yeah. So it went public. Alison and I were able to breathe a sigh of relief. MIPS was a first IPO. SuperMac was the second. You know, every IPO at the time, one redid the kitchen, the other bought a new house. The last one finally bought the ranch. They were incrementally better. But I remember that was a nice hit and I owned a good chunk of stock. It was good.

The problem was, and it was a victim of our own success. We went from 11 percent to 68 percent market share in two and a half years. So all these marketing stories weren't just marketing stories. I was literally taking share away from a company called Radius and Rasterops who were the market leaders. Who, you know, we were this scrappy-- I was desperate. I was going to build the machine and they were the incumbents. I mean, Radius had Mike Boich, and it had Regis McKenna, and they had Kleiner Perkins funding it, and I loved these things. Because my whole career people have always underestimated me, and I do my best work painted into a corner. And this is a classic of, "Why, of course, they're going to win!" It wasn't on my list that that was going to happen. So, the problem of going from 11 to 68 percent market share is every point is now exponentially, not just incrementally, harder and what was worse, is we were missing the largest market, which was the PC market.

But those economics were completely different. The economics of the PC market required us to have lower-cost products and different distribution channels and the company just couldn't get it there. We hired a good consultant to figure that out, but what was worse is we became big and successful. And part of that story was we got a new building and I fell into this trap of we were arguing about the cafeteria. I had the best corner office, and I was arguing about the artwork in the lobby. And the minute you find yourself arguing about what type of carpeting you're getting, you've taken your eye off the ball. Truly we fell into the trap of what I call "the curse of the new building." Anytime you see a startup with a new building, teams that were forced to work together, engineering, and sales, and marketing were sitting together. Now, we all had separate offices and now it was all cushy. That's usually a symptom of, yes, it's a token of success but it actually breaks a culture and the culture got broken then. Essentially at the time when we needed to go back to our scrappy roots to figure out this PC market. So, I left. It was a great run. It was a wonderful time. Of course, what's next?

Hancock: Rocket Science, right? Am I missing anything? It's time to have the two worlds come together, right?

Blank: Right. Oh, man, was that a mistake. So, Rocket Science. What was the transition? So, I leave SuperMac and by the way, I was yet, again, reminded it's SuperMac. Here I am important. I'm the head of marketing. All my people come to me for decisions even though they're kind of independent then. Blah, blah, blah.

By the way, SuperMac was, just to finish that up, the time I really learned about team building around mission and intent and culture. It was really important and was going to forget that multiple times. Before that, it was me as an individual contributor even those I was quote head of X, it was about how smart I was. [At SuperMac] it was how to get my team as smart as I was or smarter than I was.

One of the personnel problems I still remember in inheriting a team at SuperMac was there was a woman, I won't name, who was head of product marketing, who was incredibly smart. And she was Stanford M.B.A., and just really smart. But her ads were all about technology. And here we were finding out, in fact the ads were about QuickDraw, and QuickDraw was a piece of technology that enabled graphics… But our customers were graphics professionals, but she had never bothered to figure that out and graphics professionals couldn't tell you Quick Draw from anything. All they cared about was their apps and so she was focused on this stuff. Worse, our own marcom people were not getting any direction from her and sales hated her. But besides that, she was great.

Hancock: Why was that?

Blank: So, I realized she really was good. She was really good and with some coaching could've been great. But I said, "I'm going to take you out of this role and I'm going to move you in another role," and this was recapitulating what someone did to me at MIPS, I did to her. She got, "Woah, you're diminishing my job," and if I would've now known what I know it's about the sense of loss. "You're internally firing me." And I wrote her a long letter trying to describe the problems that people were having with her from a perspective she hadn't seen accompanied by, "And here's what we're going to do."

But it was exactly what someone had tried to do to me [at MIPS] and she was just unable to listen, and I thought it was a loss. I thought it was a real loss, and that was the first time I lost somebody that I thought could've been great. Who in hindsight, only in hindsight, and was replicating the same damn behavior I had performed five years earlier at MIPS. I couldn't hear a thing. The other thing is that--

Hancock: But it sounds like you delivered it in a different way.

