



Oral History of John Shoemaker

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Recorded: November 30, 2015
Mountain View, California

CHM Reference number: X7689.2016

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Kapoor: Hello John, my name is Uday Kapoor, as you know. I have known you for all these years. In fact, you hired me at Sun. So welcome to the oral history interview.

Shoemaker: Thank you.

Kapoor: Your full name is John Charles Shoemaker. You were born October 11, 1942 in Rochester, New York. So we'd like to start with your early life. Did you grow up in Rochester?

Shoemaker: I did. My family moved up to Rochester, New York from NYC I'm half Dutch, half German. My family on the Dutch side moved up to Rochester in around 1800. They had actually been in New Amsterdam before it was New York and the southern tip of.. where Wall Street is now and Battery Park and actually up until the mid 1940s-50s, they had legal claim to part of that area of Manhattan but were never successful. As you could imagine there were deep pockets on the other side but.. then in 1800 my family arrived in Rochester which was actually considered the first frontier town, believe it or not and I've been there ever since. So I'm really the first person to leave Rochester. My father was one of ten children and my mother also was a member of a large family and they were German, spoke German in their home. My grandmother lived with us so I grew up on German cooking and had a normal childhood.. went through public schools. I graduated.. I lived in a town called Brighton, which was a suburb of Rochester and I graduated from Brighton High School. I played a lot of sports in high school. I guess an interesting early life thing would be that I spent a lot of time on athletics and probably less time studying than I should have and my senior year in high school against my basketball coach's wishes, I went snow ski racing up in Vermont trying out for the preliminaries to get to the Olympic trials and in a middle of a race I broke both my legs. I spiraled one ankle very badly. Because of that, I lost the basketball scholarship to college and I was going to Bucknell and couldn't go because I had to.. I was in bed for six months with my legs up in the air. I had to drop all my science lab courses and so forth and they said, "You can come in a year but you need to go someplace else for a year and make up all this stuff." So the principal at my high school knew the president of a college called Hanover College and said.. this was literally the summer, a month before school was going start and he said, "Could you take him for a year. If he recovers, he'll be a good athlete. If not, you know, he'll leave in a year, he's a good guy and it would help us out because of what happened to him." They took me, I went there, couldn't play sports and a really funny thing happened to me. I was bored because I was so used to spending a lot of time on sports that I started to study and when I started to study I found out that I was pretty smart which I had never realized. <laughs> So to make a long story short, I ended up president of my fraternity, Dean's list and got a fellowship to go to graduate school and kind of changed my life. The other major thing that changed it because of that accident, was that when drafted, I flunked my physical and didn't go to Vietnam. So although I've had to suffer with, a bad ankle and so forth, it may in fact have been preferable to probably dying in Vietnam. So, you know, life has its compensations I guess.

Kapoor: So what were your favorite subjects in school?

Shoemaker: In high school?

Kapoor: Yeah.

Shoemaker: I liked math. I liked sciences.. more geology, that kind of a thing and I liked history. I think those are probably my favorite subjects.

Kapoor: So going to Hanover College, how did you select the subjects and so on?

Shoemaker: Well it's a liberal arts school so there was a core curriculum and then at some point you choose a major and honestly I kind of went back and forth between different things. I'd like to say I was one of these people who just knew what he wanted to do and did it but as we go through this you'll learn that was not true with me. So I ended up.. I just had interest.. and then I'd see if I'm interested in this what kinda fits it and I ended up with multiple majors. I did a political science major, a business major and I had math and geology minors and as I said I became a Sigma Chi, I was president of my chapter, I was very active in that.. it was a very good fraternity there at that time. In fact, all 30 members of my fraternity who graduated with me went on to masters and PhDs which is pretty amazing really when you think about it and they're very accomplished people now. So, I think that I was fortunate at that time to just become associated with these kinds of people, I think they made a big impact on my own mental attitude and outlook as I was going through this problem phase.

Kapoor: Did your father or mother have an influence?

Shoemaker: My father worked for Eastman Kodak. He was actually one of the guys that at that time came up with the.. I don't know if.. people nowadays probably don't remember but Kodak cameras back in the '50s and.. '40s, '50s, '60s, had leather on them but it was artificial. Well he invented all that and that was kind of what he did and he worked at Kodak Park which was an amazing place back in the 1950s. Rochester had about 250,000 residents, 50,000 people worked for Kodak. So if you figure four people to a family, pretty much tells you.. and Kodak Park was three miles long and had its own railroad, had its own.. truck fleet, everything, it was an amazing place.

Kapoor: So did he.. he was happy with your selection of your career?

Shoemaker: So one of the traumatic experiences that I suffered early in life, I think.. I really believe and maybe it's because of things that I've been through, but I really believe that people who have never had a really difficult situation to get through don't have the same resiliency later in life in terms of when they face the next difficult thing and the thing that I faced was my father passed away from a heart attack very suddenly when I was 17 years old. He was extremely healthy. He had played golf that day. He had this heart attack and basically they put him in the hospital and he laid there for two weeks and he died because medical science at that point in time didn't know. They just didn't know what to do. I've talked to many cardiologists since and I have a daughter who's a doctor and they say that if that had occurred today he'd have been in and out of there in 24 hours, had a stent and lived a long.. you know, 20 more years, so.. but that changed our lives dramatically. So, in a period of I broke my legs in December, I was in bed for five months. The first time I walked was to get my high school diploma, walking across the stage, my father was there, two weeks later he died of a heart attack. My mother carried on, she was an incredibly strong person and I had to earn my way through college. We had no money so I worked multiple jobs. In fact, I worked at Kodak Park, I loaded trucks, I did anything I could do to make the most money I could make.

Kapoor: You had siblings?

Shoemaker: And got through there.

Kapoor: You had siblings too?

Shoemaker: I had a brother who was only 13. So I was 17 and he was 13 and there we were. And we were.. you know, basically we didn't have any inherited wealth or anything like that, so we just had to kinda bull our way. And I always remember the day the mother handed me.. when I got out of college, she handed me a check for \$500 and she said, "That's it.. you're on your own," and, "Go make what you can of it."

Kapoor: So then you moved on to Indiana University I understand, how did that happen?

Shoemaker: Yes, I was fortunate to get a fellowship and so forth there. At that point I was deciding between law school and business school and I was accepted at Cornell to do their program that you could combine a five-year program and I was accepted to Virginia. But again, I had no money, and Indiana gave me both a fellowship and an assistantship. So I went there and I got an MBA and then I.. they encouraged me to stay and I went out and worked for a year and I came back and I did a year.. a couple years toward a doctorate but I never finished my dissertation and that was actually in political science and government. It was the interaction of the federal government with the private sector and I looked at things like the Federal Reserve System and so forth. And then I went back and found.. and got my first full-time job which was in New York City. I was selected for a small group of people who did.. worked for a company called Container Corporation of America. I did programs for combination marketing, packaging and so forth for major consumer brands. Things like Shell pest strips, liquor business, cosmetics and so forth, where the package actually was more valuable than the product, believe it or not. And I went through this intensive sales and marketing training and actually had Marshall McLuhan come in and train us which was pretty amazing and I was with them.. oh gosh, about a year or so and I just.. it just wasn't my thing. I didn't find it interesting and.. so I ended up.. and this is what I think to some of these earlier questions, this is. I was pretty flexible trying to figure out what I wanted to do. So then I ended up going down to the Bahamas and Grand Bahama Island in the mid-1960s was.. had just had a deal done, two people, a guy named Ludwig and.. I'm trying to remember the other guy's name.. he was a shipping tycoon, bigger than Onassis. They had done a deal with 250 square miles of Grand Bahama Island called Freeport Lucaya and they got a 99-year lease and they had a holding company called the Port Authority and they owned the taxicab company and the construction company and all the retail. If you wanted be a doctor or lawyer on the island you could come there and pay 100 pounds for a license and so forth and I wandered in there and they hired me and I structured the whole organization, all the business systems, accounting, human resources and so forth.. helped create a strategy and I was there about a year or so and I got what they call rock fever and I had to get out of there. So I came back and that was when I first got.. started getting into tech and I took a job with General Dynamics, electronics division in Rochester when they were building the aerospace ground support equipment.. made support systems for the F-111 airplane and I lead a team that planned all of that and I really enjoyed it. The Airframe was being built in Fort Worth and we were under an impossible schedule to get this thing out and over to Vietnam. And it was.. the specifications for it were very, very difficult because they wanted it to be able to land and take

