



Oral History of Timothy Andrew Koogle

Interviewed by:
Marc Weber

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Marc Weber: So I'm Mark Weber of the Computer History Museum. And I'm here on December 16, 2013, with Tim Koogle, who was the first CEO of Yahoo, as well as of several organizations, and [who] has had quite an illustrious career that is continuing. And thank you for doing this. We really appreciate it.

Tim Koogle: My pleasure.

Weber: Start just by telling me your full name and when and where you are born.

Koogle: You want the full, full, name, Timothy Andrew Koogle? There you go. Or Tim Koogle, most people call me, or TK. You want where I'm from? I was born in 1951. I was born in Alexandria, Virginia on the East Coast.

Weber: And please tell me about your family.

Koogle: My mother and father-- so my mother and father were both born in Maryland, Western Maryland, in a small place called Brunswick, which was a railroad town that basically shut down during the Depression. They were both born in 1920, so they were children of the Depression.

My father went off to World War II, got trained by the Navy, and served in [the] submarine service in the Pacific. I think his title was fireman, which was the person who kept the engines running, and [he] had an on-board machine shop, and made parts when things broken, and all that sort of thing.

Post World War II, he left active service and became a machinist full time, a precision metal worker, in Alexandria, in the Naval torpedo factory. So that brought my mother and he to Alexandria, where I was born.

My mother served as a trainer for Safeway and then stopped working outside the home to raise us-- us being my brother and me. My brother is three years older than me. And we lived in a blue-collar neighborhood-- bricklayers, and electricians, and my dad was precision metal worker. A couple of the guys that had been journeyman machinists with my dad were our neighbors. And so we lived in, very much, a working class neighborhood.

Weber: And did you have technical hobbies or interests given what your father did?

Koogle: Totally, totally. [LAUGH] Let me know when my answers get a little long, by the way.

Weber: No, this is perfect.

Koogle: Yeah, my dad, actually, was hard wired, actually, to be involved with machines, and metal, and all kinds of stuff-- technical basis. And following World War II, also, the bit I left out earlier was that, coming out of the Navy, he, like many others, were given the opportunity to go to university under the GI bill. And went to GW University in DC for a while. And I think got within his senior year, almost to his senior year, and then had to quit.

I asked him about that later. And he said, you know, I was faced with a really tough choice. I was raising a young family. I was working on moonlight-- graveyard shift, I think is what they called that at the machine shop, and going to university during the day. And at one point, he says, I realized I couldn't do all three.

I wasn't going to stop raising you because you're my family. I had to work to pay for food. And so that meant university. But he had already done really well, and had a real acumen and an aptitude. And he was an engineer.

I think in retrospect, it got really clear to me, especially in retrospect, that he and I were both wired up exactly the same. How it felt to me, and how it manifested itself when I was a boy, was that I just loved everything he was doing.

And so I spent a lot of time with him in his shop, both at the machine shop, as well as a home business that he had rebuilding engines for folks and working on all kinds of machinery, mostly automobiles, and trucks, and tractors, to some extent.

And I learned those trades from him in an informal way and just dug it. So I was always with him. And that was the beginning of that, and my feeling for whether or not it really resonated with me, you know, machinery, and mechanisms, and all that sort of thing, which later led me to sort of self-selecting into that path as well.

Weber: So what were the kind of things that you built yourself as a kid?

Koogle: Oh golly. So I hung out with my dad incessantly in both of those places, and, mostly, it was engine building, at the time. So it was learning. And maybe we can go into that later on. For me, at least, it was a realization-- it came on kind of slowly, and then really quickly, when I entered into engineering school later on, that these things that we called engines had incredible technology in them-- thermodynamics, fluid flow, just about everything you could kind of name-- materials science, et cetera, et cetera.

And so I was sort of deeply involved in those sorts of things, and built motors with my dad, and built motors myself for him, and hung out, informally, at the machine shop. I later went to De Anza College here, too, and finished my precision machining certificate with a bunch of journeymen.

Weber: Neat. And tell me about your school experience. What were your favorite subjects? Start with what were your favorite subjects?

Koogle: So in high school, I was really good at math and science, which you might predict, or might not, depending. But I really was. And I was deeply, deeply enthused about everything science and math. I was really, really bad at Spanish. And so you didn't ask that, but that's in there.

And so that was in high school. And I did pretty well in math and science-related kind of things. I worked with my dad, of course, and also played a lot of music, and did some sports, and water skiing, and everything else. But with regards to courses-- science and math kind of started there as a thing that I clearly fell in love with.

I went to engineering school at the University of Virginia-- you may ask me about that a little bit later on-- but in mechanical engineering. My first semester, I actually elected to be in civil engineering because I was really enthused about the math of very large, complex structures. That's what I was really in love with.

But pretty quickly realized I liked things that move, and large scale bridges aren't actually supposed to move. They also run on really long design cycles. So I transferred into mechanical engineering and went deep on machine design, and mechanisms, and everything related to that.

Weber: What music did you play? What instruments?

Koogle: I played clarinet, saxophone, guitar, both acoustic and electric, and banjo.

Weber: Wow. And were there any particular professors that were important to you, or teachers, going back to high school?

Koogle: Yeah, you know, not so much in high school. I was like most high school students, I think. You're sort of figuring out what you're deeply passionate in or not. My dad was particularly clear about making sure that I paid attention to what I was passionate about and using that to guide me through it.

You didn't ask this, but I think a lot of people probably don't have that guidance toward using that as a litmus test. I think it's the one thing that is really important. When I got into engineering school, I worked my way through as a tractor mechanic, by the way, in Charlesville and in engineering. And I fell in love with engineering really deeply.

And there's a number of different courses that I really deeply loved and professors there, too. I will say this, that, at UVA, I suspect it's similar now. At the time it certainly was true that they seemed to have selection criteria for their professors that included not only folks that were deeply trained and knowledgeable in the science of what they were teaching but also had been professional engineers, either before they went on to get their PhDs, or later on and then came back to teaching. But most of them had that in their arsenal and in their experience base.

And it was so clear to me because they taught not only this deep, very abstract stuff, but they also taught it through the lens of what you could go do with it. And that connection for me just, like, lit me on fire, frankly. So I worked really, really hard and loved all of it.

And, you know, I think I saw on your list of questions, actually, you might ask about what professors were inspirational to me. And I thought about it, and I think there's two or three that really stood out.

One was a math professor I took successive-- quite a few math courses-- from this guy. And it was everything from advanced calculus, to matrix theory, approximation theory, et cetera, et cetera, et cetera, you know, and beyond. It was a guy from MIT. I think his name was Simmons, Professor Simmons, who was completely geeky. Would show up with one red sock, and some green sock. And when that was pointed out to him, he'd go, it must have been dark when I got dressed this morning as an excuse.

And I loved everything about him. And I was clearly studious and really focused. And he and I had a really good relationship. He'd look after me. And I remember distinctly, a number of times, getting through a semester, or to, or a year, or whatever, and I'd see him on the street. And it was a big celebration. He said, you did it again, and all that sort of thing. And that was really great. So I not only had a really great bond with him, I learned, deeply, a bunch of math with him. And I loved the way he taught, such energy level, and stuff like that.

One of my other favorite courses was thermodynamics. There were several levels of that that I took. And we had a really, really, really thick book in thermodynamics. I don't remember the authors right now. But I learned that cover to cover, and all the diagrams, the whole thing. And I just loved it.

And it was taught by a guy named Lachetta, Tony Lachetta, who also had practiced a lot out in industry and taught it, just, deeply and passionately, just that way. And the last professor I can-- could really

remember distinctly having a relationship with that went beyond just in classroom was a guy named Professor Reid who taught mechanisms design.

And I started teaching outside of the university, believe it or not, working my way through and going to engineering school. And some of my tribe started something called a "free university" outside of the university. And I taught mechanisms design, and mechanics, and things like that through it.

And Reid clandestinely loaned me the keys to the engineering school and allowed me to use the basement facilities. And he had cut-aways of various machines and all this sort of stuff. And so I'll never forget that.

Weber: Did you enjoy teaching?

Koogle: Pardon?

Weber: Did you enjoy teaching?

Koogle: I did. I did.

Len Shustek: Did you consider it as a profession?

Koogle: Numerous people asked me that all along the line. So did I consider teaching? Yeah, I did. And I did consider it. And I came close to actually thinking about it and choosing that as a path. But I was pretty clearly drawn to, and driven by, actually going and doing stuff with what I was learning and thought, someday, I might come back to teaching.

Weber: And here's one that you-- don't answer, if you're not comfortable. But may I ask you about the values you were raised with? Did politics, religion, or ethics play an important part in your family?

Koogle: OK, sure. I'm totally comfortable with answering that. Values had a big part of my upbringing. And it's hard to remember, or list, all of those sorts of things. But I'll give you some examples.

My parents were both children of the Depression, as I mentioned earlier. And coming out of that-- I think a lot of people were broken by that. My parents were anything but broken by that. They actually took it, and everything that came their way, then, they viewed it as a gift, having come out of the Depression, going

into the war, surviving that, coming out with a trade, in my dad's case, that allowed him to have a career of his own, support a family, and grow it, and all this sort of thing.

And my mother and father, deeply, were in love with each other. They met each other when they were in grade school. My mom used to say that when she was like eight or nine years old, she already had decided that she was going to marry my dad someday. I don't know if that was literally true or not. But probably.

And how that's relevant, actually, to your question, I think, is that one thing, among many, that I remember really distinctly is sitting inside the house when my dad came home every night for work. And he would give my mom a big hug, and a big kiss, and tell her that he loved her, and sit down, and we'd have dinner together.

And so I was raised in a home where my dad, though he was making a fine living, as a precision metal worker, we didn't have much money. But my parents both taught me, both through words and, more importantly, actions, how little you actually need to be happy. And I'd call that a core value. And it's something that I've never forgotten.

And a couple of other things they were explicit about was everything should always stand the light of day. You should always put yourself in the other person's shoes. You should never assume that anybody owes you anything. You have to earn it. And treat people. Treat people honestly. Let things stand the light of day, et cetera.

And the last bit that are kind of quasi-values were-- and this was, I'm sure, a product of their having gone through the Depression and realized the value of education-- was that they encouraged my brother and I both-- clearly, and consistently, and repeatedly-- to go and get educated, and be resourceful.

So those things I've never forgotten. And I think I've pretty much have lived that way. Most people that you meet that I've either worked with, or who have worked for me, et cetera, would say that's the way I've lived.

Weber: And so, after college, you came out here, right?

Koogle: Yeah. Yeah, I graduated first in my class at UVA in engineering-- somehow. And I spent another almost a year there. Maybe this is relevant to how I got here, got transported to the West coast. And I just kept working as a tractor mechanic.

What I discovered was that most of the jobs, most of the companies in Virginia, down from the corridor from Washington, DC down to Charlottesville who came there and recruited were companies that-- I went to the job fairs, and all this sort of thing, at the University of Virginia. And I found myself in this really odd, interesting place of having been in complete love with engineering, doing really well academically, and, yet, what I found was that I had no interest whatsoever in working for any of those companies, which was a fascinating place to land.

And I came from a neighborhood where we weren't surrounded-- it was all working class people, and blue collar, everything else-- we weren't surrounded by folks who had been senior executives of anything. And we certainly didn't-- I didn't hear the language of mergers and acquisitions, and startups, and venture capital, and all those things that, now, we're all, here in the Valley, so fluent with.

And so I wasn't confused. But what I knew was that I really hadn't found what path I should take, post undergraduate school. All I knew was that I'd done really well. I had a great aptitude, it seemed, for things technical.

And I was broke because, usually, every year my dad, would contribute about \$500 to my college education. That's what he could afford. I earned the rest. And I'd work my way through the school year and be completely broke around May, and then double up on work during the summer, and build a bank account, and go at it for the next year. And the senior year was no different.

So I graduated, and I didn't have any money whatsoever. And I thought, well, I'll just keep working with what I'm doing right now. Scared my mother to death. And friends of mine, what you'd call colleagues, now, at the University, said, well, you should be consider graduate school.

And that was obvious. And so I did applications to graduate schools. Got accepted to a bunch and got scholarship or fellowship offers to many. And I decided to go to Stanford, and take that fellowship thing, and moved out here, and just went to school full time.

Weber: Why Stanford?

Koogle: For me, it was a decision to make a radical shift. I thought it would be really interesting to just change everything. I did a car tour of the country, ostensibly to visit universities, and mostly to see the country and check that off as well. I needed to do that. And fell in love with the coast. It just smelled to me like this was a place that was full of innovation, pretty free of constraints, from the standpoint of intellectual constraints.

And that resonated with me, number one. Number two, Stanford had a great reputation. Engineering, in particular, there did. But I was drawn by moving 3,000 miles away, completely changing it, and inserting myself into what smelled a culture that was very open minded and very innovative.

Weber: Given your mechanical background, tell me what you drove on that trip around.

Koogle: [LAUGHS] So I had an old Volkswagen bus that I had rebuilt, restored, and it was reliable enough to make that trip. Yeah.

Weber: So you moved out to Stanford. And tell me about your experience there.

Koogle: It was different from the University of Virginia. And there are several dimensions of it that might be relevant. One of them was that I had done really well academically. And when I entered graduate school, it was pretty clear that, in graduate school, there at Stanford, that I wasn't alone in that. So instead of being the big fish in a small pond, I was a very little fish in a big pond of folks that were very ambitious, and very capable, and that sort of thing. That was OK because that was stimulating, too.

I wasn't as fulfilled in the classroom, largely because-- and this only became apparent to me a lot later-- Stanford professors, maybe this is true in most schools. It certainly seemed true to me in engineering, were under a lot of pressure to publish, to get grants, and do all that sort of stuff. That became apparent to me later on. All I saw was that they weren't actually as accessible as my professors had been in undergraduate school.

They passed the baton, quite often, to their TAs, and their RAs, to teach the courses, did have office hours, but, oftentimes, they were very limited. And so accessibility and presence of the professors in the classroom was a little underwhelming to me. And that maybe sounds really critical. And if somebody was here from Stanford, they'd probably slap me for saying all this stuff. But that's what I experienced. And I was little disappointed in that.

On the positive side of the ledger, what I really liked about Stanford was that it was an incredibly vibrant environment. Lots and lots of stuff at a level that wasn't present, even at the University of Virginia, which I thought was an excellent school, was present here-- from a variety standpoint, from a depth standpoint, and from an excellence standpoint. That's one.

Second, the infrastructure at Stanford was excellent. So if you were very self-directed, and I was, those resources were available to you. And that was great. And I was forever grateful that I got a scholarship because I couldn't have come here without it.

Weber: And so what followed next?