Blank: Naw. In hindsight, now, I probably would've still delivered it in a different way. I wouldn't have gone through the litany of things of what people were trying to tell her, because she wasn't at a point where she could listen. She was God's gift to marketing. Just like I was. So, now I have a lot more empathy about trying to understand where her head was. I probably would've gotten to her, if I would have had a little more patience, but it was pretty screwed up. I needed to move, but she was worth saving and it didn't happen.

But the other thing I did learn at that company was something else. Is that, I was not a natural marketeer. Meaning, yes, I was smart, and I was good but marketing requires eye contact with people you don't like. The difference between an introvert and an extrovert, the standard joke for engineers, is whether they're looking at their shoes or your shoes. And so it took me a long time -- Mostly at Convergent and Ardent, working with Rob Van Naarden and other great salespeople, to learn how to ask people, "So, how's your mother? So, hey, is your daughter graduated already and how about those sports scores?"

And finally, by the time I got to SuperMac, I realized I had a couple of great-- in fact, there was one woman who was spectacular. I also won't mention her name, but in her case she was wonderful. MIT grad, but she had zero empathy for customers. But she was really worth saving and I decided to start teaching a class called emulating empathy. I realized that world-class technologists or people in technical

marketing have excess compute power, it just isn't tied to their gut. But we could teach them how to emulate.

Here's the set of questions you need to ask. They go, "Well, this has nothing to do with our technology." Yes, and it's sports scores. It's all the things I had watched world-class people do by just happening to be there, I decided to teach. I actually detailed her to sales for three months. "No, you're going out to the field." "No! I want to be in the building -- and she was great. She came back. You could still tell she was an engineer, but she could talk about customers, and needs, and she ended up as a world-class marketeer. That was the first time I decided my role was more than just managing and it was now team building and then it was about coaching and it was actually-- for the National Science Foundation, one of the things we teach is emulating empathy. We don't call it that because they're principal investigators. But getting out of the building requires some attempt at emulation. Alright. So, we're now talking about--

Hancock: Before we leave that because I was going to ask about that a little bit later as one of these lessons, can you just summarize in a pithy way some of those key principals?

Blank: Of?

Hancock: Emulating empathy. You talked about a few of them right now, but kind of give the whole arc as a piece right now.

Blank: So, in emulating empathy, one of the traps particularly in Silicon Valley is we're so in love with the tech ourselves, we forget that the customers are probably not buying your tech. They're probably buying what your tech could do for them. So, let's start with, "Do you even have a clue what problem they're buying your tech to solve?" "Oh, no." "Okay, well good. So, let's agree that that might be an area worth discovering," and then let's have another conversation. "Did you ever see world-class salespeople?" "Oh, yes, flashy gold watches and chains." "No, but did you ever see them in front of customers?" "No." "Well, what do they do?" "Oh, they talked about a lot of useless stuff in the first five minutes of the meeting." "Really, what's that?" "Oh, well, they asked about all these other things and they said how great the company was. I don't know why, their company sucks," and then we start having that conversation.

So, to sum it down, emulating empathy was actually to find the connection between your technology and your skillset in explaining technology to actually connected to what potential customers really want and need, and to remember that people don't buy from datasheets. They buy from other people and it was to raise the bar of marketeers. Not to turn you into salespeople, but to understand what your role was, was to actually diminish that resistance between your company and the sales organization. Whether it was direct sales force or a channel or today even the web.