off from an aircraft carrier. They wanted it to be a fighter, they wanted it to be a bomber. They wanted it to be able to carry a Phoenix missile system. It was a moveable swept wing configuration and we had.. that was my first time I realized that.. how much it would be wonderful if we had a lot more computer technology because we were literally trying to build this thing, get the ECOs, through 'cause everything we did affected the airframe and we had fax, and we had Brunning smelly copiers and we would be sending things overnight, flying, you know, all the latest changes back and forth and we finally got about 30 of these planes over to Vietnam and anybody that was alive then will remember that they all crashed.. it was a complete disaster and so we had to rebuild from that. I was there about two years and then I think probably most people over at Rochester was where Xerox was founded and also the reason Kodak was founded.. it was a very high tech town, almost like a little Silicon Valley type place really and it had the University of Rochester, the Strong Memorial Hospital, Medical School, it was a very high tech place. And I was fortunate to get job offers from Kodak, Xerox and IBM and I wanted to go to Xerox 'cause Xerox was in those days a very hot, fast growth, no control, startup and..

Kapoor: You chose to go to Xerox because it was close by?

Shoemaker: Yeah and I had job offers from the others but Xerox never got me the offer letter and I finally called them and I said, "I'm going to go work for Kodak if you guys don't give me an offer letter," so they did. They had a guy drive it out to my house and I accepted the job and ended up being at Xerox for the next 20 years. It was very interesting.

Fairbairn: Did you go there because of the job or because of the company? What was the draw about going to Xerox?

Shoemaker: The company. It just.. you know, I had worked five summers at Kodak, it was very interesting, and IBM I was very much this way. When I went to Kodak and interviewed, they actually had an employment folder on the desk that had my whole history as a summer employee.. I was shocked at that. How could they actually have this right? I went to IBM, it was so structured and you know, you just felt like.. I don't know what. I went to Xerox, I said, "Well, like what's the job?" "We don't really have job descriptions, you kinda do what you want." You know, "You can expand as far as you want go." It reminded me a lot of a place I worked later in my life called Sun. <laughs> I said, "This sounds great," so I took it and it was very similar to Sun in a lot of ways. Super smart people, creative people, the whole business model, everything. They were the first.. they were the fastest growth company to a billion dollars and if you go back to 1960's you know, the mid-late 1960s, early '70s, Xerox was the hottest company on the planet.

Kapoor: So you joined as a financial analyst?

Shoemaker: I joined in pricing and strategy analysis which is in retrospect, I was very fortunate to have had that happen to me.. pure happenstance but when Chester Carlson invented.. first came up with.. discovered the Xerox electrostatic process and they built this.. over the next 10 years or so they went around to Joe Wilson, attempted to get money from IBM, Kodak and all these places to buy his company, they wouldn't touch him. So they self funded it, it was a startup basically. And when they got the first machine built, it was very big, it was very slow. You know, why.. and everybody did carbon paper and

they'd look at this thing and they go, "Why would I.. you know, pay 20,000 dollars for one of these?" So Dataquest did a.. I think it was Dataquest, did a market projection and they said, "At most, forever, you'll sell 5000 of these in the world," and everybody went, "This isn't gonna hurt," and so my little pricing group I was in, I wasn't the leader of it but came up with a thing called rental pricing and we charged a nominal use charge and so much a copy. So we'd take one of these machines and we say, "Well put this in your office, pay us 25 dollars a month. If you don't make a copy on it, that's all you pay and each time you make a copy, give us a nickel." And these people are going, "Sounds like a good deal to me," and that was the secret sauce and it took off and from there on, you know, it's history. But rental pricing, leasing pricing, all the creative pricing strategies combined with the patent portfolio that Xerox developed was basically the fundamental reasons for their success and I think in a lot of ways.. and they are a precursor to Silicon Valley. They are.. were a very high-tech company that actually had many different technologies in their products and as time went forward, you know, they had optics, they had paper handling optics, you know, all kinds of physics, technologies, materials technology, you know, toner, developer and then as time passed and the transistor was invented and so forth, they were actually one of the first companies to utilize those things in an era before any of these things were commercially available. They designed their old VLSI architecture, they fabed their own chips.. did everything.. a total vertical integration.

Kapoor: So how did your career advance within Xerox?

Shoemaker: I.. you know, really honestly, at a personal level, I was shocked how well I did. I never thought of myself as some guy who was going shoot up the corporate ladder, I truly did not. In fact, when I was at General Dynamics, I got my first performance review and the guy who.. I'm not going say names, but the guy who was my boss sat me down, told me I did a good job on this and that but he said, "You know, I want to caution you.. I don't think you have what it's going to take to ever be in management so don't.. don't set your goals too high." I said, "Thank you." Anecdotaly about 10 years later, this guy.. and I don't mean this in a negative way, but this guy worked for me two levels down at Xerox and he was a great friend but he never forgot it. We used to laugh about it all the time.

<laughter>

Shoemaker: So, my career in Xerox was.. , it was amazing.. I just.. it was a terrific career, I have nothing negative to say. I moved from pricing and they had just gotten the company to a size where they were beginning to develop multiple products and so we created for the first time a program management system, a matrix organization of program planning and analysis. We used PMS 360 and I built this whole organization to manage multiple developments.. product development activities and we brought in people from.. we brought in a guy who had done the planning for some of the space program out at NASA and a couple guys from RCA who had done things and we built this whole thing out and created business units for the first time and so I evolved into that.

Fairbairn: So you went from a financial and pricing kinda thing to a product management job?

Shoemaker: Exactly, just like that. And after about.. so that would've probably been around 70.. mid-70s, they moved me over into strategy and they created a new position called Director of Electronic

Reprographic Strategy and my job.. and this was my very first taste of moving towards the systems business and my job was to begin to figure out what the strategy should be for the company and how the market for light lens copying and electronic printing or digitally-generated images would merge.. what the growth impacts on light lens copying would be and as you can imagine, this is the heartland of Xerox so they were very concerned about this. This was also part of the reason that they started investing and building PARC out and so I ended up with two bosses. One in Rochester, one in El Segundo, who hated each other and were on opposite sides of the argument. So I got that experience for a couple years and then they decided that I had more potential and so for the first time ever they took a person from headquarters and they moved me out to the field and then I became a vice president region manager and they promoted me to a Corporate Vice President. I was the youngest Corporate Vice President in Xerox history and I ran sales and service, about 3000 people, P and L for a couple years in Detroit, the Midwest. When I came back I was only there for a few weeks and they said.. I got this phone call and it was a guy named Bob Adams who was Executive Vice President and ran all the systems business for Xerox and he said, "I really need help. I've talked to David Kearns, I want you to come out," who was the CEO, "I want you to come out and be my chief of staff and figure this all out." I relocated to LA and that's how I got to California and I had all his.. I had an interesting compilation of organizations under me. I had marketing, HR, finance, but then I also had the electronics division and I had the Pomona board plant and various things. So I really had everything that wasn't under either electronic printing business or documents systems business and I did that for a couple years and then they asked me to be in charge of document systems and they moved me up to Silicon Valley. That was when I first had my very initial association with Sun and my mission in that..