Koogle: So I went through graduate school, got two degrees, as you know, in engineering. Started off in mechanical engineering. Loved all things mechanism design. The math behind that for me was kinematics.

As you may or may not know, that's the way one describes, in mathematical terms, how things move. I got a deeply involved in that. That had outlier paths, and tentacles, and things associated with, then, how do you computationally do that, describe motion? How do you depict it? So that had me kind of doing some computer science stuff.

And then, lastly, how do you instrument things so that you actually can measure how they actually are moving. And overlay that on what you had predicted and do optimization. So you see how the paths kind of begin to multiply, but kind of all around that sort of thing. There were some really kooky Polish mathematicians hanging around. That was pretty cool and stimulating, and that sort of stuff. But it did have me kind of getting a little bit broader than just mechanism design as I was there. That was really fun.

Weber: I mean, you'd been exposed to computers before, I assume. But when did you first really use them?

Koogle: So my vintage-- I forget whether we talked about when I was born, the year of 1951. I went to undergraduate school in 1969 and was there until 1973. And somewhere there, during undergraduate school, HP came out with its first handheld calculator, the 35, Reverse Polish [Notation], and all that sort of stuff.

None of us could afford that. I think its price point was \$400, which was astronomical for us. Our professors had them. Probably given them by HP, kinda doesn't matter. They'd lay them on their desk. And during exams, you could take turns using them to run your calculations and stuff.

We had a mainframe on campus. We had remote dumb terminals that we would access that through. I think there was an HP or an IBM machine initially. Then HP started to do that. So we were accessing both IBM and HP computers through dumb terminals.

And that's when I started messing around with that. And golly, it seems so primitive now, in kind of retrospect. When I came out here, Stanford was pretty well endowed with computational capability. But even so, you, and others in this room, actually, right now, including Len, would remember the punched card era. I survived that in depth and kept messing around with computers during that time.

Weber: And so your first jobs after Stanford?

Koogle: So I started my own companies while I was still in graduate school. And one of them was more avocation-based. And the other was more, quote, "professional." The avocation-based one was that I started rebuilding engines for folks out here. My dad sent my tools out to me.

He did it on a dare. And I could tell you about that if you want. But he did that. And so I posted up index cards all over campuses. This is way pre-web and everything else. And something like, if your car's broken, call me.

And I found this really rich niche business in restoring old ratty Porsches, and cars like that, for wealthy Stanford undergraduates who had trust funds-- who I think were driving ratty cars to look somewhat poor or something. And when they broke, their parents said go get that car fixed, we'll pay for it. I just want it done right, so it's safe.

And there I was. So I started doing a lot of that. I borrowed the machine shop keys at Stanford to do some machining where I needed to get that done and then started to build a network of suppliers, and machinists, and heat treaters, and that sort of thing all around the Bay Area. Those folks all started to send me racing engines to do as well.

So I did that, hired a couple of my friends, and we had this business, moved off campus into a barn, down in Los Altos, in an orchard, and had a full machine shop, and an engine building thing down there where we did outrageous racing engines for folks, and charged top dollar, and had a nice little business.

I bought a house in Redwood City in my third year in graduate school from the money I'd done through that. Bought it cash. Tiny little house, by the way, not that impressive, but it was cash.

And then I mortgaged that house, and took all that money, and put it into the second business, that was a little bit more what you'd call professional, probably. And I picking up subcontracts from my professors to do mechanism design. So designed some of the core-- I can't believe, to this day, venture capitalists actually allowed this to happen. But we'd pick up contracts to design the guts, actually, of new products, for both startups, as well established companies.

And then we evolved that to where we started picking up pre-production runs, pilot runs, pre-production runs. We bought a machine shop and in little pre/pro facility down in Milpitas near the junk yards down there.

And that business grew. And I hired folks and started to grow it. And we evolved it several times and went to the sweet spot. And for us, it was microprocessor-controlled equipment for electronics manufacturers, especially clean room related ones, high value, high margin kind of things. Capital equipment, but smaller price points, all the way up to big price point systems and things. And that's, believe it or not, what I started, also in my second year of graduate school, and into my third year. And we kept growing that.

Weber: But you were making components for other companies? Or you switched?

Koogle: We switched. We started making full up products for folks.

Weber: What was the name of that company?

Koogle: Phase two, in the end of it. And that was a little bitty company, in the context of things these days, really, little bitty company. But Motorola bought that when I was 29.

Weber: And you moved to Motorola with the company?

Koogle: I did. I took some time off. My friends said I should take a lot of time off. Some of them silly things like, you should retire, and things like that, but-- and you're fairly clueless when you're 29, or at least I was, about that sort of thing. And it was not interesting to me. And Motorola said, we like you. And we want to keep you. And if you would entertain working here, you'll report to a guy that reports into the office of the CEO. And we think we've got a lot of really interesting things here for you. And I viewed that as a real gift, actually, in retrospect because they dropped me into all kinds of troubled things to train me. And I learned a lot from people that I really respected and really admired.

Weber: Going back, was it an easy decision to sell?

Koogle: No.

Weber: Or did you want to build your company up?

Koogle: Those things are never easy, those decisions. You have a baby, right, that you had, you birthed, and all that sort of thing, and you're growing it, on the one hand. On the other hand, when I started, I bootstrapped it. I don't think-- I don't know, because I didn't really try extensively. But I did try a couple times talking with folks that you now would call venture capitalists. And nobody really wanted to back somebody from Virginia who was, at base, a mechanic and had gone engineering school, admittedly, but nobody was willing to back that. That's why I mortgaged the house. And we bootstrapped it. And we were

always really capital constrained. And I was, without knowing about this from experience then, drawn to things of scale, where there was a balance sheet, and what we call now a currency, and the ability to make strategic decisions and place big bets, all of which require resources, just generically. And it smelled that way to me, even then, really, really clearly. And so that was clear. Shoot, I was 29 years old, and I knew that I needed to learn a whole lot. And I'm not shy about learning at all. Loved it.

Weber: And so selling seemed like a better way to--

Koogle: Completely.

Weber: Move to that next level.

Koogle: Way more leveragable.

Weber: And were you still building engines at the same time to support them?

Koogle: No, I quit doing that. Yeah, I quit doing that. I faced a similar my dad did, but different. I was married at the time. I'd gotten married, I think, when I was 30, or 31, I think something and was still doing racing engines. And we still had our company we were growing. And also I was trying to be there for a wife, and have a relationship, and all that sort of stuff.

And she did remind me one night that I probably should pick from a smaller set of those things. [LAUGHS] And she was right. And so I sold all my tools, or a lot of my tools, and all of our spare parts, and all that sort of thing, and wound that down, and just focused on a shorter list of things. It was the right thing to do.

Weber: And so at Motorola, well you said it took some time off. But then they sent you to a number of different things at Motorola.

Koogle: Yeah.

Weber: So briefly summarize some of the high points of that.

Koogle: Yeah, I got around a lot at Motorola. I reported to a guy who then reported into the office of the CEO. That was a really good time for Motorola, a company that's lost its way in recent times, as you know.

But it was being run by Bob Galvin, Jr., who was the son of the original founder of Motorola. So Bob was the CEO at the time. A guy named Gary Tooker was the president and COO. And George Fisher was in the office of CEO too. And he may have been president, and Gary was COO, but they operated that way, as a threesome in the office of the CEO.

And they literally would rotate roles in various things. I thought it was a really astute thing, strategically, for a company like that. And I worked for a guy who reported into there. And with various things I did then, I felt, and it's part of the feeling of it having been a gift-- I sat around those tables, too, and soaked it up like a sponge. And listened to these guys-- they were all guys at the time-- making big bets in strategic things, and succeeding and failing, and not being shy about that, and talking about innovation really clearly, and using balance sheets, and using currency to make big leveraged bets in areas that looked like they were emerging, et cetera, et cetera. So, for me, that was an incredibly rich time of learning for doing that. And they put me off in various ventures over the next eight years.

And you didn't ask it, but I learned that they had put me on a short list of people in Motorola, of, I think, 50, that they were intentionally grooming to see if, in fact, we could be CEO. And I don't know if this is a good thing, or a bad thing, in retrospect, but they kept that list secret.

And so they gave me a number of very uncomfortable things to do. And at first, I thought that was just because they didn't like me. [LAUGHS] You know? I mean, what other conclusion can you come to. And it wasn't until I phoned George and said, I'm going to leave Motorola, and he said, you can't do that.

Weber: How far in?

Koogle: My eighth year. And we can come back to that as to what and why. But I said why? And he said, well, you don't know, but you've been on the short list of people. And we've been grooming you all this time.

And so in all those things that those of who had been CEOs that then had these discussions with really good people that you are grooming who then say they're going to leave, you try to talk them out of it. And he did. He tried that and stuff.

But my head had already left. And my heart was in the next thing, too. So I stuck with my decision and left.

Weber: But what was the reason that you left, though?

Koogle: So in my last two or three years at Motorola, I was doing a lot of things where Bob Galvin had actually asked this to be done, that a few of us go out and sit in the operating divisions, and pitch in, and add value, but listen, and listen for the things that were barriers to their success. And a lot of those were technological, which was great. And then draw up a list, in a way, to then, either through acquisitions, or through investment in development, remove those barriers. And that can be a longer conversation, if you want, about what those were, and that sort of thing. Really stimulating. And we also were looking for things that were, like, hostage in operating divisions that should be freed up and freed out. And in that context, in some cases, we were looking also, externally, for companies that had great product, or great technology, but lacked distribution channels and lacked platforms to which they could get bolted to really, really spur on some growth. And in one of those areas, I'd gone out and looked hard at what was being called the automated data collection area. We had a really great technology and distributed process control based in Chicago that I was infinitely knowledgeable about, associated with, and we were scanning the landscape of companies that were high growth companies outside, in the application space, if you will, of this, and kind of mapped it over onto those, and then sort of drew up our short list, and then made mostly friendly runs at a few these companies for acquisition. And we made a mostly friendly run at a company up in the Northwest that was a leader in its space, and a couple of others. There was one in New York that was a leader in its space. And we backed away and didn't go through with an acquisition. But in the meantime, I'd fallen in love with the business. And those guys recruited me.

Weber: And so that's when you went to Western Atlas.

Koogle: I went to a company called Intermech. That's what it was called up there.

Weber: Which is a subsidiary of Western Atlas?

Koogle: It was a subsidiary of Litton. Instead of us, Litton bought it. Litton was operating as a holding company. And then Litton subsequently split in two and kept all of the defense and aerospace-related businesses in one bucket, and all of the non-that stuff in another bucket-- that had to do with data automation, and a full range of things to do.

And so I operated Intermech as their president, and CEO, and a division president, and all this sort of thing. And then Litton, and then, subsequently, Western Atlas, gave me titles. And those kept escalating.

It was kind of odd, interesting to me. I'd get these phone calls late at night, and it would be some senior executive from Western Atlas, or Litton, and saying, congratulations. And I'd say, why? [LAUGHS] I'm saying, they're operating this company. And they'd say, well, we've just given you a bigger title at the parent company. And so I operated in parallel spaces there, both at the parent company, as well as operating this division up in the Northwest.

Weber: And so you were based at the time in the Northwest?

Koogle: Seattle. Yeah.

Weber: And then what was the transition to Yahoo, then?

Koogle: So we did a turnaround up at Intermech. And I was there running it for, I think, five years. And we did that, and did that very successfully. And that was a hoot for me, or a blast, or whatever else this will transcribe well into.

And one of the ways in which we got it, actually, growing rapidly again was that we took a lot of the things that had evolved, already, into almost commodity status products and moved those into a sustaining engineering kind of mode, sold out the direct channel related to those products, and made it into an indirect channel, et cetera, and basically moved a lot of the resources that had been dedicated to all of those things over to innovations in high growth emerging areas that were also logical extension of what we were doing.

And one of those, if you follow all that, one of those was in wireless data transfer and portable computing. And so we did that. And it was a lot of fun.

And that got us into this emerging area of wireless data communication standards, and the rest, and some hardware related to radio technology that was in it. It was in my background from Motorola to kind of be reasonably fluent with that stuff, too. So we had a lot of fun doing that. And it was really successful.

Weber: And what was the application?

Koogle: So the company was operating this data communication collection space and data communications space. We can come back to that if you want. It was kind of one of those times where it started to become really, really clear to me, almost in a muscle memory way, to anticipate, actually, where things were going and kind of moving what was emerging, at higher value, was not just collection of data but what you would do with it. How you move it around the networks, how you would escort it into mainframes, or whatever else was at the head end of taking that data and putting it into information that could be used to direct workers, et cetera.

And so we were already in that space. And we were leaders in the space of-- from a vertical industry customer perspective-- we were in distribution logistics, manufacturing, et cetera-- not so much in the

retail space. We had a smaller business there. But mostly in distribution logistics and automated manufacturing, worldwide.

Weber: And the wireless and portable came in all across that? Or in some specific--

Koogle: Yeah, it came in all across that because, you know, you had a data input device. You'd plug it into something. You'd carry around with you in a work setting. They made some of the very first hand held, what we'd call handheld computers now-- big, ugly, brick-like things, initially, were made increasingly smaller and prettier.

But it was an emerging thing. And we did a lot of that. And some of them were batch upload related. At the end of a work shift, you'd put it into a physical dock. It would upload via hardware link up to a factor controller somewhere, or a distribution logistics controller somewhere. And then we started doing purely wirelessly connected ones so that more and more, in real time, not only could you move the data up into what we'd now call the cloud, or some other place, but, also, you could give work instructions back down, increasingly, in real time. That was a blast, doing that kind of stuff.

I got approached-- your first question, which led to all of this. I got a call one year before I decided to leave from a head hunter who tried to get me to join and come run a startup company in wireless here in the Bay Area that was Kleiner Perkins backed. And while it was in my sweet spot, I turned it down. And I turned it down three or four times. And finally, on the fourth time, or the fifth time, he goes, OK, I get it now. I've written it down. But would you allow me to call you. I told him the reason was I didn't think I'd really finished what I thought I'd promised to do up there. And that was important to me. And he said, how long do you need? And I said, probably, about a year. And he said, would you allow me a call you in a year then and ask you if I've got anything interesting. And I said yes. So he called me in a year. And I left to come down here and do Yahoo.

Weber: Yahoo is quite a switch of industry-- or maybe not. Tell me about why did you take Yahoo?

Koogle: I took Yahoo for several reasons. First off, I didn't know it at the time, but as I soaked on it and got to know Jerry and David-- because I agreed to come down here, and meet with those guys, and they had five or six employees at the time--

Weber: Tell me your impression when you met them?

Koogle: I was really impressed with Jerry and David. One of the things, I think, that you learn-- I know that you learn, if you are in a position long enough to run and scale things, is how to be intuitive about people and try to look for what their motivations are.