And you see the best companies actually develop a culture and an image that people want to buy from because they identify with the company's mission, or the company's products, or the company's, what we call today, branding and people now understand. The valley's gotten a lot more sophisticated, but this was just on a personal level to teach marketeers. Again, right off the scale on how to do this …

At SuperMac the other thing I did was … part of our product line was sold in retail channels … and part of the conversation of when I came into the company is that same head of Marcom who asked me about the logo when I got into the company, showed me our retail packaging. The boxes were black. I said, "What?" She said, "Oh, they won all these awards." I said, "Well, award for sales?" "Oh, no, awards for design." I said, "Well, how are we doing on sales?" Sales hated our boxes because you put a black box on a shelf and it disappears. So, I went out to a couple of retail channels. One of them was Fry's and our boxes not only disappeared, they were on the bottom shelf. Well, I don't know much about retail, but I know that's the last place you're looking. How do you get them? Oh, you got to pay the channel and you got to have people who do shelf stocking. And so I find this woman who was actually teaching packaging design. Her name was Signe Ostby and Signe had been at P&G, and her husband, the founder of Intuit--

Hancock: Yes, Scott's going to be here next week. Actually, Scott's coming next Monday.

Blank: Scott Cook. It turned out the first third-party software person, the only one who would talk to him when he was running around Apple to get people's attention was my wife, Alison Elliott. Alison was the software evangelist at Apple for the Apple II division. So, she knew Scott when he was some kid with a checkbook register. So I got to know Scott and Signe. So, when I was talking about packaging, Alison said, "Well, you ought to talk to Signe," and Signe taught me packaging design. And it was a such brilliant, obvious but not obvious, that no one had understood retail.

Everyone in my marketing department, regardless whether you're in Marcom, or product marketing, or technical marketing, went through Signe's class. And we had the ugliest but brightest boxes in retail. Truly fluorescent green. You could see our boxes across the street with the curtains closed. I mean, that's how bright. But they had snipes and even before we had awards, I would make up awards and snipe the thing and then learn how people turned around and dealt with shelves and would make up mock-up boxes and take them out to Fry's and stand there and have to pull them out of people's hands because they had nothing in them. So, to learn about this stuff, and then teach a marketing department this stuff, was another-- so, as you can tell, I had a lot of fun at SuperMac. As much fun as Ardent, actually. There's a lot of learning.

Hancock: A lot of learning to this.

Blank: Sorry. I don't mean to take up your--

Hancock: What else should we talk about? Peter?

Blank: Peter Barrett?

Hancock: Yes.

Blank: Genius.

Hancock: So, we haven't talked yet about Peter.

Blank: No, we mentioned him at SuperMac. Yes, so Peter was this young, 18, 20-year-old genius who was designing a ton of hardware for SuperMac from Australia. Incredibly urbane. Incredibly erudite. I mean, just a great guy. At SuperMac, I'm just in love with Peter. Not just because he was fun to talk to and smart, but because he delivered, and on time. And stuff you didn't even think about. Again, the Video Spigot was his, the codec was his, a good chunk of what we called Digital Film, which was a not so successful video product, but a great run at one. And really liked Peter a lot.

So, when I left SuperMac, there's this notion in venture capital of an entrepreneur in residence and back then it had more of a different role than today. But it was still kind of, "Oh, if VCs don't know what to do with you but think they want you." It was kind of like a golden handcuff. And so, Kathryn Gould, who I had known as a recruiter, basically got me over to her firm. It was called Merrill, Pickard, Anderson, and Eyre at the time, to be an entrepreneur residence. The setup was I was going to start in a week or something. I had some other stuff to do and I knew some of the partners. Andy Rachleff and Bruce Dunlevie had both been in my wife, Alison's, business school class at Stanford and so she kind of knew them and so I was kind of a semi-known entity. And Kathryn liked me just because she thought I was a crazy marketeer and we enjoyed each other even back then. But it was a different relationship. It was a VC to-- and so, I was going to go start physically sitting in their offices.