Fairbairn: Before you get there, can I interrupt you.. can I take a step back. There's an important thing that happened at Xerox in '68, '69, they bought Scientific Data Systems and you were at Xerox at the time?

Shoemaker: Yes.

Kapoor: Were you in any way involved or part of or you know, a close observer of that whole process and what was the.. can you give me an inside view as to what their goal was and that sort of thing?

Shoemaker: Absolutely, yeah. Peter McCullough, who was CEO, Chairman, renowned famous as its executive, had a vision called office of the future. He believed that.. he was very visionary and he believed that there would be a.. he didn't know any of the details but a point in the future he could see.. you know, if the transistor hadn't been invented at that time, computer companies were springing up, he could see that Xerox needed to somehow play in this and that he had a wider vision for the strategy of the company or the mission of the company. That was also why he was the driving force behind PARC and the formation of PARC and.. so they identified Scientific Data Systems and they paid one billion dollars in cash for it. What's really interesting to me, was there was testimony at how little knowledge there was within the Xerox east coast executive management team of the systems business or computer technology, is the fact that they thought they could take that company and make it a commercial computer company that would compete in enterprise accounts against IBM and so forth, when, you know, anybody technical knows that this was a purely scientific computer product with a completely different architecture set of objectives and so forth and so that never really came to be. That mission that they

had.. you know, and their vision, Peter's vision, never came to be and I've always assumed he got some bad staff work on it but what did evolve out of it that actually made it in retrospect for reasons other than those that they I think were thinking about was that it.. that actually ended up becoming a critical part of the electronic printing business which ended up.. , growing to be a multiple billion dollar business and moved Xerox into the data center with eight and a half by eleven cut sheet duplex printing which knocked out a lot of IBM printers and as the laser technology progressed and reliability got better and cost came down, became a very profitable business for Xerox.

Fairbairn: All right, so anyway, you were describing?

Shoemaker: So I walked into this.. I don't want use four-letter words but I walked into this situation with the system.. with coming up here and looking at where Xerox was and they were losing three, four-hundred million dollars a year. They had all of the PARC work and they had a completely proprietary business right when Open Systems were taking off. If you start at the very bottom they had a proprietary chipset, they had a proprietary language called Pilot. They.. operating system, they had the Mesa language. They built their own.. they fabed their own chips. They were building their own hardware, they were building the chips, building the boards and building the workstations and..

Fairbairn: It was the Star workstation?

Shoemaker: Yeah, Star workstation, it was just a disaster. But through PARC they had amazing first, third gen software icon based mouse and all that. So what happened with me personally was we went through and looked at it and said, "We have to just transform this whole thing. This isn't a matter of, you know, cutting costs and figuring out how to make this whole architecture successful, it's never gonna happen." What we ended up doing was, starting to work with Sun Microsystems which was pretty small at that point in time and . we closed down the.. all the hardware development. We OEM'd in Sun workstations, Xerox labeled them. We ported the Viewpoint software onto Unix. We closed down the chip development, opened up the whole thing and through that process-- oh and then also we sold a whole ton of IOTs, image output terminals, to Sun which they OEM'd and they drove 'em out of their workstations and we developed this very successful business alliance and I worked with Wayne Rosing, Eric Schmidt, Scott [McNealy] a little bit, and so forth and a guy named Bill Raduchel who actually worked for me at Xerox and then went to Sun and then over a period of two to three years, I worked so closely with them that they said.. Xerox was.. I was not that happy and I was probably going to have to move back to the East Coast . So I made the decision and they said, "Why don't you just come work over here." So I didn't really go through any formal job search process or anything, I just went over there and they gave me a job offer and I took it and started working there one day.

Kapoor: There were some interesting sidelines.

Fairbairn: So what year was that?

Shoemaker: That would've been the end of '89.

Fairbairn: So I have a personal question just to interject here. When you were still at Xerox in early to mid-70s they had a huge to-do in Boca Raton, Florida, they brought in sales and other people from all over the world to kind of get them rah-rah, 'cause things were looking.. you know, the copier business was in trouble at that point and they wanted to get everybody pumped up about what the work that was being done at PARC and what the future held. Were you part of that or were you?

Shoemaker: I was not at that. I would've been probably too junior but then I was.. when they made me a corporate VP, they had a Corporate Officer off-site in the Bahamas and I was at that and I'll never forget that because I walked in the room and it was a tier classroom environment. There were maybe only.. I think 30 corporate officers and I'm like below the most junior one and I walked into this room and I sat in the upper back corner chair and Dave Kearns was CEO then and he walks in, he looks up and he goes, "John, what are you doing up there, come sit next to me," and I had to go down and sit in the front row next to him for this whole two days and that just pays testimony to his charisma and leadership, the guy was an unbelievable guy, but a very funny thing happened. One of the key guys they brought in to speak was Peter Drucker, and so I'm sitting next to Kearns in the front row and Peter Drucker is doing his talk and he holds up the Xerox World, which was the company newspaper and he holds the front page up and he says-- This big head line and everything and says, "So how many people then--" and he's got a column down the side, David Kearns' picture, CEO column, and said, "So how many people do you guys think read that?" And people go, "I don't know. I don't know." Well he says, "Not many." And then he flips it over and he goes to the bottom right corner of the last page like in the equivalent of six point Kanji, right, and he says, "You know what this is?" He says, "This is a list of everybody who's been promoted. How many people do you think read it?" The obvious answer was everybody, and of course Kearns is blushing in the front row, and he turns to me and says, "Is that true John?" I said, "Yeah, it's probably true." I have these little anecdotal things you remember in your life and that was one I remember.

Fairbairn: So anyway I keep distracting. Go ahead.

Kapoor: No. No.

Shoemaker: Those are all good. You're reminding me of things.

Kapoor: So maybe you can do a little bit of the story of how you came to Sun.

Shoemaker: So I knew Scott a little bit. I knew Wayne Rosing extremely well. I knew Eric Schmidt extremely well and a few other guys. A couple of things happened. First of all, I go over there. They fly me out, and they said, "Go see Scott." So I go see Scott, and he doesn't even interview me. I don't want to mention everything we talked about, but it was very casual, and he says, "So don't worry about it. I want you here. Get the right job." But he said, "There's one person on my staff who insists on interviewing you." And I said, "I bet I know who that is. Carol Bartz". And he goes, "yep." And the reason was that about three years earlier, I was single. She was single, and Owen Brown fixed us up on a blind date, and Owen was briefly president of the Sun, and he was also Xerox. So we went out, and I invited-- the Silicon Valley Ball was coming up, and I invited her to go to it, and then about three, four weeks or whatever before it, I had met my wife, and I said, "Carol, I had to break the date because--" and she goes, "Oh, okay. Goodbye." So before the Silicon Valley Ball, Donna and I show up at Owen

Brown's house for a cocktail party, and who walks in but Carol alone with a beautiful new dress on and everything. So this had been-- she decided she'd interview me. So I went there. I knew what it was about. She just ripped me for an hour, and it was all done. I said, "Well, okay. Do you feel better? Is that good?" "Yeah." And the final thing-- she later married a really cool guy, Bill Mayer, and Bill and I are really good friends. In fact, my kids would play with his daughter and stuff, and so through the years she left Sun after that and went to Autodesk and later Yahoo. Recently about, people probably know, about a year or two ago we had a Sun reunion, and Carol comes up to me and puts her arms around me and hugs me and says, "You're forgiven." <laughs> That was a funny story.

