



Oral History of Kanwal Rekhi

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Recorded December 20, 2017
Mountain View, CA

CHM Reference number: X8425.2018

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Katz: Good morning. Here we are at the Computer History Museum on Dec 20, 2017. We're going to have an oral history interview with Kanwal Rekhi, one of the pioneers in Silicon Valley and currently a venture capitalist among other things. We'll get into details in a moment. The interviewers are two of us. I am Jeff Katz from the Semiconductor Special Interest Group and--

Hancock: I'm Marguerite Gong Hancock, the executive director of The Exponential Center here at the museum.

Katz: So, let's get started with some easy questions to get Kanwal into the mood of speaking. Tell us a little bit about how you grew up and what kind of family were you and what did your parents do and what did you like to do as a kid?

Rekhi: So, I had a very interesting start. I was born in Pakistan, before partition in 1945 in what was still India, and the British were getting ready to leave. My father, who had gone to war in Africa, had come back and got promoted to become an officer in the union army. So, it was a very exciting period. I was only two when we left Pakistan. And I didn't start my schooling-- formal schooling-- till fifth grade. First four grades I was home-schooled by my grandfather, because we were moving from Pakistan to India and my father had just become officer, and we moved every six months to eight months in India. And, so, moved a lot and then finally settled in the City of Kanpur, which is about two hundred miles east of New Delhi, because my father felt "Our kids have to go to school," And, so, I had my formal education in Kanpur. Just to finish the story, in 1963, I went to IIT in Bombay. IIT was brand new. It was huge, being set up by the government of India to train the engineers for emergent India.

Katz: Before you got to IIT, what were you doing in formal education? How were you educated there?

Rekhi: Before it was regular public schools. What we call here in the US the public schools in India you would call them private schools, because public schools are like the British private schools in India. But, yeah, I went to the government schools.

Katz: Did you have any particular favorite topics?

Rekhi: Mathematics. Math. Yeah, the math was my favorite and, by extension, sciences, you know, physics, chemistry.

Katz: Okay. So, what made you decide for IIT?

Rekhi: By late fifties, if you remember, the world was very excited. The space stuff was starting to happen. The transistor radio had come and the early computers from IBM were happening. And, so there was the sense that, the science and technology is the future, especially in India. And IIT was this brand-new institution being set up by the government. The one I went to was set up with the Russian help, IIT Bombay. Russia and the US were the two superpowers and US set one up here. But the one I went to was set up with Russian help. There was one set up by German help, one set up by British help, and-- yeah. So, IIT Bombay.

Katz: Did they each have a different specialty?

Rekhi: They had to grow, civil, and electrical engineering everywhere. And IIT Bombay focused on metallurgy a lot, because the Russians were very much into metallurgy-- metallurgy and materials. And when the US had set one up in Kanpur in 1964 and that focused on computers. Computer science. And that became a center of excellence for that one. I was at IIT there were no computers there.

Hancock: You mentioned your love of math and the sciences. Did that come from you instinctively, from your family, or your environment? Where do you trace that?

Rekhi: No, there was no family background in math and sciences at all. As a matter of fact, there was no family background in education. My father was a high school graduate in 1941, That was considered very, very good. High school graduation was very good education. He joined the army, you know, started the war, and there was no family history of education. I was the first one in the family to go to college, be on my own. Yeah. And my older brothers both went into the army like my father did.

Katz: So, you went all the way through at Bombay?

Rekhi: IIT Bombay, which was about a thousand miles away from home.

Katz: Yeah. Were your grades okay there?

Rekhi: <laughs> Yeah, I was average. IIT Bombay, you know, I was a very good student before I went to IIT Bombay, but competition was very tough. Just about everybody at IIT Bombay was at the top of his class before he got there. So, it meant that everybody at IIT Bombay was being good. To get to the top there you had to be really sharp.

Katz: I understand. I can relate perfectly.

Rekhi: But I did all right. I held my own. The subjects I liked the best were the math and EE. Electrical Engineering is almost all math. So, I loved it, And [the] more abstract things were [the] better. I liked them. Field theory. Very few people like it, but I love field theory. Vector analysis. So, these are the subjects which were very abstract.

Katz: Were there any particular teachers who directed you or inspired you?

Rekhi: I don't remember any from my early days at all. Really. I was basically self-sufficient. There was nobody at home and nobody out there that was inspiring me. This news about the Sputnik being launched, and this ten-megaton bomb being blasted, and the fifty-megaton bomb being blasted in the open air. So, these were the stories, yeah. And, I was totally self-driven all the way through IIT.

Katz: All the way through IIT as well?

Rekhi: Yeah, all the way through IIT. I was pretty quiet, pretty shy. As a matter of fact, I was the "hidden person". Nobody noticed me as an individual. Not outgoing person. And it wasn't till much later in life I became-- Much later in life.

Katz: Okay. Well, you got out of IIT, did you go directly to graduate school?

Rekhi: Straight to Michigan Tech.

Katz: What made you choose Michigan Tech at the time?

Rekhi: Michigan Tech was very cheap. I chose a cheap place, about two hundred dollars a quarter in tuition, a hundred dollars a quarter in [other expenses].-- it was very cheap. Or they had a tuition aid to supplement most of my-- took care of most of my expenses. But from India here you don't know any difference between Michigan Tech and MIT and Stanford, because it didn't matter. This is long before the Internet. They all had nice brochures that I found in the library. You couldn't tell them apart a whole lot. But Michigan Tech offered financial aid. It was cheap.