But before I started, and I'm hesitating because I'm trying to remember the order of things. Peter Barrett had been talking about this whole idea about the future of video games. I didn't know about-- I had played some. I was definitely not a gamer, but okay, and then he was talking about the intersection of video and Hollywood and it was a great vision. I mean, it was a great-- I said, "Well, Peter, I'm kind of now involved with this venture firm. I'm going to start there next week. You should pitch this idea to Kathryn Gould who I really like," So I set up a meeting with Kathryn and Peter and she said, "Steve, why don't you attend as well," and Peter goes in and it was late on a Friday. I think I was supposed to start on a Monday there. So we just thought this was a casual meeting and Peter starts talking about the future of video games, CD-ROMs, video, et cetera in a way that I'm still convinced today that he put drugs in whatever we were drinking because it was the most-- even today, I've heard hundreds if not thousands of venture pitches. It was the most compelling pitch I have ever heard in my life.

Hancock: What made it so?

Blank: It was obvious that the world that was going to unfold [the way he described]. He did this without a script, without any slide. It was the most extemporaneous... You would think he'd been practicing for Shakespeare, but it was amazing. It was just unbelievably amazing, and he stops, and Kathryn turns to me and looks at Peter and turns to me and says, "If you don't do this with Peter as a company, you're out of your mind." That was the beginning of the worst company that Silicon Valley had ever seen. And again, no diss on Peter or Kathryn but it was truly the most visionary speech I'd ever heard. And I'm thinking now a little earlier, maybe I'd heard Peter talk about this before at the company. SuperMac had an offsite in Hawaii and I still remember us going to Merriman's [restaurant] together with his girlfriend at the time, and Peter reciting Henry the fifth as we were driving down drunk from the top of the Big Island, which was not a good idea to do at the time. But I still remember being enthralled with Peter, but obviously, I was not

the only one. You were talking about reality distortion field. I had lived it in that moment and Kathryn still remembered that a decade later. It's the most compelling reality distortion field ever. Ever!

Hancock: That memorable.

Blank: Memorable and it was the idea that, in fact, video games were ripe for a change. That they were text-based or they used sprites. But video, which was what he was the world's expert on along with the QuickTime team at Apple, and he was going to be able to convince the QuickTime team from Apple to quit their jobs and join this company, along with some great Hollywood people. Ron Cobb, who else? And literally within a week we had raised four million bucks from Merrill Pickard. But I remember Bill Davidow trying to throw a check at me across the table and I had to throw it back because Kathryn had already--literally.

This is the only time in the Valley somebody literally threw a check at me, and Davidow was one of my idols. Bill Davidow was one of the first people in Silicon Valley. He had been the original VP of marketing, or not the original but the early VP of marketing of Intel who came up with a Crush campaign which was to make the 8086 the dominant standard and one could argue that the IBM adoption was through some of his work. But he then became a great VC. He was on the board of MIPS and was an example of technologist who taught himself how to be a marketeer. I mean, Bill was a great engineer. So, anyway.

So, I kind of knew Bill and I would run into Bill in the Epiphany story as well. He was essential in positioning Epiphany by not funding it. But we'll get to the story later. So, I remember he literally threw a check for four million dollars, which was then, not a seed round. That was a lot of money, and me turning it down. So, Peter and I go off and assemble this amazing team, if the world would've gone our way. Just amazing. Peter punched way above his weight in age. He was just like a renaissance man. And so I do my part. I raise the money and I got us on the cover of Variety and Hollywood Reporter. So, I'm now in a new industry I know nothing about. I'm just getting press because of the news story. How great for a marketeer, "Hollywood meets Silicon Valley." How can you not beat that story? It was just great.

In the meantime, we're building a gaming company. Now, not only do I not know anything about games, but I'm starting to discover as I'm going out of the building and I'm talking to channels, we're learning about a completely new distribution channel. A completely new industry. Doing my schtick about getting out of the building and discover my customers - fourteen-year-old boys who want to kill stuff. I hate my customers. I hate them and I'm just fast-forwarding a lot. I discover for the first time in my career, I don't want to talk to these people, because I can't stand them. Not I can't stand 14-year-old boys, but I've been selling to truly rocket scientists when I was building supercomputers, chip designers, and even at SuperMac interesting people were doing stuff with the graphics. Now I'm talking to 14-year-old boys who want to kill something. This isn't much fun.