Kapoor: I was there, but I didn't know that.

Shoemaker: That was a funny story. So I went over and next funny thing that happened, classic Sun Microsystems was the night before I'm going to start work, I get a phone call, and it's a guy named Kevin Melia who was EVP of Ops at that time. He was following all of that and very serious guy, and he said, "Look. I want you here in the morning, but we're going to just put you temporarily in this job." And I said, "What happened to the job you were going to give me?" And he said, "Well--" and this is a continuation of the previous story, but he said, "well." He said, "Carol Bartz just got promoted from running service to running sales, and Bill Mayer, her new husband, can't work for her. So we're going to put him in operations" this job "and we're going to put you in his job."

Fairbairn: That was the job that you were going to get?

Shoemaker: Yeah. And so that was how Bill and I actually ended up being friends. When I look back now and I think about all those little things just coming into Sun. Even before I got there, I'm going, "This is a different kind of place." And the other thing that happened was they were convincing me, and I said, "Oh, I haven't made up my mind yet." So they had this huge VP offsite in Tahoe and said, "Just come up and attend it for four days." And they're going through all the secret stuff, strategy, and everything. I'm not even employed. "Don't worry about." So about the second day Raduchel and Scott sat me down. They come over to dinner or something, and they say, "Oh, you think you like it?" I say, "Yeah. This is really cool. I'd like to come work here, but I think I'd like to take a couple of weeks or a month off and then I'll start." They said, "Well, you know, that's okay, but that's a problem." "Why is that a problem?" "Because we started you on the payroll 10 days ago." And I said, "What?" "Yeah, we thought you'd take us, so it was good time to do it, and so we just started you."

Fairbairn: So why you're still working for Xerox?

Shoemaker: No. I had terminated there.

Fairbairn: You had terminated?

Shoemaker: Yeah. So there was no legal problem with it.

Kapoor: So they've done..

Shoemaker: I had two other job offers I was in the middle of considering.

Kapoor: So they've done some panel discussions with many of the early people?

Shoemaker: Sure.

Kapoor: So we have capture a lot of the history of the early days of Sun, and so I'd like to find out when you arrived at Sun, what were the conditions like? Because this is an intermediate..

Shoemaker: Great question. Another amazing experience. I walked into Sun as they were making a flying catch to save the company and a thing called Q489. I'm sure many people know about this, but Q489, what happened was they tried to convert to a new computer system, ship a whole bunch of new products all at once, couldn't ship anything, couldn't book revenue, had no money, and at the last minute Goldman Sachs stepped in through a lot of work by Bill Raduchel, who was acting CFO at that time, and gave us 60 million dollars to save the company. I literally walked in the door as this thing was going, teetering, and then as I started working there, I had trepidation because at Xerox I had a really good reputation and everything and goodwill. I never forget, I came home from my first day at Sun. I went in my first meeting, and as I recall, it was something to do with AT&T, 50 million dollar decision, four, five people in the room, no overheads, no anything, everybody yell and scream and argue with each other, and after an hour, they said, "Well, let's do it." And everybody goes "okay" and that was it, and I went home and I said-- in Xerox there would have been three weeks of preparatory slides. There would have been staff work. No one would have made a decision in the meeting. Everybody would have put editorial comments into the meetings and eventually someone would have made a decision. And I went home and I said, "In spite of the wonderful career at Xerox," I said to my wife, "My first day at Sun was better than any day I've ever had Xerox." That was how I started, but then Sun was just at the point where it was growing up. So you had all these brilliant, great people who were in the early days of Sun, but they also needed a new skill set, seasoned people who had run big operations and knew how to do all that, and so there was a period there where this whole transition occurred and everybody is trying to figure out the right things to do. We always talked about shooting ahead of the duck, which meant whoever we hired we need somebody who's done something that's probably two, three, four times bigger than what we're asking them to do here, and we need to attract them and tell them we're going there and we need your help to get there. So it was a very interesting, exciting time. And as you look at Sun a few years later, I think a perspective that many people perhaps don't understand is that-- everybody knows Sun had this exciting reputation, world's largest startup, fun culture, Scott, etcetera, etcetera, etcetera. What they don't probably appreciate was that-- I don't remember how many years in a row, but we were named the best financially managed tech company, and when you went under the covers of Sun, it was really well run. So it had that aura, but at the same time, they knew what they were doing. So that was pretty cool.

Kapoor: So I noticed that..

Fairbairn: Who was responsible for that?

Shoemaker: There was a layer of people. I can give you names.

Fairbairn: I don't get that Scott had been..

Shoemaker: No. It wasn't Scott..

Fairbairn: So who was there..

Shoemaker: Scott was very smart, and he knew what he needed, but it was this whole layer of people like the Mike Lehman and Tom Meredith and myself and Kevin Melia, George Reyes, etc. on this team of probably half a dozen people that were very professional managers and strong leaders, and they really did. Not to flash ahead too far, but if you go ahead into the 2000, whatever, '05, '06, when the company really never came back from the bursting of the bubble, what you'll see is that those people are all gone, and I think the whole was too big. I think a big reason that the company wasn't quite able to pull out was that leadership team really didn't-- Masood Jabbar, Ed Zander were gone. I was gone. Meredith went to Dell.

Kapoor: Mike Lemmon there for some time, but then he also left.

Shoemaker: Yeah, but he came back. He left, and he came back because he wanted to try to help. Another one was George Reyes, and George went to Google. If you look at these people-- and Zander went to Motorola. If you look at these people and say "wow." It's quite a team of people. You don't take a team of people like that out of a company and not expect something, and then Scott retired.

Kapoor: So we'll come back to that.

Shoemaker: Jonathan probably made mistakes that was-- it was a lot more than.

Kapoor: So we'll come back to that thing. One thing I noticed was that you also achieved quality officer sometime.

Shoemaker: Yep.

Kapoor: What was the reason for that assignment?