I personally have always looked for folks who I'm going to rely on to come to the party for really good fundamental reasons. And some of those fundamental reasons are there-- in this case, they're founders. Are they real founders versus fake founders? We can talk about that later if you want.

But there are a lot of fake founders of the world that are flippers. They are kind of in it to make a quick buck and get on with something else, et cetera, et cetera. Are these people that are doing it for a reason that they're not likely to let go of because they just really, really, really deeply feel dedicated to having something of impact through this thing that they're starting-- first off.

Second, they seemed like really nice people. And lastly, they seemed like, although you never really know until you go to see with people, but they seemed like people who were pretty self aware, and pretty self aware of what they weren't good at, and seemed, also, to be willing to turn those things over to someone else. And I think that's a really crucial part in making a decision to go to join an early stage venture, for obvious reasons, probably, to you. But they checked all those blocks. And the last bit, what it awakened in me was actually the getting back to a sense for how much I love early stage, how much I love everything about that, how the rules aren't written. You're in a small place with a small team. When you have questions, you just walk down the hall, if there is a hall, you noodle it, and you make a decision, and you just go. You don't have committees, and you don't have stakeholders, and all this sort of stuff.

And that is not for not for every one. But I really, really, really like that. And it sort of re-awakened in me that I was running this large thing. And we had a bunch of moving parts to it. And it was global, and all the sort of thing. All of it was fun. But this was really simple, and really crisp, and really focused with folks that seemed to want to die trying at what they were doing. And what I couldn't tell is the last bit of it, which is, to what extent could it be a sizable company? No idea.

Weber: And the decision to bring in a CEO, was that theirs, or the VCs, or what was the--?

Koogle: I think it was the VCs. And I forget who articulated this to me, but, you know, Sequoia Capital put--

Weber: Michael Morris.

Koogle: I think a million bucks in the company. And that's the only venture capital we ever raised, which is odd, in this environment now, where you read about hundreds of millions of dollars being put in pre-A and series A stage companies. That's the only venture capital we ever raised. And Mike had put that commitment and had actually done the wire transfer. So there was a million dollars that they invested in the company, the external capital they raised. And I think Mike only had two rules that he asked them. One was to go out and get a CEO. And the second one was to not change the brand. That's what I was told-- two rules. [LAUGHS]

Weber: And so, when you came in, there were four or five people, as you said.

Koogle: Yeah.

Weber: And where was the office at that point?

Koogle: It was here in Mountain View. It was a little street called Pioneer Way, I think, not far from the freeway, in the back of a little industrial building, office building, behind a rubber stamp manufacturing company. I think we had no more than maybe 1,000 square feet. That's probably being generous.

Weber: Do you remember the address?

Koogle: I don't remember the number address. But it was on Pioneer Way.

Weber: And so it was the two of them-- you, and who else?

Koogle: The two of them. There was a guy named, his nickname was Lobo, an East Indian immigrant and engineer, Don Lobo. And Srinija Srinivasan, aka Ninja, Tim Brady was there, and a woman named Kelly, Kelly Moore, I think was her name, who basically operated as an office manager and go to person, kept us stocked with sodas, and munchies, and stuff like that-- answered the phones.

Tim Brady wasn't even there full time at the time. He later took over all the producers, product management, and did a great job at growing it. Tim was trying to get an MBA at Harvard. And all I remember, at the time, was he was trying very much to talk Harvard into-- he was trying, and I think he was successful, but I'm not sure, talk Harvard into allowing him to do that via correspondence course so that he wouldn't have to leave the company. [LAUGHS] He stayed, so he was either successful, or he decided to not do it. I think I forgot to ask him.

Weber: And it was directory based. Who were the people adding links to each category?

Koogle: So initially, it was a Lobo and David, David Filo. They would both write code that would run the service as well as kind of add these sites. Ninja's job-- she was in library sciences at Stanford. I think she has a master's degree in it. So she was really deeply trained in classification of subject areas and everything else. So she would create the structure of it. And then the three of them would collaborate, really, on taking submissions, and finding out where they belonged, and making the link, and putting it up on the site.

Weber: So just two people, really, doing that.

Koogle: Yeah.

Weber: Yeah? And I know you're one of the people, or the person, that brought in the idea of an advertising-based revenue model. What was the thinking? When you came in, were they making money? How were they thinking about that?

Koogle: No, they weren't making money. There was no revenue, zero. They had the beginning of a business plan done but hadn't finished it. And that business plan, in abstract form, had a whole bunch of different questions related to how they might generate revenue. And it's easy to forget now in this advanced state that the web, everything web, is, how undefined everything was at the time, and unknown. So advertising certainly wasn't any sure bet.

But two things occurred to me. And I'll say me, but I really will begin including using the word we because we did everything in collaboration there, as you might imagine, six or seven people sitting around figuring this out together. We vetted a whole bunch of different things. I will say that David and Jerry were not at all sold on the idea of doing advertising on the site, anything but.

Weber: How did they think it could be--?

Koogle: Well, there was this undercurrent of what was called at the time the "Webstock" kind of mentality of things. Sort of everything's free, and everything's open, and it was a bit of [the] Wild West, and pioneering, and all that sort of stuff. And a lot of the users, early adopters, and users, of the web, pretty much were rewarding folks who would then embrace that freeness and openness and stuff like that. And advertising is commercial. And commercial sounds like a sell out. And so it went sort of counter to that whole Webstock kind of mentality, or sensibility, at the time. And I appreciated that. But I didn't believe it would matter in the end if it were done right, and if it were done right, meaning it were done in a way that actually added value to the user experience and was minimally intrusive, that we might be able to balance those two and certainly attach ourselves to what we would hope would be a pretty rapidly expanding revenue base for the company. Economically, it seemed like a really obvious thing to me from a business model perspective because the incremental cost of adding a banner-- at the time, it was sort of graphical only-- was *de minimis*, as you might imagine. You're already shipping a page. Ship a few more bits, minimal cost-- and a wonderful, wonderful model.

And so I remember talking with Jerry and David one night. And said, you know, here's the thing. We operate our own little server cluster. We watch it every day. We see what the traffic's doing. Let's put a few up. And if people are, like, boycotting us, we'll know right away. And we'll take it down. And we'll

experiment with this. But if they don't, then we'll grow it. And so they agreed to that experiment. That's what we did.

Shustek: Did you consider other revenue models, like having users pay for the service?

Koogle: Yeah, we did. Of course, we built a list of what our now called premium services, and fees, and subscriptions, and the like. That was really early days, though. And it seemed, it just felt to us-- you never know, but it felt to us that already, the expectation of free delivery and free consumption had taken hold. It certainly had taken hold at that time.

Whether or not it would reverse out over time by adding enough value that people would then begin to see the value, to actually value it, and to be willing to pay, on a subscription basis, on a per drink basis, for access hadn't really emerged. And it didn't feel, in comparison to what you could already measure in the advertising space, and other media forms, to be anywhere near the scale of opportunity that advertising represented.

And part of startups is placing bets. And part of it is figuring out what step one and step two and step three is. And I'm a big believer that, actually, if it does seem feasible to attach yourself to a larger demand base rather than a smaller demand base in a way that isn't likely to kill you in its scale, that doing that, if you're successful, then gives you a platform on which to run a bunch of successive experiments for extensions for revenue. That's how the logic went for me at the time. And that's why we went that way.

Weber: And did GNN serve at all as a model? They were a portal running ads by then.

Koogle: Yeah, they did. And we of course looked at AOL.

Weber: But that was subscription-based as well.

Koogle: It was subscription-based. But they'd experiment also--

Weber: Both.

Koogle: Yeah. They'd done both. They'd done both.

Weber: And you didn't consider products in some form because that would be the other way to go, is to sell something over the side. That never entered into the equation?

Koogle: Not then. Later it did.

Weber: And so when you started the ads, how well did it-- how quickly did it take off?

Koogle: It was clear that it was going to grow, and did grow, and did grow successively. And I don't remember, I mean, literally, I don't remember what the revenue growth rate was in the absolute numbers.

But I do remember that even that year, which was 1995, I think, in the fall, or early fall, we started the advertising experiment, if you will-- by the end of the year, we'd gone from zero in revenue run rate earlier in the year to about, I think, like, \$5 million or something. And to us that was significant for a quarter's worth of experimentation in advertising and certainly had great economics associated with it.

Because I think we'd added what are called "surfers" which are then folks who are then taking website submissions and doing further linking. We started building out infrastructure. But I doubt that we had any more than 15 people, maybe 20, working at the company. So that smelled good to me. And so we just kept at it.

Weber: And those surfers were contractors, or employees?

Koogle: No, employees. We had a couple contractors. We'd date before we got married, selectively, with some. We'd have them in, kind of do it on an hourly basis, and then we'd convert them to full-time if it looked like they were really good.

Weber: Tell me a little bit about your relationship with the founders, and which roles each of you played.

Koogle: Sure. We had a great relationship. And the roles is an interesting question for two reasons, I think. One of them is that at a really early stage company, you kind of all do everything. And then, as you evolve, it looks like you're hitting your stride, and getting clear about what you do, and the value of it, and all that sort of stuff, then you, if you're good about evolving it, you put more order on chaos, and more order on chaos, and you get a little bit more structured.

And it's kind of what I used to call the Goldilocks principle-- not too much and not too little, but just right for any one time. Too much structure gets in your way and slows you down. And too little is still chaos. And just right is just right. You get the drift.

So we sat around the table. And actually, it was so easy to discern David's role because David always loved writing code. He was really clear about it-- slept under his desk, quite literally.

Weber: Literally?

Koogle: And would write code at 2:00 in the morning. And we'd all have to be really careful if we came in at 7:00 in the morning or whatever, so we wouldn't wake up David until maybe like 10:00 or something. And then it was OK, he was awake again.

But he was really clear about that. So that was never a problem, figure out what his role would be. It became a little bit more complicated later on because David also didn't really aspire to running large engineering groups. He liked writing great code, and serving as a mentor, and being what you'd probably call a CTO kind of thing. But at that stage, it was just really clear what his role was.

Jerry was a little bit different from that. He also wrote great code. And he was a good to great architect. And so he and David worked really well from that perspective on that stuff. But it was clear to me that Jerry also wasn't going to be a professional manager in any way. And it was probably clear to Jerry.

It was also clear to me, but required verification, that Jerry was really good at articulating things and was a really good spokesperson. And if the two of them were asked, which they were, many times, to be interviewed by whatever, *WIRED* magazine, or whatever, that they'd both appear, and all that sort of thing. But Jerry would be so good at actually articulating what it was they were building, why they were doing it, what the story was, what the vision was, and all that sort of thing. And he was only a little bit uneasy about doing it because he was insecure.

So it became, really, pretty clear pretty early that a couple of roles that he played were very crisp. And one of them was an internal guy who would be a great backboard for David from an architecture perspective on things, a reality check-- because I forgot one other attribute that it was clear Jerry had was that Jerry had a really, really clear gut sense for what would work for consumers and what wouldn't work for consumers.

And so he served as a backdrop for all of those kind of reality checks that were internal conversations about what we do for product extensions, service extensions, what would really resonate, what might resonate first and grow fastest, what would piss people off, and serve to people to leave, and all that sort of thing. Jerry played that role. So his was threefold-- external spokesperson, internal architect, helper with David, and consumer sensibility, and reality check kind of person. And that kind of never changed.

Weber: And you were, what, early to mid '40s. They were just out of school.

Koogle: Right.

Weber: So you certainly were the adult supervision. But what was your relationship like day to day?

Koogle: It was good.

Weber: Did it feel like that? That you were the adult.

Koogle: Sometimes it felt that way. And you didn't ask, but it has been written-- and lots of things are written and some of them are true. This is true-- that the adult supervision thing was the pickup line that the recruiter snagged me on when he called me. He said-- one year after I said no, and he said, one year, can I call you? And he did. And he said, you know, I've got this really interesting little company. It's in this emerging space related to the web. Sequoia Capital put a million bucks into it. They are well known. And it's a really interesting thing, and they're in desperate need of adult supervision. Are you interested? That was the pickup line. So you know-- I've never really felt, I've never thought of myself as adult supervision in the negative kind of ways of that because I have as much to learn as everybody else. But I had been around the block quite a few more times than those guys had.

Weber: So a typical day, in, say, '95, at Yahoo, tell me how would it unfold?

Koogle: Oh, in '95?

Weber: Or early on. Maybe early '96.

Koogle: So from late '95 is when we really started to experiment and really kind of push it. And then, into early '96, we stuck to that, and pushed more aggressively, started to build out the team more aggressively and the rest that you do, if you're smart, and you seem to start getting traction. You start to identify key leads that you want to add to your team, go and recruit those, and put them in place. I'm a big believer, have always been, at getting clear about what you're going to go do, hire people that are really good at it, push authority and responsibility out to them. So we started doing that in earnest in early 1996. So I'd say it changed. It was kind of nutty and really small in '95. I'd come to work and do a bunch of tactical things that needed doing. There was a near death experience just after I arrived there. And so--

Weber: Which was?

Koogle: So I arrived, and they had a couple of consultants that they'd hired-- they being the venture guys-- as kind of interim managers while they went out and hired me and then relied on me on building out a team. There were a couple of folks there. One was an acting CFO. I think they even called him a CFO. It's so silly, right? When you've got five people, and a million bucks maximum in the bank account,

and one rent bill. And they had another guy was interim, or acting, CEO when they went out and did a search. And those folks hadn't managed the cash very well. And so Sequoia, and the founders, Jerry and David, thought they had a bank account that was much bigger than they actually had. And I did what I'd been trained to do, when I came in and asked for all the files associated with all liabilities, so all commitments that we had that were monetary-- to folks, rent, licenses, anything that they'd signed, commitments there, et cetera, and started going through them.

I asked the acting CFO, or controller, for an income and a balance sheet. Not rocket science. And he said, I don't have those, but I'll get them to you within maybe five days. And I thought, how hard is that, and why is it hard to have an income statement and a balance sheet for a company that, by that time, we we're doing, like, I don't 50k or 100k, just starting revenue, right? So there weren't that many moving parts to it.

And I thought, we could sit here right at a white board, I bet you, and construct one. And that's when I asked him to do. And when we did, we found out that they'd burned through quite a bit of cash already. And we only had, on that burn rate, and the commitments we had for new hires, probably about six weeks left of cash. Incredible, I know. Really stupid.

Gone to a lot of trade shows that were really expensive for some reason. They had bought all the server hardware, and all the desktops, and everything else, all the equipment, furniture, operating hardware, and everything else with cash, as opposed to going out and getting a lease line going and leveraging that, et cetera. But I remember the call I made it to Mike [surname?] one night and said, you know, you may not know this, but the company, right now, has, at current burn rate, about six weeks of cash left, even though you put in a \$1,000,000 early this year.