So, I stopped going out of the building. And I do what Allen Michels does, and I hire marketeer and salespeople who, make a long story short, as we're building the games, they're trying to tell me the games suck and I'm going, "No, no, no. It can't suck. Haven't you seen our press? It says we're the new geniuses of Silicon Valley, and I've already sold the VCs that this is going to be our Christmas and we

can't raise money…. "Steve, the games suck". I know they said those words. I know they said them, because I somehow have them in writing. It was Dean Fox who we hired from Sega. We were able to hire anybody. Dean Fox. Dean, I apologize, which I've said multiple times. He said it in writing! He said he was literally sending up signal flares and to be fair-- and, again, I'm going to say this and there's probably better words to say it. I'm not going to blame Peter, but that was his job was to run the gaming side of the company and we got great tech. We got great whatever, and I thought my job was just to raise money, and be the CEO and make sure the lights were on.

In hindsight, that's where I screwed up the CEO job. I abdicated my responsibility. And as smart as Peter was, he also hadn't built video games before. So, having Peter being the head of a game studio was like having someone who cooked in his house say, "Let's set up a restaurant chain." That leap may work, but probably required some more adult supervision with domain experts. And what was really interesting is there were no domain experts in charge. We had experts inside those groups but no one on the exec staff or the board had every built a hits-based business and this--

Hancock: It's totally different.

Blank: So, it was six months into the company when not only did I discover I hated my customers, but I was in a hits-based business and by hits-based, I meant it's like making movies. Or is your novel going to be successful? Or your venture investment? It's like you got to have the fingertip feel for knowing what a hit was, and I was way out of my element. What I didn't understand-- and I understood that within the first year. I should've resigned. What I didn't understand how far my co-founder was out of his element as well, and again it's not a diss. That happens, et cetera. I'll put it back on myself for not being able to blow the whistle. And I remember gently having these conversations with either Peter, and I know I had it with the board, who said, "Hey, listen. He's in charge of that. You worry about X." I should've been a tougher CEO and said, "Guys, I don't know what to do here and I'm going to leave." But this was my first big CEO job and then the joke was we were on the cover of Wired magazine and so here it is, I think, November '93. Digital superstars. I'm wearing a ponytail and a baseball cap.

It was Roger McNamee who saw me at a trade show and said, "Steve, every company I've met where the CEO starts dressing like their customers goes out of business." I haven't forgot. That was probably one of the best McNamee lines I've heard. And yes, we made shitty games. It was a hits-based business. Hits-based businesses are unforgiving, and it's not like we couldn't have recovered or couldn't have done something. But the management team, starting with me, but including lots of other people, just didn't quite understand the business we were in or the capital we needed.

My favorite story is we went to Sega in Japan. Sega was one of the 800 pounds [gorillas.] There was Nintendo and Sega and Namco, and some others, making great games and we want to raise money from them.

Hancock: So, you're there.

Blank: Yes, I'm there. Meeting Nakayama-san. Boardrooms in Japan, back then, the carpet's about nine-inches deep, so you're doing the moonwalk with our shoes off. I was like, "Oh, let's bounce around," and he [Nakayama] goes, "Well, let me show you our game development facility." It was right out of the movie Brazil. You're in this fancy boardroom area and I'm going, "Oh, we're going to some other building?" He literally opens the side door and we're on a platform 30 feet above a warehouse of people at desks typing in front of computers. It was like, "What?" He spoke English, haltingly, but very clear. He said, "You're making two games? Yes, and they're all going to be hits? Yes," and we're looking at this sea of coders he said, "At Sega, I forget the number but it was huge, we make 150 games a year. Only five will be hits." But what made me forget the lesson he was trying to teach me is he gave us five million bucks, just because the story was so compelling. I think he figured, "Well, maybe they're right." Well, it turns out – he-was right. It's a hits-based business. In his world, it was a numbers game. Meaning, we don't know which ones are hits so let's do a lot and some of his designers ended up-- this is just as the Sega character, I forget who it was, [Sonic the hedgehog] becomes famous and some of those designers[3] actually figure out a pattern for hits. But back then, it was like well we'll just massively do this.