Shoemaker: If you go way back in my background to my days at Xerox, Xerox did a huge strategic relationship with Fuji Photo Film and formed Fuji Xerox, and Fuji Xerox was the first company to win the Deming Award in Japan, and I was on that team and brought Leadership Through Quality at Xerox for many years, and so when I came to Sun, it wasn't why I came to Sun, but one of the things that I brought was that experience. So when it became clear that part of this transition to becoming a grown-up company was we needed a lot better processes. We needed a lot more focus on quality, whether that be in our products, whether that be in our service strategies, whether that be in our business processes, I began to play a role there. What happened was that in addition to my job running computer systems and worldwide operations, so forth, I had an additional title, which was Chief Quality Officer, and I oversaw that, and it was a lot of synergy there because since I was responsible for all hardware development, when we had problems, I was in the middle of it from multiple perspectives, and I don't know how many people may remember a thing called eCash parity, but we had a horrendous technical problem that we knew what was causing it, but we didn't know how to stop it, and we almost destroyed the company with it because we had all these mission critical installations with E10Ks and mid-range servers. We were

having products go down, and we were spending hundreds of millions of dollars literally replacing products, boards, everything we could do. We had analysis going. I'm trying to figure out the cause, _____ it was actually SRAM from IBM, and they were very cooperative. They were fabulous. They were a competitor at some levels, but they were our partner too, and we also sold a couple of hundred million dollars a year of systems through IBM Global Services at that time, so very interesting, complicated relationship. One of my themes has always been make the problem the answer, and we made the problem the answer. What we did was I was asked by Scott and Ed to be the person in charge of solving this problem, and I said, "Okay. But what I want to do is I want authority to handpick a high potential, one of our best vice presidents to run for me each aspect of solving it." And so I got this team of people, and I got Kathleen Holmgren from Ops. I got Rich Green for software. I got Steve McKay and so forth, and we met at 7 a.m. every morning, and they each had a team and they went out, and one was responsible for software and Patch management, and how we managed that whole aspect of it that was Rich. Kathleen was responsible for all the Ops aspects of it, Steve the technology aspects. I had Paul Rochester who worked the service part of it and what we actually did was not only eventually solve the problem, but we remade all the processes of the company. So whereas for the first six to nine months, I was spending all my time doing interviews with the Wall Street Journal and TV and everybody else telling them, "We're going to fix this. This is not Sun.. hang in with us." I would fly to Japan to talk to a customer, get on the plane four hours later, and fly back that's how bad it was. Two years later, they were coming and wanting to interview us because their customers were telling them Sun has the best processes and best quality of any company that we work with, and we went from being in the dog house to being considered a leadership in quality, and again another aspect of that was the purchase of Cray from SGI, which gave us all of their data center knowledge, RAS type knowledge, high-end quality process knowledge.

Kapoor: So going back to when you came to Sun, what were the product mixes? What was the strategy in terms of work stations, graphics, networking, Java, Solaris? Can you tell us..

Shoemaker: You mean kinds of transitions that occurred?

Kapoor: Right.

Shoemaker: Sure. So when I got to Sun, it was a technical work station company. The total TAM of available market was probably 15 billion dollars. Everybody knows the story of open and industry standard components and the Andy, Bill, Scott's strategy and all that, but it became clear that if we were going to take this company to a bigger, broader mission, we needed to go beyond that, but what we had one is build a really great company to serve the market we were serving and the classic customers we were serving and that classic customers was basically technical people, and they didn't really worry a lot about high availability. They actually liked to take the things apart themselves and put them back together. They were all doing mainly technical applications, computer aided design, and all that kind of stuff. So when we started saying, "Well, how do we move into the commercial marketplace," which is a dramatically larger market, we began to realize that we didn't have everything that we needed basically, and so I really view Sun's transformation from a technical work station company to a true broad-based systems company, one of the great S-curves in the way of transitions that has occurred because everything was different. So what we basically did was we achieved a point in time around 1995 where

we said, "Okay. We're going into multiple businesses." And we completely restructured the company from a functional organization to business units. So we set up a work station business unit, which had previously been the whole company. We set up a mid-range server organization and a high-end organization, and within work stations we had graphics and so forth. Then, we had SPARC and that began to grow as a separate division, microelectronics, and we had all the software. So we had Solaris as one of our organizations. Java was another organization, and so the company suddenly went from a technical work station company with a VP of marketing, a VP of manufacturing, a VP of sales to a multi-business, business-unit driven, general manager business-unit driven organization, and the only two shared functional organizations were global sales and worldwide operations, and then we began to build off that base.

Kapoor: So some people say that Cisco should not have happened because Sun had a networking strategy that should have taken your business.

Shoemaker: Well that's easy to say.

Kapoor: I know.

Shoemaker: You can argue that about a lot of things. I also think you can only do so many things. So if you watch the degree of change and the degree of dynamics that occurs in tech, it's not the way it happens. If you look at IBM, and I'm not being defensive. I'm just saying it's not an obvious thing like somebody went, "Oh, I screwed up. I should've done that." If you look at IBM in 1970, and I don't know what the revenue was, but whatever, 50 billion, 60, whatever it was. You looked at a Gartner Dataquest, somebody projection, they projected IBM to be at 400 billion dollars by, whatever, 2000, but guess what? Didn't happen. And if you look at every-- you go from mainframes to departmental processing to desktops to the internet to mobility and personal devices and so forth, what's the common thread? No company that was successful in one phase is carried through to be successful in the others. So DEC happened, Tandem happened, Compaq happened, Dell happened, different business model approaches, and then what happens after that is there's consolidation. So DEC buys Tandem, gobble. Compaq buys DEC. HP buys Compaq. Now you watch what's going on in the chip industry right now. There's incredible consolidation. One of the boards I'm on is Altera, and we're in the final stages of an acquisition by Intel. Again, if you look at the number of microprocessor companies right now that's just the way it is. Cisco had a very focused mission, a strong team, sure what they wanted to do, and they went and did it. Now Sun could've gone and done that but maybe Cisco would've beaten us out doing it.

Kapoor: So you mentioned cultural shift where the initial enthusiasm and fun culture, and I read some literature where there was somebody, Nancy Hauge, was asked to reinvigorate and became the CEO of Fun.

Shoemaker: We had a chief officer of fun or something.

Kapoor: Because Scott felt that company was being..

Shoemaker: I compliment Scott and a lot of executives in that they-- I think Sun, more than any company I've seen, when it got to be 15, 20 billion dollars still had a quasi-start up fun culture. If you go talk to Sun people today, they will tell you, "best time I ever had in my life. Never worked at a better place. Never had more fun." And that was true all the way up to 2001 or whatever when the bubble broke.

Kapoor: And it was a very sad time for people that had to leave the company. So you're absolutely right.

Shoemaker: And it was truly a unique place, no question about it.

Kapoor: So you saw tremendous growth at Sun, and of course you saw the bubble burst, can you describe that experience?

Shoemaker: Yeah. It wasn't fun. That was not fun at Sun. So just before it broke-- I think it was interesting anecdotally. This is a true story. I had my office down in Agnew's, and I was right by-- well, Scott was around one side and Ed was next to me. I'm sitting there and he walk in the office and go, "Did you look at the stock?" I said, "No." He said, "Our market cap this morning is 210 billion dollars. We're bigger than IBM." And we said to him, "holy crap." Now what are we going to do? Because our whole strategy, our whole PR, everything about us was we are the underdog. We're the up and comer and all that. We don't know what to say, and so we had this little period in there where we'd really made it, but if you look at our customer case, the way we had done it is through all the newer corporations, the high growth, the service providers, and so forth, but we're growing like 50 percent, whereas our big competitors, who were so much larger in terms of revenue, were IBM, Hewlett Packard and so forth, and they're a very different customer base. They had a traditional company. So they had General Motors and all these kinds of people. We had them as customers too. They're all heterogenous environments, but they were the core of their business. So they were maybe only growing five percent, but when the bubble broke, it didn't just break in a generic way. It broke much more severely for the kinds of customers that we had, so an Exodus. We might have a company with 30 or 40 thousand servers in it that just went out of business and so it hit us much harder, and I will never forget after that big crash occurred, I had an outlook for the quarter of five or six billion dollars in week seven, which is a critical week when you reassess your quarter to reset your procurement activities and so forth. For our organizations, our outlook went from five or six billion to three billion. We were hiring at a rate of four or five thousand people a quarter. We were literally planning building out a new 5,000 person campus every three months. It was unbelievable. We went from that to stopping dead all our expansion, laying off 10,000 people instead of hiring 5, beginning to pull back from all of our financial commitments for land and construction of new campuses, and literally slammed the brakes and stopped on a dime, and it was an incredible experience. So not only the obvious financial and business aspects of it but just to walk in the halls, and there's so many brilliant young people in Sun, and you would look at them, and they were a deer in headlights. They were like, "What's happened here?" Their whole career, all that experience was just up-ramped, and they had never been through a major downturn and so it was a frightening time.