And we went to work at that. I took all the equipment, and all of furnishings, everything else, went down to Silicon Valley Bank, did a lease line on it, reversed back out the cash, put that back on our balance sheet for operating cash flow, et cetera. And then we really pushed hard on growing the revenues, and got the cash flow positive really quickly, and all that sort of stuff. So there was this little period that smelled to Jerry and David like a near death experiences. It didn't worry me too much because we'd get through it.

Weber: And would Mike have put in more if absolutely necessary?

Koogle: Yeah, probably, but he had the same sensibility I did, which is, it'd be great to not.

Weber: And why have all your own servers? I mean, even then, you could rent those in a co-lo [co-location server service] somewhere.

Koogle: Those were far and few between, those co-lo services, at that point. And so they bought the stuff. And you didn't ask, but, actually, you could buy servers-- we were running FreeBSD. And we were running those on white boxes. And I think we were doing two ops. Might have done four ops later on for server hardware and stuff.

But we started sourcing that stuff at large scale out of Asia. And you could get that really cost effectively. But if you had a lot of them, it would take, at that size, and that scale, the balance sheet, and everything else, it made a significant dent. And the reason they did it was, I think, just practicality. It was easy to get that, easy to control it. You know, there was a lot of wiring up and stuff like that, and diddling with it, at that stage, in the discovery mode that I think served the company really well from the standpoint of building up that internal core competency on all that.

They had it hosted over at Netscape, believe it or not, because they had a relationship with Andreessen and others over there. And that seemed treacherous to me. So we pulled it away from Netscape and put in our [server] closet over at Pioneer Way.

Weber: And the name. You added the exclamation point because of the barbecue sauce?

Koogle: I don't think so.

Weber: Is that an urban legend?

Koogle: Probably.

Weber: OK. But you did add the exclamation point sometime in that period.

Koogle: Yeah, you know Jerry, and David, and they friends had done the original header on the top page of the site. And it was really very cartoony. Actually, we called it the other Uncle Stinky font type, actually, in the original version of Yahoo. It didn't look polished enough. We actually wanted to keep your irreverence, and the humor associated with the brand, and the excitement, and everything else, but true it up a little bit more, and make it a little bit more professional.

So we called some pals, had at a little outfit called Black Rocket. And we sat around and did-- I think it took us like three or four days or something to settle on a new font type, and add the exclamation point, and true it up, and stuff, and that kind of became it. It wasn't this huge Landor [Landor Associates?] project that folks would have done. But we kind of did it that way, trued it up.

Weber: The IPO came very early, in '96. So revenue had gone from '95-- what was your revenue at the time you were preparing for the IPO.

Koogle: I don't remember, but we probably were a run rate, on a look forward basis-- which turned out to be conservative-- of about 50, probably, for that year. Taking the company public was one of the hardest decisions we ever made. Taking it public then.

Weber: Tell me about it.

Koogle: Yeah, you know, I'm a little bit old school, still am, about this sort of thing. I think it's better, even if you stay away from all the overhead associated with running a public company, which there is, and all or most of that stuff actually looks and is, actually, pure overhead. It's a distraction, and it keeps you from focusing on the stuff that really matters, which is your customers, and your product, and your revenue stream, and your profitability, right? And your innovation queue. All that stuff is really, really important.

So I've always had a little bit of an aversion to that. But I think at the right scale, and the right stage, it can make big strategic sense to then go public and take on the overhead when you can afford it from a bandwidth perspective.

I think, more importantly, it's really important to prove to yourselves that you actually have something that is sustainable and profitable and have a track record that isn't just a fluke because you've got more than one point on the curve, which isn't a trend, that actually proves that and substantiates it. Have enough runtime to know that, and experiment with it, and know where the basis of it is, and where the dimensions are you need to push on, and basically do that before you take a company public. But there was a bit of an early mania going on of companies that were minted about the same time, if not just shortly before Yahoo, and all of them were rushing to be public.

Weber: Yeah, you talked a little bit about, and that's good-- I mean, obviously, Amazon and eBay you were looking at as kind of contemporaries. What were some of the others?

Koogle: So even then, there was Infoseek, there was a Lycos, Alta Vista hadn't really been minted--

Weber: Oh, and you were looking to true search companies. Sure, they were competitors in a different way.

Koogle: Completely. All focused on navigation, right? Discovery and navigation. I think Excite had been funded by KP. And we knew, because we kept our ear to the ground pretty closely, which wasn't hard,

here in the Valley, that they all were already talking with bankers and all preparing to take their companies public.

And so there were two dimensions to it that we took really seriously-- was if they did, and we didn't, it was possible that they would get a type of promotion that would benefit the growth in their brands from the standpoint of awareness, getting a broader awareness set through the process of going public to great fanfare, to this whole emerging part called the web, et cetera, et cetera, et cetera. So that would be a brand benefit to them, first off.

Second is that if they took their companies public, and didn't screw it up, they'd have a currency that we wouldn't for making strategic acquisitions and all that sort of thing. So we had lengthy discussions around the table, in our tiny little boardroom, about whether to do it or not. Because it didn't feel like it was time.

But we also are already felt pretty sure that we were operating in a really disciplined way with a really great model. And our revenue was growing really well. And so, in the end, we took the chance. Took it public.

Weber: I know Mike Morris was on your board. Who else, who are some of the main people?

Koogle: God, I don't remember them now. We had, like, no more than four people on our board at the time.

Weber: Oh, OK, so it was very small. And I mean, Netscape went public in August of '95. Obviously, that's what set the clock ticking for everyone. But through the relationship with them, did they sort of nudge you guys or say why haven't you done it yet?

Koogle: Not so much Netscape. They were pretty wrapped up in their deal, and their story, and all that sort of thing. It was a pretty heavy thing going on. But, I mean, bankers started to show up. It was kind of really weird-- weird but not that bankers started to show up. Folks in the media would give us calls and say, are you guys planning, et cetera, et cetera? So there was a clear drumbeat to do that. And everybody was getting those phone calls among our competitive set. Couldn't avoid it.

Weber: And in terms of directories, were you aware of the CERN virtual library?

Koogle: Yes.

Weber: So was that a model, to some extent?

Koogle: In pure search?

Weber: For categories for the directories.

Koogle: Yeah, it was. We tried to be aware of, actually, other things that people had done that seemed to be better than what we were doing. We tried to do what you should do always, which is look outside, look at the best stuff that people have done, look for what you can actually copy legitimately, what things are really lame that you probably shouldn't bother with-- because they bent their pick on it. You don't have to also-- and then make extensions to what they're doing. So basically learn by comping your competitive set or resource set all the time. We did that. We did that.

I will say, though that it, at the time, it didn't seem that-- from a categorization standpoint, it did seem to us that what we were doing was fine. It would be enough substance to serve us for quite a long period of time. I did worry about the scalability of it, from a human resource perspective.

And what we also didn't know at the time was to what extent this thing that we clearly called navigation, that we thought of, and really clear, and it was accurate, and it was correct to be thinking about it from a user perspective. That's the value that we bought-- that would never go away because we were willing to make the assumption that the web would continue to proliferate at increasing rates.

And so the world of available content, in the form of websites and others, would just become even more enormous. And the task of finding things that were of relevance to the consumer would continue to escalate exponentially as well. So navigation would never go away.

What we didn't know at the time was what we called front of the book and back of the book approaches to this, table of contents versus index, which one would take precedence. Because, at the time, search, in the forms that were available, didn't really return super relevant results consistently enough to give a really good user experience.

And so the front of the book stuff, because people still weren't really trustful of what was out on the web, how pervasive and comprehensive it would be. So many, many users were coming at it from the perspective of having already identified, for themselves, a subject area that they were interested in going to. And so the table of contents approach, actually, was pretty sufficient for that. Served the need really well.

Weber: But you must have worried about the exponential need for more and more surfers then, right?

Koogle: Yeah.

Weber: What was the thinking-- did you think you would have to integrate with keyword search at some point, back then?

Koogle: Absolutely, absolutely. And we did. And we did through partnerships.

Weber: So tell me a bit about the lead up to the IPO. And you said it was a tough decision to make. Once you'd decided, what did it feel like, and how did that affect the way people related to each other?

Koogle: It felt fine. It felt, actually, more than fine. It felt like a really interesting new door and new chapter. And again, without belaboring it too much, that's one thing I love about startups is that you get something right. And you get it set as a platform. And while you're doing that, you're already, if you're good at it, you're already thinking ahead, and you're extending, and everything. So you drive through that door, see if that works, then you drive through the next door, and see if it that works. And this was another door for it. It was a pretty exciting time outside folks, et cetera. So there was that enthusiasm. And it didn't really carry any negative things from a dynamics inside the company associated with it.

We later discovered, after being a public company during the late '90s, where things were so, like, frothy, how, additionally, you had to spend management cycles, and leadership cycles, really, on keeping people clear about what really mattered enough so that you could minimize, as much as possible, the hubris that can set it with that whole thing. And we can come back to that if you want. But in early '96 that wasn't really a challenge.

Weber: I mean, suddenly, these very, very young guys, and some women, were quite wealthy. Did you have some of them just cashing in, and moving on to something else, or was it such a core group that that wasn't an issue.

Koogle: Yeah, we didn't have people cashing in, or cashing out, and moving on. Yeah, people, for sure, at that point, when we were still a very manageable size-- it took you five minutes to walk around see everybody kind of thing-- it was very tight. And people were doing it for all the right reasons, completely.

Weber: And do remember the day of the IPO? Did you have a big party?

Koogle: We had a party. It wasn't like, you know-- it was a nice party. But it wasn't like a Genentech party and stuff that you know, these days-- sorry, for naming brands. For sure, it wasn't some over the top thing. And I think we had it back at the company out on the lawn.

We'd already moved onto a street that I can't remember the name of. But we had a little building that was, like, four or five times the size of our initial office, maybe a little bit bigger than that. It had a little piece of grass in front of it against the street. And I think we had a party that kind of spilled out onto that grass. It was a nice one.

Weber: And how many people were you then?

Koogle: Don't remember. It was early '96. So I doubt that we were any more than 70 people, or something. 60 or 70 people.

Weber: And did the level of scrutiny from the press, and from other people, really increase after the IPO?

Koogle: Sure.

Weber: Yeah. So what was that like?

Koogle: It was OK. It was OK. Yeah, there's a bunch of dimensions to that, really. It took up extra time, but I enjoyed it, quite frankly. People in general were, out on the street, and in the media, just really enthralled with and curious about what it was. What was this thing that was emerging? And there's a new vocabulary associated with it, and all that sort of stuff.

And people were experimenting with various business models. And that was fertile ground for conversations. It was a time that I remember, really distinctly, being kind of really fun and really nice because people, genuinely, weren't trying to find ways in which you might fail. They were more engaging you around vision, and excitement, and experimentation, and innovation. And what I remember from that time, and for a long time, was getting up in front of groups, small and big, and seeing lights go off in people's heads. That was really fun.

Weber: That's when the web was really a new thing, the whole idea of the online world, in many ways. So you felt very much caught up in that.

Koogle: Mm-hmm.

Weber: So right after the IPO, what were the next challenges?

Koogle: The next challenges were really practical, all those sorts of things. We had a revenue model. We had a profitability model, et cetera. Even though quite a few things about operating a web company had yet to be discovered. So many things had to get discovered.

I think it took real risk tolerance, by the way-- I see this in retrospect now-- to operate in that environment. Because there was hardly an area you could poke, actually, where things were known or given. You had to discover a lot of things, and invent a lot of things, and had to go find partners, in many cases, that also didn't have deep experience in the areas in which you were extending stuff. And so that was either stimulating or frightening, depending on what perspective you were coming at it from. It was exciting to me. It was really fun.

And at the same time, operating a company, and scaling a company, wasn't really rocket science. And there were fundamental things that I knew, from lots of time in the trenches in operating roles, I knew how to do. And I knew what the priorities were, and I knew how to do it.

Things like pay attention to your cash, protect your balance sheet, keep your powder dry, drive profitability, look for ways in which you added value, and which and ways in which you didn't, shoot the things in which you didn't add value and probably would never, that weren't core, so that you could move your resources more and to focus on things that move the needle, hire really good capable people who had scale experience-- again, Goldilocks principle, not too much so that they are corner office people, people with a fire in their gut, but also have enough experience to actually do stuff at a greater scale than you already are operating at so that you could do that.

And the disciplines within the company weren't all that radically different from many other companies-- product management, marketing, brand management, sales channel and management, sales itself, finance, legal, HR, et cetera. So, you know, that stuff was really straightforward. So that period, even in retrospect, seemed like, in spite of the fact that we were on the product side of things, and on the partnership side of things, doing a lot of invention, and a lot of extension-- from the standpoint of building a team and having a good foundation under the company, they were all just really straightforward hard work kind of things to go at.

Weber: Who were some of the most memorable hires?

Koogle: Oh, golly. We hired a guy, and this was late '95, who ended up running sales for a long, long time. And ask me later his name. But I can picture the guy. He was an East Indian immigrant also, come up through the ranks in sales, both in packaged software-- who we took a flier on because nobody that I knew, and nobody that I knew who knew anyone knew anyone who had done web-based advertising sales. But it was more of a logical extension that you might imagine, especially if you hired folks away from rich media backgrounds, as well, in sales and operations perspective.

And that was a key hire. He came and pitched us on a startup idea that he wanted us to acquire, I remember. And that turned into a recruiting session. I turned it into a recruiting session. And we hired him instead, and said, no, that's a really stupid idea. Come join us. And he did.

So that was one. And that was in late '95, actually. In late '95, we hired a woman named Karen Edwards who ended up running all brand management and brand extension for us, who was an absolute guru. I think she came out of an agency background and also had been in some of operating companies. Knew consumer branding really well and really deeply. She also had a really great sense of humor and was irreverent in all the right ways. That was a really key hire because, in retrospect, that was one of the things that, actually, our brand building of the Yahoo brand and awareness was absolutely something that we were both intentional about, and focused on, and luck had it that we did a lot of the right things with-- served us really, really well to doing that.

So Karen was another key hire. I hired a real finance guy, named Gary Valenzuela, early on, who was good strategically, but he was excellent tactically, which is the right thing at that stage. And he hired, then, a comptroller, and later on, we hired a lead counsel. And those verticals reported into Gary. And later on, when we went public, Gary interfaced really well with the banks, and the Street, and everything else. He was known out there on the Street as a trusted, known quantity. And that served us really well additionally. I don't know.

Weber: And the founders, in that period, their roles changed or remained pretty much the same?