Hancock: Just going to throw it all out.

Blank: So, it was a painful denouncement and, as I said, I kind of needed to own it. I didn't own it. I'll give you another great story completely untold in the Valley history. So, again, first-time CEO learning how to work with the board. There's Kathryn and there's Jon Feiber from Mohr Davidow. Both of them way after this company, after I was pissed at them, became good friends. I mean, good friends. But it took another decade until that happened. So, here was the first time when I abdicated my role of CEO.

We were forming the company and starting to think about an advisory board and if I'd been smart, I would've said, "Advisory boards should be gamers and game executives." But I thought well the first person I need is a technology advisor, because we got this QuickTime team. Who do I know? We worked out an option pool. How much stock are you going to reserve for your advisors and so I went off to find some advisors and back in the history of my early career when I had left Convergent, I got approached by Sun Microsystems who was a workstation company at the time building Unix-based workstations. They had grown so large that Carol Bartz, who was the head of marketing, was now going to just be the head of corporate marketing, and they were going to divisionalize and one of the divisions needed a head of software marketing and that division was run by a guy named Eric Schmidt. So, Eric interviews me and Jon Feiber was there as the head of communications software, and Eric, to make a long story short, wanted to hire me as VP of marketing and my career would've taken a much different--

Hancock: That would've been a different route.

Blank: Right, several billion dollars later probably. But it got worse and, again, I had just left a very dysfunctional organization. Didn't realize I was going to join another one with Ardent. And I'm about to maybe say yes, but I get to interview with Carol. Now, I could understand this because, again, any time

[3] [Interviewee's note] programmer Yuji Naka and artist Naoto Ohshima

you divisionalize a company the people in corporate lose. Meaning, you lose power, you lose authority- remember my whole story about MIPS and changing and what I was trying to do with this woman at SuperMac and trying to get her into a different role?

Carol was still in the angry phase and now obviously she went on to a great career and, I'm sure, as a great human being, but she was angry when she was interviewing me. Because I remember the one line that convinced me I'm not working at Sun. When she said, "What makes you think you're qualified for this job?" I still remember that. I went, "You know what? You guys haven't settled your political issues," and Carol still is in the angry mode. I don't need to walk into this.

But I liked Eric and I liked Jon Feiber, whose, as I said, careers would intersect again, and this is the Rocket Science story. So, when we started Ardent, I remembered Eric was a great guy. So, we tried to recruit him as the VP of engineering of Ardent. It didn't work because he had now had a bigger role at Sun. We still kept in touch and I think our wives and I had, at the time, dinner together and we lived in Palo Alto.

He's the first guy I want to get on my advisory board at Rocket Science. I mean, Eric is now-- I think he was just transitioning to be CTO of Sun. I cut some deal with him and it was a very generous deal. I mean, generous in terms of percent of my option pool and here's where things went south. I went back to my board and said, "Hey, [I got] Eric Schmidt," and then Jon knew him. He worked for him and instead of saying, "What a great thing, Steve and congratulations," they went, "That's half your f'ing option pool. You can't do that!" Blah, blah, blah, blah, blah. "Go back and tell him no, there's a different deal."

Now, if I would've known what I would've known now and would've set the tone for the rest of what should've went right at Rocket Science, and this was the lack of maturity and wisdom on my part. I would've said, "Screw you guys. This guy is the best guy in the Valley. You know what? I'm in charge. You can fire me or not." But instead I went back to Eric, I can try to renegotiate the deal with Eric who was rightly, completely insulted. Never spoke to me again. Now, given Eric's career,… but I absolutely in hindsight think I screwed it up on multiple ends. I mean, multiple ends. I should've said, "We have a deal. That's it. It's not some random guy. Jon, you know him, and you worked for him."