Kapoor: So you wrote an article in the Indiana University business journal, which is pretty well read, that the transition took place from Sun's model of the vertical architecture to horizontal, people that were with Linux and Intel products.

Shoemaker: Well, I'm sure there will be people who don't agree with me. What happened was three professors wrote some kind of research study, and they used Sun as an example and when I read this thing, this was in Business Horizons, kind of like Harvard Business Review, same kind of magazine, they took Sun and they went through this whole explanation of why Sun crashed and all that. They had it all wrong. I read it, and I just got aggravated. So I wrote this long email to them. I don't think anybody knows this. I wrote this long email to the editor, and she reads it, and I said-- I'm not going to hear anything back, but I feel better and so about a week later I get an email back, and she says, "This is the most unbelievable thing I've ever read. Would you please consider the possibility of converting it to an article?" And I said, "Yeah, sure." So I wrote this thing, and I said, "Here's what I think," which is completely different from what all these guys think, and I then I went through my logic. Basically what I said was this was not about Sun making mistakes with its-- they were talking about the low end and about Sun's inability to compete and so forth. I said that that's never been Sun's strategy and what Sun was about and the reason it was successful was Solaris. I said, "We had the most highly scalable operating system ever developed and very robust and parallel with that and that the power of our RISC chip set was not a uniprocessor head-to-head competition on a product cost basis with Intel. It was a systems company, and it was a combination of being able to build a 20, 40, 60, 80, 100 processor machine and marry that with a tuned Solaris operating system that could scale and get the full benefit of the performance of that kind of machine, and when you have that combination, you could go up against a mainframe or anybody else and deliver incredible performance and incredible cost performance," and so forth and so went through all that, but the other part of it was-- I know Scott was pissed at me for a while. I didn't use his name or anything, but I essentially said, "We had a leadership vacuum and that had a lot to do with the problem." And so I talked a little bit about that in the article and tried to put it together in a way that was not specific or critical or any one thing but rather explain hopefully as objectively as possible what really happened, why it happened, and why it was so difficult to get back out of..

Kapoor: There certainly has been a lot of people asking that question.

Shoemaker: It was interesting in the way that thing evolved. I published the article, and I started getting emails from all over the world, and then the editor said, "This article has been read by more people than any article we've ever published." That's pretty unbelievable. I only wrote it because I got mad one day.

Kapoor: So just reading through that, I think some of the things that come out the reasons for Sun's decline, I think you mentioned slow rifts, the reduction in force, too little too late as you said, product strategy in terms of what kind of products, competitiveness you mentioned, the Java expenses you mentioned, acquisitions like StorageTek, MySQL, which was later, open source strategy, giving away things for nothing. I think you mentioned leadership at top. These are some of the things that..

Shoemaker: Those are all true. I think one of the things that happened at Sun in that period was religion is good, business is good, but it's like America. Religion is supposed to be separate from government or whatever, but I think Sun got a little mixed there. Funding 4,000 Java developers with zero revenue was not exactly a good business decision. We can argue about it all day. The very poor business acquisition decisions, a lot of these things happened because the people who had built the company weren't there anymore, and the other half of it is I think after some decisions were made, the people weren't there to drive changing those decisions too. It's like when you buy a bad stock, you can say, "I'm losing a little

money." You pull the trigger and sell it or you just ride it to the bottom. It looked to me from the outside they were riding every bad decision to the bottom.

Kapoor: So a lot of people are wondering about selection of Jonathan Schwartz as CEO.

Shoemaker: Well, I wasn't there when Jonathan was selected. I know Jonathan well. I know him as a business development person. He came, I think, with the purchase of Lighthouse, and I think he's a brilliant guy. He actually attended my staff sometimes, and we looked at a lot of acquisitions. We did a lot of acquisitions. I think he was very good at that and very smart. What happened when Scott selected him is-- I don't know. I wasn't there. So I'm not really-- it would only be hearsay on my part.

Kapoor: I understand. So in terms of uniprocessor performance, as you mentioned was not competitive. Do you have some reaction to that, for example, UltraSPARC won, I when it was announced at..

Shoemaker: If you look at the years of the late 90s, go talk to Neal Knox who ran the low-end server business and the workstations at that point in time. He came into my staff being presented 20 graphs that showed how disadvantaged we were trying to sell a uniprocessor box and exactly what we could do to you and so forth, how much more competitive we got, and then how we could bring Solaris in to impact that and scale and so forth. I will challenge anybody that comes in and tells me that a single SPARC chip, at that point and time, against Intel was competitive on a price performance basis. It was not.

Kapoor: Also millennium, which was the chip that was canceled but was still in fab. In fact, it was completed..

Shoemaker: What was?

Kapoor: The millennium processor. So that also there are a lot of questions asked as to why was it done, because it was supposed to work for the Cloud computing application, which later on became a very big thing. So it's something that had reached the fab. It was all completed but at least, you evaluated so that was a question I asked. You have any thoughts on that?

Shoemaker: I could only make general comments about it. I think that chips like that are very, very difficult to do and basically comes down to that. My basic point has always been if you look at an E10K, any high-end server we build up to 105 processors and then we had clusters, and we were working on the architecture of that product, the partitionability of the product, the individual domains, the amount of RAS, the real estate that was devoted to RAS combined with the robust scalability of Solaris is what made those worthy products. It wasn't a chip. It wasn't any one thing. One of the great things we learned from the acquisition was that these guys really understood the IBM mainframe business, and they understood the approach and how much of the real estate in a mainframe is for RAS, and they were shocked. We were shocked when they said that. Then you've really got to make a major commitment to this, and you've got to devote a lot of resources to it, and if you don't-- the number one requirement of any customer in that class of device of high availability and you achieve it through no one thing but through many things including easy failover, more in backup, high RAS, clustering strategies, whatever it takes,

and the exact opposite of where Sun started as a company, which was a technical work station run by an engineer who loved to tinker with it. So it was a amazing transition by a company.

Fairbairn: You've mentioned RAS several times. I'm not sure all our readers of..

Shoemaker: Reliability..

Fairbairn: Availability and scalability.

Shoemaker: ...availability, and scalability-- serviceability, I'm sorry.

Fairbairn: I wanted to make sure that was clear.

Kapoor: So the other disruptor was the clock speed in chips, which caused power problems, and I think many of the people were affected, Sun included and Intel.

Shoemaker: Still a problem.

Kapoor: It's still a problem. So Sun took the position of acquiring Afara to go to multithreading and multicore to address that issue, and I think they have succeeded fairly well in that and other people thought, including..

Shoemaker: And from what I've heard from talking to you and others is that the number of cores that you're achieving and the whole architecture is amazing. I probably shouldn't say this, but in a way, it's afterwards disappointing but sad that that technology is sitting there inside Oracle probably with a lot of governors and limiters on it.

Kapoor: So some general questions. Looking back at the career, when you got stuck with a project, what did you do? This is a general question.

Shoemaker: When I got what?