Koogle: They remained the same. We built an engineering organization. I hired a guy named Zad Nasum, Farzad Nasem, out of Oracle to run engineering. And Filo both reported to him, as well as separately, as a CTO, mostly to Zad. And that was really easy because David remained really, really clear about what his strengths were, and what his desires were, and everything else-- a great coder, and a great architect, and all that sort of thing. He was a super resource for Zad for many, many years. And Zad was a hard hire to make because he had thrived at Oracle. And was one of Larry's key lieutenants. And prying people out of Oracle was not an easy thing. So I had long, long conversations with Zad before he finally took a flier. And I think he was really happy he did.

Weber: And at that point, it was still mostly one product, just the directories, right? Because it's in '97 that you started doing quite a few acquisitions.

Koogle: Yeah.

Weber: And there was the kids thing, Yahoo!igans. When did you start to kind of differentiate and do different products?

Koogle: So the answer to your question has two parts to it. One of them is the internal discussions and realizations that we had and came to about what was going to be the real nature of our business, long term. And the other part of it was the stuff that then we did that then sequentially became apparent to people outside. We tried to keep those separate for all the right reasons because we're competitive.

And I'll tell you, really early on, and it might've been even as early as late '95, we had the kind of discussions internally about really moving the videotape forward, and looking out over the horizon, and asking ourselves, how do we articulate what it is that we will be out there? Because it was clear what we were. And we were clear about that. It was all about navigation.

But here was the thought process on it. And I'll tell you where we landed on it. What was beautiful to me about them, about the nature of that enterprise, was that there were two parts to it. I had a factory background. I made real stuff in large quantities in my background. And I had work in process, and long inventory chains, and physical channels, and all that sort of stuff.

This was beautiful from the standpoint of that you could come up with something conceptual. You could write code at night. You could put it online, and you could see if it would succeed or fail. And you knew exactly because you owned the servers. And we'd written metrics behind it that would report up to us every morning, or any time you want to query the database, what was actually going on.

How many folks were pinging various parts of the site? What were they spending dwell time on? What were they moving from? What were they moving to, all this sort of stuff. That was beautiful. And it was electrons we were shipping, right? So there wasn't any physical inventory. It was this thing that sat in a closet called a server cluster. [LAUGHS] And that was really beautiful.

And the degrees of freedom it gave us were huge strategically to kind of see. And we decided really early on that one of the things that was a beauty there was that we could see exactly what people were doing, what exactly people found of high value, and what they didn't. And we knew, early on, that we were going to use those signposts to guide us, then, into populating the site, and the service, later on with the things that made themselves apparent to us that were of high value to folks.

Weber: For instance?

Koogle: Well, for example, various kinds of content. Starting with a table of contents approach to navigation, it was by subject area, [so] you could tell instantly whether people found, for example, sports of higher interest-- suspected that they might. Whether finance would be of higher interest-- suspected that they might.

On the other part, three-eyed, eight-toed horn toads in the Amazon, a few people found that really interesting. Probably not really broadly applicable and stuff. The obvious things, and then some not so obvious things. We pretty much, early on, thought this navigation thing is really interesting. It'll never go away.

On the other hand, providing an aggregated service that then will have nicely curated thematic areas through partnerships, or whatever, later on, might be of value. And the word 'network' started to enter our vocabulary. Media platform was obvious.

And when we stitched all that together, we started to really visualize really clearly, using the navigation part to guide us toward the most popular things and then building out services that were of deep and sustained value that would allow us also differentiation through providing what would appear to be original content but actually was curated, really cost effectively, curated content that went deep in subject areas that we saw would be very popular.

And set together with the revenue model, then, you could do much more targeted advertising serving, not only on subject area basis, but also on the traffic. And then, as we built services that had the users identifying them to us in an identified way, i.e. they would give us their email addresses, their names, and maybe a little bit of information about them, you could both target based on the subject area, which was of higher value, from a revenue perspective, as well as to an individual perspective.

And wrap all that up together, then we started to say that our elevator pitch was to, ultimately, become the only place in the world that anyone would have to go to find and get connected to anything or anyone-- and later added to find, or transact, with anything or anyone to it. But that became our mantra. And then we started to build out these verticals.

Weber: And which were the first verticals.

Koogle: Golly, I don't remember. But I'm sure sports was early on. Finance, for sure, was. A personalized version of Yahoo was very early on. I suspect if we both looked back at it, we started launching our first personalized version, which then not only had people crafting their own view into all the aggregated content that would be highly relevant to them, but it also would give us a direct communication link to our users through the personalization avenue, had that additional strategic benefit to it. So I think My Yahoo was pretty early on.

Yahooligans was an experiment, through partnership, with folks that extended out through Nickelodeon and that sort of things, for kids. But I think, probably, finance, sports, and My Yahoo, if we look back on history, were some of the earliest properties.

Weber: They actually rolled out right after the IPO, right?

Koogle: Mm-hmm. Yeah.

Weber: And your first acquisition was 411, right?

Koogle: Yeah, it was.

Weber: And that's '97. I think so.

Koogle: Was it?

Weber: But, I mean, that's a big switching gears to actually providing email service. What was the thinking behind that?

Koogle: Yeah, well the find [?] didn't get connected to anything or anyone does include a direct communication path. So we thought about it a lot. And this area of web-based mail was very early and very new.

Weber: Hotmail.

Koogle: It was clear to us that, actually-- well, I'm tempted to take us down an expanded path. But I'll try to keep this as concise as possible. You know, web-based mail, if you look at in retrospect now, was one of those things that untethered someone from an application that had to reside on a given desktop.

So your access could be from any device. All it needed, really, was Internet access. Sound familiar? So all the stuff that we now called cloud-based, et cetera, where things are moving increasingly. That represented one of the very first visible moves, even though it wasn't thought of that way at the time. We didn't think about it that way at that time.

We were actually very worried, tactically, in a good way for competition, good for us way, for competition that was cementing itself deeper and deeper into physical access services. That seemed stupid to me.

And it was really clear that if we operated a web based communication link, that we would provide, that A, people communicate all the time. So it would actually further harden the frequency at which people would visit us, first off. It would identify them in a way that we would then have a direct relationship with them, a

named relationship with them. And we'd provide a really interesting and valuable service at really low cost to folks. So that's why we did it.

Weber: Because AOL depended on having a client on your machine, right? So there was--

Koogle: That's right.

Weber: And Hotmail was also independent.

Koogle: They might have been initially, but then Hotmail actually turned into web. There were a number of webmail startups that started to hit the horizon. And Microsoft acquired one of those, although Microsoft remained obsessed, I think, with emulating AOL a bit extensively, including the physical access service.

Weber: Well, they came out of the MSN, the online services model.

Koogle: Really burdensome.

Weber: But you were the first, broader side, certainly the first portal, to call it that, to add mail integrated with other kinds of information.

Koogle: Yeah, we were.

Weber: And tell me about the rocket, well, the 411 acquisition.

Koogle: One of the best ones we ever did.

Weber: What made you choose them?

Koogle: Good guys, local guys, seemed to be a really good technology platform. We tried as best as possible, whenever we looked into any of these acquisitions, to find things that were scalable, that had a code base that was consistent enough, at least, with our core architecture, so we would have the ability to extend it easily without operating, then, multiple code bases-- something the company migrated away from later, to its detriment.

But at that time, we were pinching pennies, trying to be really, really, really, I'll call it prudent, if not stingy, on stuff. And so we looked for code base consistency and architecture consistency. And we looked for really, really good people that seemed to be doing, for all the right reasons, the things I ticked off earlier with you about it. And that team seemed to tick all those boxes. And Geoff Ralston, and some of the core folks there, I think, with the exception of Larry, stayed with it for many years, many years.

Weber: And then it became Rocket Mail before Yahoo Mail, but within Yahoo. But the team that you acquired kept running that for a long time.

Koogle: Oh, yeah.

Weber: Yeah. And then Yoyodyne, was that your second acquisition?

Koogle: I don't remember. You're going to ask me a bunch of names here of all my acquisitions.

Weber: Well, in your recollection, what's the next big step?

Koogle: In acquisitions? Or big steps?

Weber: Acquisitions or vertical channels. How were you growing, let's say, in '97.

Koogle: Yeah, I'll say one big next step, which wasn't an acquisition-- it did include a partnership-- was doing international sites.

Weber: True. I did have that.

Koogle: It was a big deal for us.

Weber: And you started when?

Koogle: We identified that we were going to go do that very early in '96. And we started to identify, if not launch, these precursor sites, then, in early '96 and throughout '96. And this was another-- involved a discussion, a rather lengthy discussion, sort of. I mean, kind of like a week's worth of discussion. Not super lengthy, but not like five minutes either-- for all right reasons.

Because it's hard doing international when you're a little company, and you've got like 50 people, growing to maybe 100 people, or whatever, based in California. We had a pretty diverse employee base, but not that diverse.

And that's on the negative side of things. Those are the things that should give you pause, extending yourself too much in a place that's way outside driving range. And, for sure, facing different types of channels, sales channels, and distribution channels, and access partnerships, and all that sort of stuff. Certainly, language barriers, and culturalization barriers, and all that.

So if you just sort of stay there, you'd go jeez, you should never do that sort of thing. However, I'd kind of learned before, much earlier, that-- or at least, this is what I internalized. That if you're operating a company that you think there's a safe bet to assume that your product or service is very generalizable, internationally, that it behooves you, early in the company's life, to start actually doing things internationally. Because it'll build the DNA right inside the company.

And of course, it's going to come with hard stuff. But that all comes with being as prudent as possible, and hiring really good people, and doing that in as light a way, as leveraged a way as possible, et cetera, and looking for fruitful partnerships to enter certain markets where that was necessary, until you've got enough scale, and then maybe take back the partnership and go direct-- all those sort of tactical things I kind of knew before. But I thought very, very, very strongly that it was important to do international early. Because if we were going to build something of scale, it really needed to be global.

Weber: Sure. And what was your first international?

Koogle: Don't remember, again. Probably, it was France, Germany, or UK, or Canada. It might have, in fact, been Canada, which was easier. It's just north of us. And I think we did a partnership with Rogers for access promotion up there. Then we might have done in the larger economies on the continent. And then we did Yahoo Japan either in parallel with that or shortly after. And I know that we were already in discussions with Masayoshi-san of SoftBank before we took the company public because we did something really interesting with him there.

Weber: Talk about that.

Koogle: Well, you know, I'd spent a lot of time in an earlier life-- in two earlier lives, actually, in Japan-- enough to really have a huge appreciation for how difficult it is to penetrate that market if you're not Japanese. And the trading companies have pretty constricted channels of distribution, and promotion, and everything else there, et cetera-- a really long list of things that make it really difficult for you to penetrate those. But if you have something of huge value, and you find the right partner, then you could

come in through a partner into that. And that market is really good. It's really well developed, even in an advertising way. And it was at that time.

So there were a lot of things that were really attractive about it. And we really knew it was difficult. And all we really needed to do was find a really good partner. Masa is a really great entrepreneur. Lots has been written about him. You may know him. I know him really well.

He's a real entrepreneur. He's one of those folks that asks, why not, as opposed to why-- is one of his skills. He's really brave. He's willing to make bets. And he had actually evolved SoftBank pretty extensively, to where they had really strong, and very direct, ties into the advertising market there and wanted to begin a web presence by laying down investments and bets pretty broadly across the landscape. That was something he was moving aggressively into.

And so we talked with him about doing Yahoo Japan and splitting up the equity stake in it, having him be in control, so it was off balance sheet for us, for a long period. Having the option available, at least later on, to claw back, in either direction, more of the ownership stake, but to use his direct advertising feeds in to generate revenue there.

He would assemble a group of engineers through an investment that he would make there locally. They would be required to operate off of a common code base that we authored here in California. So we had leverage, operationally. And all these things, we decided how we would do it, how we'd go about it, at least initially, what the rules of the road were, and all that sort of thing. And then also, by the way, we're thinking about taking the company public. We've made the decision. We haven't decided bankers, or timing, but here's how it's shaking out.

And he expressed interest in investing a significant amount. And we did that. And it was, tactically, a really good move from the standpoint of how to set the IPO up because we'd timed his investment around a valuation that we negotiated with him that floored the value of the company in what I thought was a really prudent range. But it did.

And it gave those who were going to be public shareholders then a lot of confidence. And it worked out really well. It was really for the story, and it really good for the company. And it was less money that we had to raise publicly. So we wanted to--

Weber: So how big was his investment?

Koogle: I don't remember, but probably like \$200 million, or \$100 million, or something. Something significant enough.

Weber: And totally separate from what he did in the Yahoo Japan. So this was investing back in the parent-- yeah.

Koogle: Yeah. Yeah, yeah, yeah, so it was good. And Yahoo Japan has been a great success.

Weber: So that started shortly after the IPO, that they actually started doing it.

Koogle: Mm-hmm.

Weber: But you think Europe was in that same period?

Koogle: Probably.

Weber: And do you remember visiting the offices in that period?

Koogle: Absolutely.

Weber: What was it like?

Koogle: It was fun. They were like mini-Yahoo's. We'd kind of populated it with people who were crazy enough to come do this thing, and really bright, and really ambitious, and really focused, and it was really fun.

We always had a strategy, really, of building what you'd call international services-- Yahoo UK, Yahoo Germany, et cetera, in a long list of those-- with local talent. And sending out, occasionally, an expat who was deeply knowledgeable about something that we wanted to actually inject into it-- but do that sparingly.

Because we really knew that we needed not only to localize the service, from a language perspective-- otherwise, it wouldn't be very accessible, duh-- but also culturalize it. And you really can't do that without hiring local talents to guide it. And that's what we did. And so it was a lot of fun, actually, visiting those folks.

Weber: But it can be a difficult balance for companies between the home culture and the local one. Did those offices feel like they shared a Yahoo culture very distinctly? Or were they more a part of the country they were in?

Koogle: Both. At the time, for sure, it wasn't hard to detect the Yahoo culture. And pretty much around the world, in just about any place I was aware of, people were fascinated by that. It was irreverent, and lively, kind of cutting edge, I guess, would be a little pedestrian way of saying that.

And so people were excited to join, and people were excited to emulate as much of that as possible, because a lot of these really staid countries, it's was such a breath of fresh air-- California, tech company, big success, blah blah blah. If anything, they kind of didn't know how to do it, in a way. It was a little bit like teaching somebody to ride a bicycle, to some extent. [LAUGH]

But everybody was well meaning, and everybody was doing it all in the right way. And I have always been a big fan of having folks that are really good, and really full of ambition, that you find yourself occasionally pulling back selectively, as opposed to having to push. We had no push challenges. It was always kind of pull back.