But instead, again, now I remind my CEOs, "You're the field general and if you're not prepared to be fired at multiple points, your job is not to keep your job. Your job is you know more about the direction and speed and obstacles and resources that the company has. These people just visit. They have the money but they just visit and if not you're prepared to lose your job over these issues, then you're in the wrong job," and I failed at that at that startup and that was-- I tell you that story, because that was a precursor for me not being able to manage or recognize or put on the table, "We're in a hits-based business, guys, and we're lost and this is not heading in the right direction."

Just to finish up Rocket Science. I hired a world-class chief operating officer. First as a head of bus-dev named Jim Wickett, who still decades later one of my best friends and Jim was just-- I mean, I could be an hour talking about Jim, which I won't do. But Jim had an extraordinary career. His wife is Magdalena Yesil, one of the pioneering women in the valley, which is why Jim and I liked each other. We married

each other's spouses in terms of personality. Jim's like my wife and I'm like Magdalena in terms of personality. She's much smarter than I am though. Both women are much smarter than I am. But Jim ended up being a great partner. At the end, we ended up selling the assets off to Sega rather than shutting it down, and I left. But I left with a plan which I still have that says, "We need to downsize this thing dramatically," and of course they didn't do that. They ran out of cash and Sega shut it down.

But it was a painful experience, and I'll leave with the experiences. The only time in my entire 21-year history of being an entrepreneur, there were three weeks when I hated my job, and that was at the end of Rocket Science. In fact, I was coming home and going to sleep at 4:00 P.M. and Alison says, "You know? That's a sign of depression." I went, "Oh, no. Everything's just fine." She says, "You're going to bed at four." Yes, it was pretty miserable because I had, for the first time in my life, was boxed into a corner. This time I was standing in and couldn't see a way out other than finally selling the thing off to Sega. But there should've been a win there. And so I went through, once I left, a whole series of depression, again, for three weeks. The only time in my entire life. I mean, I'm a pretty optimistic guy. "We're screwed here. Okay, we're surrounded. Alright. Let's move over there." Chaos? Love it. But this one was on me. There was nobody else's business card that said CEO. And so I had truly 100 percent failed in my job and it was just sinking in. Then phase two was anger. I was mad. Phase three was blame it on everybody else. It was my partners Peter's fault. He fxxked it up and he did.

But you know what? That wasn't his problem. He worked for me ostensibly, and I didn't exercise authority or judgment. So, regardless of what he did, I owned this thing. So, third was, after anger, some ownership and it took me-- this didn't happen overnight, it took me years to go through each phase. What did I own of this? How much of this was mine and in hindsight, I own it all. And that's, by the way, a big deal. People get trapped in each one of those preliminary phases of you could be depressed forever. I failed. Well, that's why entrepreneurs who are successful are resilient. You're talking about tenacity. But this ability to bounce back after three weeks - which was a long time. I'm saying three weeks, maybe it was three days but it felt like three weeks. Is this resilience. Is the ability to bounce back. It was a public failure. I mean, this was a hot company.

Hancock: This was big. It was flying high.

Blank: This was big. Had my name on it. I mean, it had everybody else's but my name. I was the CEO. So, depression, anger, acceptance, and then it took me another decade -- or maybe a couple of years rather than a decade -- because I used it in Epiphany. It's actually extracting some wisdom out of this and by wisdom, I don't mean my wisdom. But to be able to step all the way back past ownership and go, "So, what are the lessons here?" Not just for me personally, but there were some industry lessons about customer stuff, about management lessons, about your role versus the venture [capital] role, et cetera.

All those were like extractions that took time but when I learned those, man, I leveled up. I mean, I was ready to knock it out of the park at Epiphany because it was the Phoenix out of the fire. I was just ready. I didn't know what, but I had learned a ton, and so I don't think any of this would've happened without this failure at Rocket Science. I don't think Silicon Valley would have the Lean Startup. Even though I'd learned some of those lessons, I don't think I had extracted enough distance to take these and turn them

into a set of heuristics that first I would practice myself for the first time at Epiphany, and then after, we share it with the world later on. And it took a major crater to do that.

END OF THE INTERVIEW