Kapoor: Stuck with a project..

Shoemaker: Stuck with a project?

Kapoor: Problem or a project. Had a problem to confront. What was your approach to solving that?

Shoemaker: Well, so I'm going to go up level a little bit on this answer and stop me if it's not what you want. I've always, I think, had a consistent leadership style, and the first thing I always try to do when I see a problem is I say, "I truly believe that there is a pony inside there some place and that you make the problem the answer." I feel that that's what I, after a lot of hard work, we were able to do that with eCash _____, for example. But I have a fundamental leadership style that's pretty simple. I believe in total candor. I believe in any time I've ever taken on a new organization, the first thing I do is have a meeting with everybody, and I say, "Here's what makes me happy. Here's what makes me angry, and here's my style, and I think everything starts with trust. You have to be total honest. If you and I agree to a goal,

and you're in trouble, get stuck, if you come and talk to me about that as soon as you know it, I have no problem with that. If you wait six months until you realize you have no other choice and you come to me, I'm going really be pissed at you." And all other elements are things like always try to sit in your boss's chair and think about solving the problem up a level and what will his or her reactions be to that, so on and so forth and so very much a team approach, very much a candid and honest approach. I believe the earlier you can address a problem the more options you have to solve it, and that inside of every problem, not only can you solve that problem, but you can use that in a way to make everything else better around it.

Kapoor: You've taken many decisions and tough issues. If you could change or redo an event or decision during your career, what would it be?

Shoemaker: If I could change a decision?

Kapoor: Yeah, looking back.

Shoemaker: If I could change a decision, what would it be?

Fairbairn: Or a choice or whatever.

Kapoor: Choice.

Shoemaker: Can it be at a personal level?

Kapoor: Whatever.

Shoemaker: I would have come to California 20 years earlier. It's interesting. I don't digress too much, but I'm a guy who spent a long time on the East Coast, and I worked in technical environment on the East Coast and so forth, and I traveled extensively to California, and I thought through that extensive travel that I had a pretty good sense of what it was like, "Silicon Valley." And when I moved here, I realized that I had not had a clue and that you have to live here to begin to really get a feel for why it's so different and what the secret sauce is and once you figure it out and you get involved in the middle of it, it is the most exciting place to be on the planet, and I wish I had figured that out and realized it and been gotten an opportunity to be here probably 20 years earlier in my career that would have been fabulous. And it's funny, once I got here, but I was still with a big East Coast company, Xerox. I tried to explain it to people back there, and nobody ever got it, and they were really smart people, but they would shake their head and go, "well"..

Fairbairn: Weirdos.

Shoemaker: Yeah. Weirdos. They knew I was no longer one of them when I went back in January for a board meeting, and I forgot my overcoat and my glasses and all I had was sunglasses. So I had to do my pitch to the board in my sunglasses, and I had a little sun tan, that was the end. They never trusted me after that.

Kapoor: So after you retired from Sun, of course, you been very busy, from what I can tell. You been on the board of many companies, SonicWALL, Altera, Extreme Networks. You've been a trustee emeritus of Hanover College, Indiana University advisory board, Dean's advisory board. You're also in El Camino Hospital Foundation Board and also the Philanthropy Council. So how has that life transition been for you?

Shoemaker: It's been great. I always kid people when they say, "Are you retired?" Well, I say, "Well, I flunked retirement big time." And what I realized, I got a lot of advice when I made the decision to stop working full time at Sun, and everybody said, "What's going to happen is you're going to freak out." I been working here. I work here seven days a week essentially and what am I going to do with all that time and the phone will ring and you're going to start accepting all these little things because you're afraid you're not going to have anything to do, and they said, "And actually what's going to happen is the opposite and a year from now you're going to be going, 'Why I did ever agree to do any of these things?'" So the advice was don't do anything, just take 6 to 12 months, and I did that. I didn't answer the phone. I didn't try to get involved in anything. I played golf until I hated it, and I realized I love what I do. I've done it all my life. Just because I reach a certain point in my life, why would I stop doing that? Why would I go sit in my couch and watch sports all day or whatever you do. So I got a phone call from someone who'd worked for me at Sun who was at SonicWALL and they said, "Would you be interested in joining the board?" And I said "no" a couple of times, this was in my sabbatical stage, and then they called again and I had lunch and they talked me into it. I ended up being the chairman of the board there for six or seven years, and I loved it. It was a whole new life for me. Things I'd never thought about, a whole new set of friends, whole new set of people with like interests, and a great business experience where we made it successful, we built it, we took it private, we made money, and that was my CIT launch of am I going to want to do things now anymore in my life, and it was such a great experience that I said, "I love this stuff." Hanover asked me to go be on the board, and I did that. I did graduate work at Indiana University in Bloomington, and so I became active there and so now I'm advisory group to the Dean. I'm small advisory group to the Johnson Center for Entrepreneurship. I'm director on the IU Foundation, and now most recently I've become really involved with the new exciting and fast-growing School of Informatics and Computer Science, and we're building a new building. We've taken the thing from zero students to 2,000 students in about eight or nine years.

Kapoor: Is that Indiana?

Shoemaker: Indiana. And it's interesting. Another area where we're involved is at Stanford with international graduate students and extensively involved there, and a number of those students who are in computer science at Stanford, IU was their second choice, so I thought that was pretty cool, that says IU is pretty highly ranked, and then I got involved more at Hanover. We canceled the business major there; we didn't think it was appropriate, and we set up a thing called the Business Scholars Program, and this is a track where a student has to get accepted into it separately from being in the college, and you do a parallel track learning-- I call it an application layer, no matter what your major is. Some extreme examples, maybe you're a religion major or ethics major, but you still got to make a living. So you do this parallel track, and you learn all the business skills. You learn the computer skills. You do internships in the summer, and hopefully when you come out with your Bachelor degree, you are employable. My wife

and I did some other philanthropic things there and so we're deeply involved there, deeply involved at IU where we're funding an innovation center in the new informatics building that's going to get built and that's going to tie back directly, and we're creating joint programs with the Kelley School of Business, so you can do an entrepreneur degree and have some cross-functional courses with the informatics and computer science school, and it's a perfect start. You actually do things. You actually work in this lab and build things and whatever. So we're doing all that. So a lot of nonprofit work, which I really love. El Camino Philanthropy Council if anyone is interested please come see me. We're trying to build a mental health building and associated programs, Monterey Bay Aquarium, and then UCSF we're doing a lot of work there with prostate cancer and outreach marketing programs. I've done a lot of things with the co-director of the Cancer Center, Dr. Peter Carroll. We've done public radio, national news, ABC, NBC, and we've managed to get active surveillance as a noninvasive early stage cancer treatment protocol embedded in the South Bay now, which was not even offered before. A lot of exciting things there. My wife loves jelly fish, so we're doing things with Monterey Bay Aquarium, jelly fish, and I don't know. It's a whole new life is the answer to your question. In fact, other than being old, I'm probably having more fun now than I've ever had.

Kapoor: Well, you certainly deserve a lot of the honors you've received over the years. In '96, you received the CEO Leadership Award from Sun; 2000, you received the Alumni Achievement Award from Hanover College and you were named to the Academy of Alumni Fellows Indiana University; 2001, Brighton High School Rochester Hall of Fame and named Significant Sig by Sigma Chi Fraternity and were selected most recently, just last week by the Silicon Valley Chapter of the Association of Fundraising Professionals. You and your wife were selected for Outstanding Volunteer Fundraising in Silicon Valley.