On the operations side of things-- it was, and will always be, for every company that tries to operate around some unified core values, or unified core operating principles, internationally, adherence to those with customization applied for localization, and culturalization, and everything else-- there's always a yin yang, and a tension, if you will, between adhering to those core things that are given and having the authority and responsibility to extend them in ways that are consistent with the brand, consistent with the product, consistent, right? All those sorts of things. It just come with the territory.

Weber: Did you ever try to codify the Yahoo cultural values? Like slogans, or lists of key points?

Koogle: Probably. I don't remember a whole lot of that.

Weber: What's the most-- I mean, irreverence, you've said. What are the defining characteristics of Yahoo culture?

Koogle: Irreverence was a big part of it. Leading edge, though. I mean, the fun stuff, and then the serious stuff. The fun stuff was irreverence, and, cheeky, the Brits would say, et cetera. Humorous, right? Making fun of yourself while not losing your credibility-- were kind of, probably, a way of articulating that that people really clearly got.

There was a kind of a free spirited part, that bridged not only the way the brand was perceived, and the service was perceived, but also how the company was perceived in delivering things.

So, you know, bridging that whole thing between irreverence, and fun, and making fun of ourselves at our own expense, but never losing credibility because we always delivered. So having that reputation of delivering, also, at scale, was it. Yeah.

Weber: And in terms of perks for employees, I mean, you were pretty average for web companies, right?

Koogle: Yeah, Yeah.

Weber: Snacks, and that sort of thing.

Koogle: Yeah. Simple stuff.

Weber: Was Yahoo Messenger an important-- I know it was important, but tell me about that acquisition, and why did you choose to do that?

Koogle: We chose do that because what emerged, actually, in watching how people communicated via the web, which we did, obviously, we bought 411, operated a web-based mail. That got us into the business of actually providing a service that allowed people to communicate directly with each other-- what was always apparent to us was that the web itself, fundamentally, broke down barriers of both time and location.

And both are obvious, right? Especially now. Although it was interesting to me that I had to repeat that a number of times to folks who actually weren't intimately involved as users of the web, you know, wrote about it, and all this sort of stuff for a while. They kind of didn't get it. And then everybody got it. It was like, whoa, this is, like, huge. It's a global network, duh. And it breaks down those barriers. And breaking those barriers is hugely valuable, actually. You can use it to your advantage to disrupt and dislocate.

So to your question, on the time variable of that whole thing, it was really clear to us early on that the closer you could get to real-time, the more valuable it would be. And so messaging services were of huge value. And architecturally, and everything else, they were a little bit challenging. Still are, but far less now.

Weber: And why did you choose that group to acquire?

Koogle: Went through a process, again. And it was the best choice, an affordable one. By that time, things were getting bid up a lot. So I don't remember. But I bet you that was of a dimension that was being considered, too,

Weber: Yeah, by the late '90s, it was getting tough to recruit.

Koogle: Really bad, yeah.

Weber: And GeoCities was another big one in that period.

Koogle: It was, yeah.

Weber: And that added a huge amount of content, and the kind of user-generated stuff.

Koogle: It did.

Weber: I mean, that was a different dimension, the user-generated...

Koogle: Correct.

Weber: What was the thinking there?

Koogle: User-generated content was an emerging area. It was really important that the world of available content for any user, any person accessing anything through the web, would be populated, ultimately, by everything that's been formally published. And the extra dimension-- because people mess with that, creative people mess with that stuff.

And that's interesting. And that's a place where not only surprise, but discovery, would never disappear from it. And the only question would be in what form would it be generated. In what form could it be aggregated. In what form could it actually be made findable, and usable, and useful. All that stuff was completely green, white space. And in some ways, it was kind of an early precursor of what we call social now. But it was much more disorderly.

Weber: You didn't try to apply the existing directory categories to that kind of sprawling content? Did you consider that?

Koogle: Yeah, we did. Because we were discomfited by a lot of it from the perspective of how easy it would be-- it was clear that the early adopters, and the real zealots, and the real folks who were passionate about being published on GeoCities, and visiting, and creating neighborhoods, I think, was part of their vocabulary. And they would, then, assign their own thematic designations to these

neighborhoods-- sometimes, those correlated nicely and directly to actually what you would find on those areas. And sometimes not. So it was a bit of a free-for-all.

And we thought, you know, that's fun and entertaining for a while. But most people, most of the time-- increasingly, perhaps-- would value being able to come in and find something that resonated clearly with them more easily. It would be viewed as a barrier. What appeared initially as entertaining would appear, gradually, if not more than gradually, as a barrier. And so we wrestled with that whole thing and, I think, never did a really good job of figuring out how to do it. It was really such an early area, such an early stage.

Weber: It's a tough problem. And when you added keyword search when, roughly? And that must've been a tough decision, right?

Koogle: No, adding keyword search, actually, wasn't really hard.

Weber: No? OK. Tell me about that process.

Koogle: We always knew it would be important. I'm actually only thinking about when that might have been. You're discovering that my memory, actually-- or at least my association of time with various things is probably limited. [LAUGHS] I'm always being reminded of that by my friends. It seems like yesterday. It was months ago.

Weber: Don't worry, just say why it was important to you.

Koogle: So I'll think in parallel about that, specifically, when it might have occurred.

Weber: Well, that can be found out. But more important, what did it mean to you guys?

Koogle: Thank you for taking me off the hook on that. Why it would be important is it was always really clear to us that navigation would include both. You know, front of the book and back of the book is how we originally articulated it. But both would be good avenues.

And really, the back of the book kind of stuff, or the thing you would call keyword search, really had a deep technology challenge associated with it. And the way it manifested itself at the time was that the approach that many were taking was very capital intensive. And I only need to say AltaVista, if you've ever been a student of what AltaVista was, and how it was enabled at the time, to know that that was hugely capital intensive-- actually, to the extent that it worried me, from the standpoint of would there ever

be a breakthrough that would go around the capital intensity associated by that so that a model would actually be feasible, if not really attractive.

It was one of the things that led us to partnering, deeply, with those that were working hard on those innovations, and in an area, to see if, in fact, something would emerge. And staying free from it for a long period of time, while we brought the usefulness to our users of the function. And being free of that, if our partners had enough capital, and enough balance sheet, to continue to experiment with our having to invest in that had us then posting up search using those pages, those returned search result pages, to monetize and staying free of the capital intensity of it, while we let them discover stuff.

And we had Skunk Works stuff going all the time. And that's actually what led us to, ultimately, to also running an experiment through partnership with Google. Because David knew Larry [Page] and Sergey [Brin]. And Udi Manber was?

Koogle: Yeah.

Weber: But he was at Yahoo, initially, right?

Koogle: Probably, yeah.

Weber: Yeah. But wasn't he working on-- you were doing an internal?

Koogle: Yeah.

Weber: And Google was fairly late in your search journey.

Koogle: Totally.

Weber: Right. And I've talked to people at Google. I have some sense of it from the other side. I think you had a very tough negotiator, at that point, with them. One guy in particular that made an impression on them.

Koogle: Ah, OK.

Weber: I'm forgetting the name. I mean, at this point, how well was the surfing model, the directory model, scaling?

Koogle: Reasonably well.

Weber: How many people did you have doing it?

Koogle: Don't remember.

Weber: But lots.

Koogle: Lots.

Weber: And they were contractors, or they were--?

Koogle: No.

Weber: How were they employed?

Koogle: Well, I actually don't remember the ratio. I was aware of it because I would look at it on my reports. I'd turn my hat around and be the operating guy. I'd get all the reports and stuff, and I'd crawl down through them. And when I crawled down through them, I'd look at the ratios of the variable versus fixed costs in various groups at the company.

And that one always had a really high fixed cost. We always had a hard time actually allocating. We allocated revenue to pages, obviously, to see what was most popular, and what was really going. And I don't actually need to go into any more detail on that to you. I just don't remember what the ratios work of contractors to full times.

Weber: But you felt you could stay on top of that? It's not that it unscalable.

Koogle: Yeah, you know, because the economics of the overall business were so good, so rich. I think we probably-- I mean, you would know better than me, because I haven't gone actually gone back to look at any of my archived financials, income statements and the like. But we probably were nudging 20% net after tax with that business model and had lots of room to enhance it.

And so, at some level, it kind of didn't bother me that we made that kind of investment-- if, in fact, it was still useful to generating traffic, and use, and frequency, and all that sort of stuff. Cost of business.

Weber: When you did go seriously into the keyword search, why did you choose Google, then?

Koogle: So I still was running it when we made that first partnership with those guys. And we did it because of technology. And it was clear, even though it hadn't really been validated at real scale, it was clear that Larry and Sergey already had a distinctly different approach to indexing-- and, therefore, presentation of search results-- that would also potentially minimize, as much as possible, the capital intensity associated with it.

Weber: But you were seeing more on the end, because they also, famously, were using cheap hardware.

Koogle: Absolutely.

Weber: But were you looking at it more as saving money on the way they were indexing-- the fundamental way of doing it could save money?

Koogle: Absolutely. The way of indexing it actually played directly onto what kind of a platform you'd have, from a capital perspective. And within the capital thing, I will say something you didn't ask, but I found it darkly humorous at the time and have now, subsequently, only found it humorous.

Weber: [LAUGHS]

Koogle: We didn't use any Sun hardware, at all, ever. [LAUGH] And I don't think those guys did either. David had crafted an interesting architecture. And it had us, actually, distributing process. And distributing process, actually, if not on a page basis, actually, an embedded link basis, actually, if you wanted to push it that far. And so you could spread a pretty complex, and pretty hooked up, service across a bunch of different server hardware and actually have, by the nature of your spreading, have at least the apparent reliability be very, very high among consumers because the fail-- right? Because the apparent failures and everything else would be masked by the distribution.

And you could, in fact, if you did, which we did, then have a failover response that was hard-coded that would, for all intents and purposes, from an apparency standpoint, be self-healing. You get it. And you could spread that across white boxes to really generic hardware that had great processors in them, had great I/O, but weren't some branded thing running a proprietary operating system at all.

And the dark humor part of it was, I found myself going to lots of conferences, invited to give keynotes, and all that sort of stuff along with other companies. Scott McNealy would stand up. Meg would stand up from eBay. eBay was always a big Sun customer. And we thought we were running our business pretty

well, and everything else, and doing a great job at it. But Scott would always say really kind of negative things about us. And he would say really positive things about eBay. And I remember being, like, cluelessly confused about that.

And then somebody took me aside and said, dude, that's because you're buying nothing from him. [LAUGHS] And then we never did. So, for the record, that was, in retrospect, kind of funny. But it speaks to architecture. And I don't know, but I suspect that Larry and Sergey were also [using] similarly unbranded hardware, extensively, even then.

Weber: Oh yeah.

Koogle: It was of interest to us.

Weber: The cheapest. We have one in the exhibition here.

Koogle: Right.

Weber: But yeah, so you saw that as very much a compatible approach.

Koogle: Totally. Totally.

Weber: And then, eGroups, another big acquisition. Tell me about that and--

Koogle: Similar, but slightly different, from GeoCities. It's sort of experimenting, again, with people self-selecting sort of personally generated content and associated more directly to communications. And self aggregation is kind of probably one way of looking at that. Also, a very intriguing emerging potential trend. And we were running a pretty highly valued currency at the time, too. And so these acquisitions of \$20 to \$100 million, or whatever it was, and stuff, were so *de minimis*, it wasn't funny. And so we ran some experiments by making acquisitions.

Weber: Do you remember Scott Hassan of eGroups?

Koogle: Generally. Don't remember, specifically.

Weber: Team.

Shustek: I'm always interested in paths not taken. You were interested in user-generated content. And you were interested in curating content. Did it occur to you to do something like what eventually became Wikipedia?

Koogle: No. [LAUGH] Sort of, is the answer to that. Sort of is the answer to that. Did it occur to us to do a form of Wikipedia, since we were involved in curation, and aggregation, as well as personally-generated content, individually-generated content. No, it didn't. By that time, it felt a bit passé for us to be doing that, to tell you the truth.

Weber: Directory?

Koogle: Yeah.

Weber: But the Open Directory Project, which was more people doing their own curation, for want of a better word, that was getting big, and, actually, was one of the inspirations for Wikipedia. But that was a very different approach than Yahoo was taking.

Koogle: Right.

Weber: Did you consider that kind of user-generated input for the categorization?

Koogle: We didn't. We didn't.

Weber: Why?

Koogle: By that time, we were scaling well beyond the value of the directory. The directory stayed for a long, long time, I think, apparent to consumers. Its value remained apparent. But then its value for our users, for those who came to our brand for what we did it, began to recede. I know people started to self select into the identified properties, both on an international basis, as well as a subject area basis. And their comfort and confidence in the quality of content that resided, in general, on the web had risen to such a level that they started to actually feel comfortable with entering keyword search as a way into navigation-- more than through the directory. Seemed to us.

Weber: Even though the reliability had not actually gone up, necessarily.

Koogle: Correct.

Weber: That's interesting.

Koogle: People were still willing to shoulder that part.

Weber: But had become more experienced consumers of that kind of information.

Koogle: Right.

Weber: And you did surveys, and--

Koogle: Right. We did.

Weber: Were there big differences in international markets between the kinds of properties people were most attracted to. What were some of the ones that stood out? Things that were huge in one market and not in another?

Koogle: Wow, good question. There's a lot more commonality than you might know. In general, among higher-level thematic interest areas-- finance is pretty internationally important. And it depends, really, on how vibrant the stock market is in any one place, and whether individuals and consumers are partakers in those kind of liquid markets-- which raises the value and the interest of those.

But in the developed parts of the world, the developed countries, they all have stock exchange locally. There's always the huge buzz, and the business news, and all that sort of stuff. And so finance is one of those that was pretty universally appealing in all the top revenue-generating places that we operated our services. Same with sports, only the names of the types of sports changed. Football takes on a different meaning in certain places than it does here, as an example. But you get you get the drift.

Weber: And advertising models were similar?

Koogle: Yeah.

Weber: Even in Japan, where the SoftBank model was somewhat different, right?

Koogle: From a channels perspective, that's right. That's right. The channels were really controlled and really narrow, as opposed to other markets, where there's more of a free proliferation of agencies and direct client relationships that had pretty much settled in and were evolved.

But I will say, and I'm sure this is absolutely true today, still, it was one of the values that we brought, and folks who still do advertising in whatever form on the internet, bring as value-- is that everyone on the client side, those who actually paid the money for the advertising done, I was one of those for a long time, they will all instantly recognize the following statement, which is I'm sure that at least half of my money is getting wasted in many advertising forms. I just don't know which half. They all say that. [LAUGHS]

And the Internet, the value it brings, which is so universal, is that it's measurable. And it's also targetable. And it's only a question of how you go at optimizing both of those two things. Yeah. And the rest is just pricing. And that's of huge value. And that's never stopped being true. And it was true at the time, everywhere we were globally.

Weber: But you were charging based on impressions, or clickthrough?

Koogle: We were.

Weber: Yeah.

Koogle: We did experiments with clickthrough with performance-based pricing. But it really wasn't until the search-based advertising started to emerge that it became the lead attribute performance base.

Weber: And that really lets you track it to the end. So tell me about the peak and the crash.

Koogle: [LAUGH] Well, the peak was the peak. And it was a crazy, crazy time and very disorganized. And it felt, to me, unsustainable, for sure. I mean, you know. And you can point at lots of metrics that, especially in retrospect, even though people were still saying, you know, it's different this time around. There were still people standing up saying it's not really a bubble. That this is a different model. Different things matter, et cetera.

Those of us that had lots of gray hair, even then, and wrinkles from operating real businesses over a long period of time would tell you, you know, when you start to get beyond certain ratios, it probably isn't sustainable. The value that people are attributing to companies, even at, quote, "high growth rates," doesn't pencil out. Isn't sustainable.

So that's kind of the peak. And the crash came on pretty quickly because it was pretty-- you know, I've thought about this a lot in retrospect, in the way that it kind of informs all of us who think about markets, and marketability, and company growth, and all that sort of stuff, different environments in which you operate.

This was, at the time, for us-- because we were living in an Internet company, in an Internet world, where we were competing, and taking our share, and everything else-- it seemed like the entire world was imploding... stock values took a huge hit initially. And then, for quite a while, there was a washout and everything else where valuation collapsed among a whole lot of companies, ours included.

Weber: Yeah, you went down to \$8 or something.

Koogle: Don't remember the absolute value. But it was a lot. And that value collapse, actually, was even pretty far outside of strictly Internet-based companies. It was a tech collapse. So that was interesting and difficult. But it was just a cycle, in retrospect. It's a cycle. And I took stock, then and now, actually, of the number of cycles that I've been through and seen. Because I've been doing tech, basically, my whole life and have been in publicly-held companies quite a bit of that time, literally, from an operating perspective. And these cycles happen.

There's a beginning, and a middle, and an end. And when you're in the beginning of it, you're kind of unsure about whether it's actually a downturn or not, or whether it's just a little blip. When you're in the middle of it, it feels horrible, and you feel in your bones that it will never end. But it always does. And you come out of it and stuff [LAUGHS] And the most astute companies are the ones that see it for what it is and are very careful about building their balance sheet so that they maintain enough ability to get through it. And the best companies do that and also know to invest during a downturn in the things that will allow them to take share coming out of the downturn, when their competitors aren't investing in those things.

And I can sit here, and I will, and say, we had all those things because we'd built a very profitable company, and a really, really strong balance sheet. We had no debt and probably \$1.5 billion in our balance sheet when the downturn hit. We had no risk of going out of business. None. And at the same time, when the sky is falling, and everybody is yacking about stuff, and the cacophony of everyone saying, it was horrible, it's the death of everything we know, and all that sort of stuff.

It is really hard to operate in that kind of environment. Because you are re-assuring your employees that it's fine. And your partners are falling to pieces, in some cases. And all of those variables get introduced during the downturn that are interesting to navigate through, really interesting. And I'd seen it before and stuff, but it doesn't really discount, and I won't discount, actually, the interesting challenges it presents. We viewed opportunity in the downturn because it washed away and burned away a lot of the stuff that was just stuff that needed to, probably, be burned away. I felt terrible because I watched some companies that were probably really great businesses that just hadn't had enough time to get to enough scale to sustain through it get burned away also. But that's what happens. That's what happens during those cycles. So it burns away a whole lot of stuff. And, in the end, our company did well because it was the beneficiary-- I knew this, actually, when it started to turn down-- that we would be the beneficiary of consolidation, quite frankly.

Advertising spending, by the way, is one of those things that's really hard during downturns because economic downturns-- and this was a stock market that leaked out into the overall economy, as they all do. During economic downturns, advertising spending is typically the leading indicator. It's both leading and lagging indicators depending on what part of the cycle you're talking about, and stuff like that. But advertising spending does pull back because operating executives pull in the reins on everything that they feel is a variable expense, that they can afford to do without for a while.

And then it grows again. And when the places that had been asking for that revenue before kind of disappear *en masse*, then those that are left standing are the beneficiaries of that-- to kind of describe, in an obvious way, what consolidation does for you. Similarly, user traffic never went away during the downturn, interestingly.

Weber: But advertising revenue dropped how much?

Koogle: Absolutely.

Weber: But I mean, half, or less?

Koogle: Globally?

Weber: Yours.

Koogle: No, not half. But I bet probably 40%.

Weber: A lot.

Koogle: A lot?

Weber: Yeah.

Koogle: And that's really easy to see now, in retrospect, too, because we were at a point in evolution of the company, and of the industry, if you want to call it that, where the early adopters were principally early stage companies. They were ones that were born of the web. And there were some really early adopters they were operating companies whose mainline businesses weren't the internet but who got it, and started to build websites, and promotional, and using all the communication, and the direct advertising that was available--

Shustek: Oh, sorry.

Koogle: But we were at a point in the evolution where not enough companies of scale had actually bought into the advertising model for this. And so when the downturn started to burn away a lot of the early adopters, or challenge them, or burn away their investors-- didn't matter-- it had a direct, and large, hit on advertising spending in general on the web, directly.

In later years, when it had evolved beyond all those early adopters into more of the rank and file, really large scale companies who adopted it, saw benefit in it, saw great returns in it, et cetera, et cetera, then I think in general economic downturns pretty much mimic, on a pure percentage basis, how much advertising comes down. But this was more acute, for sure.

Weber: And Google, at the time that you made the deal with them, had-- they were in a very good position because they had lots of venture capital during the downturn. Unlike most other search engines, they were not on a downward spiral. They were stable. Was that a big factor?

Koogle: Yeah, for search, for that function, the partnership was stable.

Weber: Because most of the others, I mean, Ask, AltaVista, they were all in terrible states at that point, right?

Koogle: Yeah. AltaVista was still tied to DEC, I think. I'm not sure they were fully spun out yet. It kind of doesn't matter. But I think it does matter, actually, because DEC was challenged for more than just the downturn in the end. But Google was early stage, low head count, and nicely venture backed. Sequoia and KP.

Weber: So that was a big factor, I would think--

Koogle: Yeah, it was stable.

Weber: And, obviously, with Yahoo News, and Finance, I mean, you were a media company, or are a media company, to a large extent, Yahoo is. Did you think of going more in that direction to really seize that as a thrust?

Koogle: We did.

Weber: So what happened. Why did you choose the sort of moderated approach there?

Koogle: Well, there's two questions, I think, in your question. I think. But reel me in if I've got it wrong. What we had already been doing was enabling transactions also on our platform. We did it through advertising, and clickthrough, and all that sort of stuff, which is really easy to get.

But also, we did direct promotional, and cross-linking, if you will, to commerce sites, and eBay, and Amazon, and many others. We provided our version of the resident buttons that Netscape used to tax us for, when we first got promotion on Netscape for traffic with commerce providers. And so we were in the transaction stream.

And back to the one of the earlier questions about content versus transaction model, subscription, et cetera, et cetera, we correctly continued the dialogue about should we do more of this? How does it affect our brand? How does it affect our core DNA and our core competency by doing all those? We had, correctly, I think the ongoing and perennial discussions about all that sort of stuff and bumped up against that, to your question now about content.

Inside the company, whenever we had these discussions about commerce, and transactions, and whether we should dial that up or not, it was also against the backdrop of, are we more of a content business, or are we more of a commerce business? Can both reside in the same brand, and will we have license, by the consumers, in brand lingo, to do those? And it was always a perennial discussion.

On the content side of things, for as long as I was there, we occasionally talked, but only ever very occasionally, about original content ownership. It seemed to me, personally, to be risky, but perhaps not in the most obvious ways. It carries with it higher cost. And back to the question about scalability, that was always in our vocabulary. But more than that, it kind of got back to the original premise. And one premise that I didn't articulate, you didn't ask about, and I didn't articulate earlier on-- we did talk about AOL and Microsoft, the temptation to mimic them, a lot of what AOL was.

And, by the way, I remember a conversation I had with Steve Ballmer one night that I will maybe describe at the end of this. I won't lose my stream-- it was both the most interesting conversation the most frightening conversation I've ever had in my life at that point-- [LAUGH] about AOL, about Microsoft, and MSN, and about us.

But we looked really hard at AOL and publicly didn't say what we had concluded, I think, ever. But what we'd concluded was this-- that the Internet, by its nature, is open. And you can either choose-- and we saw traditional media companies choosing a path of control, both access companies and media companies, or content companies, choosing the path of control because it was a model that they understood. And by that, meaning, to kind of crack that code for you-- extracting value, as a traditional

media company, in one way or another, either more or less, is derived often from the control and the control of access to those things that you have. You pay a toll, right? If you're in the access business, you own a pipe, the value that you are able to extract comes from the fact that you are a traffic cop. People can't get the stuff unless they pay you a subscription fee for it. And then they only get the stuff that you choose to give them.

And so it's like interjecting a market inefficiency, if you will. And you get paid for that. And it's really interesting, at a really deep level, from a DNA perspective. It's kind of built into the bones of those companies where control is the thing that first comes to their mind in a lot of this. They may not admit it, even to themselves, certainly publicly, but that is a fact.

And that's a different ethos than embracing the openness of the web. You can either try to control it, or you can embrace the openness of it. And if you embrace the openness of it, it doesn't really take you down a path of saying, one of the first, or second, or third things I might think of is having our own content that we generate and own. It doesn't. Because one thing you can be sure of is that the content base out there that's available to users is going to change forever. And it's going to change in large amounts forever. And it's not really clear, A, that it's even practical to choose the right places to generate original content and own it.

Weber: But then, for instance, you bought GeoCities and eGroups, both of which are buying user-generated content.

Koogle: Correct.

Weber: I do understand the distinction that's different than buying *The New York Times*. But in both cases, you're buying content, to an extent, because you're buying that user community. So why did you do the user-generated, and not the more traditionally-generated?

Koogle: Great question. And you know, what we told ourselves was, and I still believe this, actually-- if you think about those, the user-generated content, what we were buying was a platform on which the users were free, and would continue to be free, to generate content that was relevant, and got consumed, and they would be driven like we would, actually, and anybody would be driven. But it would basically be a platform, not a proprietary platform that you'd generate content against that was proprietary in its nature, that you controlled the access to because people would have come through your pages, et cetera, et cetera.

It is a fine line, granted. But that's how we thought about it. The user-generated content was an emerging area. And what we were actually buying our way into was creating a platform that was open.

Weber: You saw yourself as buying the infrastructure, not the content itself.

Koogle: Yeah, yeah. Yeah, they owned their content.

Weber: So tell me about how you came to leave Yahoo?

Koogle: Tough decision. Tough decision. I had been thinking about it for a while. And a while probably was a year or less.

Weber: And thinking about it why?

Koogle: Well, I was thinking about it for the following reasons. It's heavily personal. But it was partly strategic, or what I thought was strategic. The personal part was, first-- I'll start with the strategic/tactical part first. When the peak started to occur, and when the downturn started happening, and we were in that, it was clear that that was something that I'd experienced before. And that period is what I described earlier. It's both a challenge and an opportunity. It's an opportunity from the standpoint of, when demand is really low, but your balance sheet is really strong, you can make investments when others aren't. And you can go at changing, or building, or fixing things that you'd convinced yourself, when the growth was only up and really steep, that you didn't have time to do.

So there are opportunities. I've always thought in those terms, and I still do. And I did at that time. And I'll tell you that, personally, I thought this might be a time to go after some things that were either constipating us, from a growth perspective, would be barriers, or were slightly broken, needed to be changed, priorities would need to be changed, and all that sort of stuff. We can go after all that stuff. A lot of that always does come down to people. It comes down to organizations, structure, and people, and all that sort of stuff.

But I thought it was an opportunity. And I thought it might be of value to bring in another person. And at that time, I hadn't articulated whether it would be somebody who would report to me, whether I would move up to a chair role, and backfill myself with a successor who was fresh, who had a fire in their gut, and could go after those things.

And we'd use the downturn because those things are always disorderly by their nature, too. And so when demand is really low. But you have a really strong balance sheet. You have the ability to do that stuff and get it either right, or partly right, and fix it, or whatever. So that was an overarching thing that was going through my mind a lot. And I'd been doing what I'd been doing for 25 years or something like that. A long time. So I was thinking about evolving.

On the personal side of the things, I'd been thinking for awhile, but not really letting myself think too much, about how I was living, and how I was working. And how I was living and working was the way I always did, which was 150% consumed by the thing I was doing at any one time. And I would occasionally change jobs and go take on another challenge. I had at Yahoo, and I'd done before, several times, and everything else. I always did 150% and didn't have any other dimensions to my life, pretty much. Always did things I was passionate about. Always tried to do that with people I really liked a lot, really admired, in areas that were really fun and exciting. And my work was my life kind of thing.

I did have friends successively tell me, at times, that that was kind of a stupid way to live your entire life. In fact, it might even be risky to do that too much. The recruiter who came to get me and talk me into this really fun, and really crazy gig at Yahoo dropped over dead one day from a heart attack. It was just kind of a-- about being, which I wasn't, I just thought, that was an interesting thing. He was one year older than me. We both lived-- we were type A+++ people, both of us. And I started asking myself, is this-- A, you don't have to do this. You can work differently. And you can add other dimensions to your life. And without getting all Kumbaya with you and stuff, I was having that conversation with myself as to whether or not I should choose to work differently and choose to live differently. And I started to feel, very clearly, that a path would be to spread myself around a little bit for the next chapter. And we can come back to that, if you will.

But that's the choice I made, the decision I made, to hire a successor, to pass the baton, to do that. And I have a suspicion, but I know that I'll never know whether or not that was the right thing to do. It was the right thing to do for me because we haven't talked at all about the life I have lived since and am living now. It's a good one. It was a really good thing. It may have, in fact, saved me. My wife feels that, strongly. But I don't think it was right for the company, in retrospect.

Weber: And you became the chairman of that?

Koogle: Yeah, I became the chairman. I became the vice chairman. And then I exited the board.

Weber: When did you finally leave the board?

Koogle: I think I spent another two years in that role, in those roles, and then left.

Weber: And do you want to tell me Steve Ballmer story before or after you fill in what you've done since leaving Yahoo.

Koogle: I'll tell the Ballmer story. It's short. I met with him. And I met with Bill. And sometimes we met with the two of them there and some of their key lieutenants. But we had a number of meetings with them over

time because it's the right thing to do. If you're competitors, but you're also potentially collaborators, you do that. And we did. I've have always been a big believer in that.