Shoemaker: Thank you.

Kapoor: Congratulations for all of that.

Shoemaker: I can't believe that's me.

Kapoor: And I'm sure there's more to come. You have continuing education with the universities Stanford, Harvard, MIT. So I had a few questions to ask you typically for the sake of the future generation, people that are coming up, for the young people. What are you working on now? Anything exciting?

Shoemaker: Yeah. Can I go back and mention one other thing..

Kapoor: Sure.

Shoemaker: ...along with that question? What happened at Sun was once a year the top executives, four of five people, would go in a short meeting with Scott and they just ask you one question, which was, "Are you going to sign up for another three or four years?" So the year I left, I said, "I've decided at the end of the fiscal year June 30th, I'm going to retire." And knowing, especially Scott, God bless him, I figured he'd say, "great." Everybody knows that was coming. And he went, "No. No. No. What'll it take

to stay? We don't want you do it. Will you stay one more year?" And they gave me a really nice incentive to do that.

Kapoor: This for two years, right?

Shoemaker: Yeah. So they had me stay in my job one more year, and then the second year, they say, "You can do anything you want to do." And so to your question, I created a thing called Leadership Institute and what this did was we select handpicked 18 high-potential vice presidents. Their boss had to agree that 25 percent of their time would go to this development activity. And we worked with them intensively off site, and then we gave them a team project to do. For example, how should Sun compete with Microsoft? Some question like that. And they had to build a whole recommendation around that, and then we brought in Wall Street people and created a curriculum that would take them from being a highly competent, brilliant VP running 500 engineers or something or a sales organization to someone who could be a senior executive and have the tool set to go talk to Wall Street, run a business, etcetera, make the strategic decisions for the company and so I did that for a full year, and I have a lot of passion around. I have a lot of passion around a thing I called Values Based Leadership, which you start with your personal values, and you build your leadership style around it, and you walk the talk, and you're consistent in that and so that's in and so that's an area actually that's really close to mine.

Kapoor: The question was what are you working on now? What exciting project you're working on?

Shoemaker: Well, a big thing we already talked about, a lot of my time is going to chairing the Philanthropy Council at El Camino Hospital. We fortunately have some money through a bond measure, but it's going to take roughly 54 million dollars to build this state of the art mental health building on the El Camino campus, and we have a set of associated programs that I got to take about 15 million dollars. What I've learned in doing my research on this is that it a very unique place nationally. We could only find a couple of programs in the entire country that were even close to having anything like the capability of El Camino. The ASPIRE program for high school aged kids. As everybody I'm sure knows, there's a cluster of suicides, tremendous pressure on students, and so forth, and then mothers. We have a thing called MOMS, and this is basically we work with postpartum depression. There are huge problems with mothers that have emotional problems trying to deal with when they have a new baby and so forth, and then we have another set of programs called OATS, which is for elderly people going through major transitions, which can be losing a partner, illness, whatever it may be and so my wife and I are devoting a huge amount of time to that, and so far we've been at it for a year and we're over six million dollars and we're getting reception and so forth and it's really been terrific. Second area where I'm working on a lot now is with UCSF, and they're very close to some major breakthroughs in stem cell research, prostate cancer, trying to get the word out about active surveillance and so forth that's a big area I'm spending time on. I'm hopefully about done with it but a lot of time on the acquisition of Altera by Intel. I'm spending time with three or four different startups just helping them. They've come to me for help and each one's different, very different but that's exciting. I even had one that's in New Zealand. These guys lived in my guesthouse for a month. They didn't have any money. I'm sure many people who watch this will know about that. So I'm doing a lot of things. I have four grandchildren. Travel a little bit. I have 200 rose bushes that I take care of myself.

Fairbairn: Two hundred?

Shoemaker: Yeah. Play a little golf. I take care and prune them all. I'm not in the pruning season now.

Kapoor: Especially with the drought.

Shoemaker: Rose bushes are unique in this area because we have microclimates, and they never go dormant. So you have to take care of them differently than you would in most parts of the country. I don't know, many things. I'm very proud of my oldest granddaughter. She's looking at schools, and I'm hoping for Stanford. They're coming out in January. She's looking at Harvard, Stanford. She's just brilliant. I'm very proud of her and so I want to get her out, that's my new mission.

Kapoor: So what do you think is the next big challenge for the technology industry?

Shoemaker: How to use all the technology that we have at a far more effective, productive way by all people and as a major tool to solve some of the world's major problems. I think we've got a long ways to go with that. I think technology is really interesting. It's always out of a phase with society. If you go back to major wars, the Civil War, and then all a sudden they had all these guns and everything, but the war strategies weren't predicated on that. So all these people got maimed and killed. It's always out of phase. Technology is always out of phase. So I think right now we have more technology and brilliant new ideas and computer power, and we should really start figuring out how to solve problems with it.

Kapoor: I think mental illness is quite a challenge.

Shoemaker: It's amazing how archaic-- so many aspects of your society is given the tools we have to-- it just takes science.

Kapoor: How do you think the computer industry will change in the future?

Shoemaker: I think it's already dramatically changed, first of all, and I think it's going to become more and more pervasive. People aren't going to think of it so much as a standalone industry anymore. These companies that build these big computers and there's these companies that build laptops and so forth. It's going to be pervasive. I think the technology is going to be a part of the business strategy and product array of every company whether it's software or whatever it is, and it's going to be assumed in everything whether you're running a government healthcare, whatever. There's so many huge problems to be solved, and these places are still being run in incredibly archaic ways and so I just think it's going to become a part of everything.

Kapoor: So the technology jobs will change. What kind?

Shoemaker: Absolutely. I was reading an interesting thing the other day. I don't know who posted it, but somebody posted it. It was Facebook, and it was a list of eight or nine things, and the question at the top was, "When is the computer industry going to impact things?" And the answer was, "It already has." And then he listed the-- did you see that? This is the same thing. So the first one was the world's largest car, a transportation company, owns no cars, Uber. The world's largest hotel chain owns no hotel rooms..

Kapoor: The B2B.

Shoemaker: Air BNB and then it goes down this list, and you go "wow, amazing." The disintermediation and the new ways of things. I was listening to the radio coming over here about Black Friday, and they're going, "I'm not really sure what that means because really what's going on is everybody's buying everything online." And it said, "They don't even know how much. It's just taking off like crazy."

Kapoor: I remember Scott _____ Facebook. It's just a smart email. What call to action would you give to a young person today?

Shoemaker: I'm sure many people say this, but I always say, "Number one on the personal level, find something that you truly love to do and then figure out how to make a living at it." And they'll say, "Well, that's great advice but that's easier said than done." And my response to that is, "Yeah, but it is probably the most important thing you'll do in your life, so it's worthwhile to work to figure it out." And pick something that's relevant to an area where you feel there's a real need and figure out how you can do it in such a way that you can make money doing it. So many kids are idealistic, and it's wonderful. You're always idealistic when you're young and you're smart. So they'll go into some field that they don't think ahead three more steps about how am I going to apply it, what problem am I trying to solve in the world, and how am I going to make a living at it? So think systemically, think ahead. It's always amazing, as everybody knows, that many of the most important decisions in your life you make when you have no experience to make them. What your career is going to be, what your education is going to be, who you're going to marry, and you look back nine years later..

Kapoor: There's no reference.

Shoemaker: ...and you go, "Wow! I had it all wrong. I didn't have any experience."

Kapoor: Thank you, John.

END OF INTERVIEW