So, you know, with that as a framework, I would occasionally meet with these folks. And I remember sitting with Steve one evening when I was clear that I was anxious about their ability to kill us if they chose to. [LAUGHS]

And I said something like that. We're always looking for ways to partner with you, but we're always feeling really anxious about it. And it holds us back, actually, sometimes, from having deeper discussions because we'd feel at risk.

And he said, you know-- I expected him to either say, yes, that's justified, or, no, you don't have anything to worry about. But he said it in a different sort of way.

He said, no. We're not actually intentionally trying to hurt you. We are trying to hurt AOL. The only thing is-- we may have to go through you to get to them. [LAUGH] And at point, I went, oh jeez. It did not make me feel better.

Weber: That's brutal.

Koogle: [LAUGH]

Weber: Kiss the ring.

Koogle: I know, huh?

Weber: It's a real mafia kind of--

Koogle: So that's the story.

Shustek: Back to your statement that you thought your departure from Yahoo was good for you, but perhaps not for the company, could you have chosen a successor that would have made that different?

Koogle: Yeah. Yeah. I think we could have.

Weber: So it was not a structural problem. It was a problem of people--

Koogle: Successor.

Weber: The right talents.

Koogle: That's correct. That's my personal opinion. Yeah.

Weber: But, obviously--

Koogle: Wrong choice.

Weber: You felt good about the successor when you made the choice. It's hard.

Koogle: I felt OK. In aggregate, we felt-- and I was there for it, so I share responsibility for that choice. But enough time has passed now, I can just say it, and I will not belabor this, because it's unnecessary. But I felt pretty quickly after we made that choice that it was the wrong choice for a number of fundamental reasons. Technology acumen chief among them because without being-- all of us engineers that turn into operating executives are somewhat biased about our background and the skills we think it's brought us. And I think that's justified. And I think it's legitimate.

If you run a technology business, I really think that there are few people who are deeply trained in technology, who actually practice engineering, who then turn into general managers and, ultimately, CEOs. You know, it's oftentimes the case that the breadth that's required, and the ability to be strategic on top of tactical is not something that comes along every day.

But I think it's where you can find talent that's deeply technology astute, who also has the ability to be a great general manager and CEO, and make strategic calls to operate a business, that combination is uniquely valuable in technology businesses, and technology-enabled businesses. It absolutely is. It's my opinion.

Weber: If you want to say anything off the record, feel free.

Koogle: No, I think we'll leave it go at that. Thank you.

Weber: So then what was your next step?

Koogle: So I met my wife before I made that decision. So she accompanied me through that. And then we got married. And she is absolutely my life partner. Len, who is here in the room with us, knows her really well. She is a very special person. And I feel lucky to have met her. And we are married and are deeply in love. You didn't ask that, but I feel it really strongly. It's relevant because she became she has become my partner in a whole bunch of different ways. We do things together from a business formation standpoint. We co-direct our Family Foundation. And she has given me both a platform on which to change the way I work-- is a good way of saying that. It's really strictly true. --And a reason. Those dimensions to my life that kind of start there but are way beyond that now, I started to put in place.

And initially, I kind of articulated it that I was going to go spread myself around a little bit instead of being consumed by one thing. And I was going to add some dimensions to my life, but that was going to be an outgrowth of diversifying what I did.

I love working. I love building things. I love for profit. I love early stage. And I'd also been deeply interested in giving back at some point by freeing up some bandwidth and then being intentional about it. So I put all that stuff kind of on the plate and have been, ever since I started to change how I work from that period on until now, I've been pretty intentional about constructing a life that did those things.

Weber: And what are the main components of that?

Koogle: So I still do early stage stuff. I love it. I absolutely do. I'm directly involved with the things that we directly invest. We have capital and money that's managed passively by others in that indirect kind of way. But we make investments, sometimes with venture collaborators, because we do both from seed, probably, through Series C, sometimes. I typically don't chase out any further than that because I really do love the formation stage, and the emerging stage of these sorts of things. I really do.

So we make direct investments there. I typically go on the board. Sometimes I'm chairman of these companies. I'll grudgingly take an interim operating role in them because I've been trying to stick to spreading myself around as opposed to doing what I always did.

And that's really fun and really fulfilling. We've had some success in that arena. I had started a foundation, also, that's, in a brain-dead way, called the Koogle foundation. Not a fancy brand. And my wife and I co-direct it.

We have fiduciary partners that then manage all the boring stuff of keeping the tax people happy and all that sort of stuff, and the vetting, if you will, of grants, requests that come our way, and all that junk. But we're quite directly active with it and have laid down a bunch of investments in the nonprofit space-- all aim at education of at-risk youth.

And she and I divvy up the things that we want to go deeper in with our involvement with founders and leadership at the non-profits. And we occasionally go on the boards of these things. We try to not do much of that and stay light so that we can actually migrate, and evolve, and merge, and everything else.

But I've done a couple of those. I'm co-chair right now of a pretty substantial nonprofit and an adviser to founders for three or four others of those out of our portfolio of things. And Pam is similarly engaged.

Weber: And all education, same sector?

Koogle: Yeah. You didn't ask, but that's an outgrowth of what I feel I was given early in life. I feel like I was given a real break. Somebody somewhere paid for that scholarship that I got to go to graduate school. And it funded my entire graduate education.

And, even at that time, I thought, you know, if I ever get lucky, and work hard enough, get a few breaks, and make enough capital to be able to be in a position that I can give back, I would. And I'd go help great young, bright people who also just happen to be really poor have a break, too. That was our elevator pitch.

And that's kind of what we've been doing. And we've been learning, like all do. As you form a foundation, you start to deploy funds, you get close to the work, and you find what things scale, and what things don't, you know, a lot of business sensibilities actually apply directly to this, in this space, if you actually want to do it that way. And so I've been doing those things really actively. I've also been able to free up enough time to be able to build great cars and get back into that more directly involved.

Weber: Oh, actually, personally building them.

Koogle: Yeah. And also, I've got a network of motor builders, engine builders, and suspension setup guys, and racers, and all kinds of stuff here. So I kind of play hooky. I use that hobby, if you will, avocation, for entertainment.

Weber: Anything else do you feel we didn't cover, that you'd like to add?

Shustek: Oh, there were a couple of loose ends. You mentioned earlier on about real versus fake founders of companies. What's the difference and can you give us some examples of the latter?

Koogle: Of fake ones? I won't name names here. I could go off the record. I don't know that that's of value to people reading this.

But I will talk about what I mean when I say real versus fake founders. You already heard me talk about Jerry and David and others who have those attributes of doing it for the right reason. And the right reasons, in my opinion, are a deep dedication to having a big impact, truly, in an area that they think is important. Generally said, that's where they come at it from. And they have true and deep dedication to that. They won't quit, and they will go at it. When things get tough, they hang in. When things get good, it doesn't mess them up. I, fortunately, don't often say this. But I have said it over time, that you don't know how somebody's going to be with money until they've got it. And then you find out. And relevant to this question, it is a dimension.

The somewhat to very fake people leave when they get a whole lot of money, even though they've said, you know, they're fully dedicated to this thing, and to the people who come along and dedicate their lives to it and everything else, they do. It's that friable for them. And I won't denigrate that extensively because everybody's driven by having a level of security. And they should want to do that, and aspire to it, all that sort of stuff.

But the fake part means not deeply dedicated to something, really. Not being able to stand up on the wall, and when others have joined, and have become loyal to it, that they're also conversely loyal to not only their team, but their customer base, and their partners, and everything else. So kind of a loyalty, and a time-based thing there that's about that.

And the other parts are the things I ticked off before. I think real founders do recognize, in the context of that, that it's for the long haul. That there's a dedication over the long haul that's required. It necessarily means you're going to have to build a structure that's sustainable. And building a structure that's sustainable means hiring people who are better at things than they are, passing authority to them, being able to recognize both their love and their passion, their limitations, recognize that and be fine with that and to do that over long haul also. I think those are dimensions to real founders versus fake founders.

Shustek: You're a CEO with a technology background. You never went to business school, but it sounds like you got the equivalent of an MBA by working for Motorola when they, unbeknownst to you, were grooming you for the CEO job. What kind of things did you learn?

Koogle: Well that's a great question. You know, I think I started to learn things that one should learn as an MBA student before Motorola, to tell you the truth. And I joke about this sometimes with folks, especially folks that are bootstrapping their own new ventures, which I always highly admire.

And the thing I'll say, partly in jest, but partly not, is that you kind of learn business by making payroll. You learn all the really important stuff by making payroll. And you do. And so I learned that. And I learned, also, the importance of hiring other great talent, of getting clear what you're going to go do, and then, literally, passing authority to others that you build a team around, really early, too, before Motorola. And I

can remember the specific night that I learned that lesson. And maybe I'll say that now, what that was. So I was operating this company. And I would go out during the day. And I would get business. And then I'd come back, and I'd work with our engineers, and our designers, and I would design stuff with them.

And we built, increasingly, a design team. And it was very capable. And we built a sales force. And that was very capable, and everything else. And I would sit up late at night designing some stuff, and vetting things with folks, and then I would do our books, myself, et cetera.

You can picture it really easily, I'm sure. And somewhere around 2:00 or 3:00 in the morning one night, after having done that for seven days a week for many months, whether I went to sleep or passed out still remains to be known. But all I remember is my office manager, the next day, when the sunlight was coming in the windows, shaking me and trying to get me back into consciousness.

And when I woke up with a start, and I looked at her, she was just standing there, looking at me really intensely, asking-- she said, so, did we learn a lesson last night? I'll never forget that. [LAUGH] And we talked about it a little bit. But it was really all about extensibility, and authority passing, and leverage, and all that sort of stuff, you know, team building, and actually letting go. And that got substantiated a little bit later on with Motorola.

Motorola taught me a whole bunch of different lessons. It's almost too long a list to articulate. But you know, it has to do with actually looking out over the horizon at the time, looking out over the horizon, kind of thinking strategically about stuff, knowing when to do that, when to drill down, when to back away, and drill out, and look at things in a larger perspective from a trend perspective, overlaying that on the things that you're doing right now, saying there are emerging trends that are either opportunities or challenges to us.

Watching Bob Galvin do that, who I have, to this day, such huge respect for, doing that, visibly, and doing that visibly, with his operating leadership team, not only in the office of the CEO, but, literally, the operating executives who would come and sit at the table with Bob-- going through that and building that muscle memory among his team also. Doing it, and then building it as a way of building talent-- -- will always stick with me.

All of the things about figuring out how to be sustainably profitable will stick with me. The thing that I think I've always found hard, and I betcha, if we asked any CEO on the planet, and caught them in a moment when they could be honest about it, vulnerable, a little bit, and honest about it, would say that they also have found challenging, which is making tough calls on people and making those calls sooner rather than later. --I saw there. They were a little bit more kind than some other companies. But I did see the discipline there, and I did see the value in it. Making calls not only for when you need to change somebody out, but also when you need to introduce new talent in. And trying, at least aiming for, doing

that before you really need to-- was always the goal. And that was one of things they taught us. in the mantra of the long list of things to be a scalable, fully-functioning CEO and general manager. The appreciation of international, I saw there. So I warned you, it's a long list of things. But that's some portion of it.

Shustek: What would your advice be to a bright 18-year-old who wants to change the world? What should he study, he or she, study, and what are the fields that are most interesting?

Koogle: Great question, again. I think that something my dad told me when I was 15 I've stuck to, and I would probably advise any young talent about. I've already mentioned passion and what I think, strongly, is the role that passion should play in someone's selection of what they do and how they do it.

My dad told me, really late one night, when I was asking him how to go figure it, when my brother was so not figuring it out, and was three years older than me, and graduating from high school, how I should be thinking about making choices when I left home, which was in three years from that. Because I didn't really want to be as clueless about it as my brother seemed to be at the time. It seemed to be distressing him, and I, frankly, didn't want to be distressed in the same way I thought he was. I mean, literally. I mean, candidly, that's the framework in which we were there. And I was in my Dad's shop. And I was passing him wrenches. And he was doing work. And he looked up at me and laid his wrench down. And he said, great question. Try to figure out what you're passionate about. Make prudent choices, this is literally what he said. Make prudent choices because you'll have to eat and stay dry. But do that thing. And if you do that, you'll find that you're good at it. And if you're good at it, all the other stuff will happen, money and everything else.

And then he picked up his wrench. And then he put it back down. And he looked at me in the eye. And it's so burned in my brain, I almost apologize for this. But it's quite vivid in my recollection. He laid his wrench back down, looked me in the eye then, and said, one more thing. He said promise me this. That you'll never turn it around, ever, and start with the money part as a way to work your way back to what you should be doing, ever. Because you'll probably mess up. And he said it that way, in that order. And, for me, it stopped me in my tracks. And it seemed really true, and I've tried to live that way.

And I am always urging young people who are kind of starting out on a path to remember that, and to recite that. I think it's really not self-serving at all. And I think it's really, really valuable. And I think the hardest thing is to find out what that passion is, and where to focus, and everything else. But if you know that that's really important, and you set about trying to run some experiments, put yourself in front of a whole range of things that will give you exposure to them, so you can test whether or not you feel passionate about them, and then make your choices based that way, I think that's invaluable kind of stuff.

Beyond that, I'm always urging people. And this is somewhat self-serving, because I think this is really important for our planet. I think, in the long term, if more people rather than less choose to go after solving the world's most pressing problems, especially for those that are less enabled than we are, less gifted than we are, that you can't help but do good things both for your career and for the planet. And I think that long term vision is something I'm always encouraging people around these days.

Weber: How did your folks feel about the direction your career took?

Koogle: They felt good. They felt good. I scared my mother to death, when I-- I think I mentioned that in passing much earlier in our conversation today-- when, coming out of undergraduate school, I didn't really have any interest in the kind of companies that were presenting themselves to us in undergraduate, trying to recruit us.

There were power companies, and defense related things, and IBM, which was very dogmatic. And they just were of no interest. And I called her up and said, this is not of interest. And I'm not quite sure what the next step is going to be, but I'm broke anyway. And so I'm just going to keep being a tractor mechanic for a while.

And I remember her going, you know what, I mean, you just graduated first in your class. You're really good at engineering. I'm scared because you might end up being a tractor mechanic your whole life? Are you kidding me? So she was genuinely, I think, frightened by that. And fortunately, it didn't last. But they liked it. And loved it when I started businesses and stuff. And I got asked a little earlier today, but it was off-mic was off Mike, if they both lived long enough to-- they're both gone. And if they both lived long enough to see some of the beginnings of what we could liberally call success. And I they did, at the beginning of that. I wish they both were alive.

Weber: Well, thank you, really. Wonderful interview.

Koogle: You bet. My pleasure.

END OF INTERVIEW