Katz: Did you get through there in how much time? The normal amount?

Rekhi: Normal amount of time. Yep. So, there was a big transition that took place. I got to Michigan Tech, in EE (Electrical Engineering) hardware, EE power engineering at IIT-- transformers, motors, generators, you know, circuit analysis. And got to Michigan Tech and there's no power engineering. No EE. All here being taught was logic design, system design, control systems-- it was total transition overnight.

Katz: Did you enjoy that kind of stuff?

Rekhi: Oh, yeah. I loved it. I loved it. And I got to Michigan Tech, they had a computer center and within six weeks after I got there, yeah, I was the expert in FORTRAN on the campus. People were coming to me to help solve and develop-- software. And by the end of first semester I was very comfortable. Logic design was, well, made for me. Logical system design processes were just tailor made for me.

Hancock: At the time, did you imagine what kind of applications or jobs you would work in, given the larger kind of business and political environment that you mentioned? Exciting new technologies and new companies? Or were you just sort of discovering as you went along?

Rekhi: In US or in India?

Hancock: Either one. What was guiding your focus when you were in graduate school?

Rekhi: So, in India the job environment was very, very bad. Very, very bad. India was a socialist country. They had set up these centers of excellence for education, but they had not allowed industry to be set up. Yeah, the government was still trying- they were following the Russian model of planning and licensing the businesses. And, so, most of us who came out in my generation had no suitable job in India. You could be hired as a sales engineer, you could be hired as support engineer for one of the overseas, foreign companies. There were no design jobs. No engineering jobs to speak of. So, eighty to ninety percent of my classmates left India back in 1967. In US, you didn't worry about the jobs. In late 60s, the US was still hitting the full stride. Space program was on and all the people were being sent away to Vietnam. There was shortage of people for the jobs. And it wasn't till '7--- yeah, maybe I should talk about that when-- it wasn't till '70 when the things really slumped. In 1969, you know, we put the man on the moon, right? And there was no follow-up. And the Vietnam War was winding down. And people were returning back in large numbers. And there was a recession. I got my first job at Michigan Tech through the placement office at a company EAI, which was analog and hybrid computing company in New Jersey- and I was there seven months. And I got laid off .-

Katz: What were you working on at EAI?

Rekhi: Minicomputers.

Katz: You were designing logic?

Rekhi: Logic design, yeah. Part of the CPU. EAI had a mcomputer with mostly a sort of-- part of hybrid machine. They had a lot of computers and minicomputers. And they were building the next generation of minicomputers that I was hired for.

Katz: Were there other opportunities that you could have had or was that the only one?

Rekhi: Well, it was just the ideal thing for me to be doing. You know, I had a job offer from IBM. Maybe I should tell that story, also.

Katz: Sure.

Rekhi: I had a job offer from IBM also at the time.

Katz: Many people did at that time.

Rekhi: And, so, I didn't accept IBM job offer. I went to the smaller EAI in New Jersey. Then I got laid off at EAI seven months later-- eight months later. So, I re-applied to IBM for the job and IBM sent me a letter that I still have saved almost-- forty-eight years later-- they said that I was not eligible for a job at IBM for life, because I had turned them down without sufficient explanation by not accepting the job the year before. You know, they made me an offer, I was intending to send a letter [to answer "Please explain why aren't you coming?"] And I ignored that letter. -

Hancock: Interesting.

Rekhi: So, then I reapplied a year later. You know, they remembered!

<laughter>

Hancock: They had a file on you.

<laughter>

Rekhi: Yeah, they had a file on me. They had a dossier on me! You know, they remembered and said I was not eligible. I said, "Oh, my God." You know, IBM was eighty percent of the industry back then?

Katz: Yeah.

Rekhi: And I'm not eligible for a job at IBM ever. But my boss, that Ron Hickock--

Katz: He was at EAI?

Rekhi: Yeah, he was my boss at EAI. He was my boss at EAI. So, he had gone on to SEL.

Katz: Did he get laid off as well?

Rekhi: Well, we all got laid off. The whole thing was being shut down, right?

The whole minicomputer was being shut down. And, so, he accepted a job at SEL, Systems Engineering Labs, in Fort Lauderdale and, so, I called him up and he said, "Yeah, come on down here. We'll have a job for you." So, I went down there. And SEL was a minicomputer company, you know, doing real-time machines and mostly selling to NASA, if I remember right. They were real-time. But, by that time, Digital [Equipment Corp.] had emerged as the winner-- or was emerging as the winner. You know, with the PDP-11. Then, of course, there was Data General, which had emerged as the number two player. So, all these minicomputer [companies] - we had were all over. You know, there were dozens and dozens of them, right? If I remember right.

Katz: Low barriers to entry.

Rekhi: Yeah, well, there was no dominant player and everybody thought they could build. IBM was up there on the mainframes. So, SEL got in trouble, as you know, right? And SEL-- I was there maybe another seven-- eight months? If that long. I got laid off second time. Because SEL was not able to sustain its business either. And I thought maybe I'll go back [to New Jersey] and work for a larger company. I went to work for RCA, RCA computer systems. And RCA was also in trouble! <laughs> Because their pitch was "Ten percent better for ten percent less". IBM compatible mainframes, which were ten percent better than IBM machines, but they were [sold] for ten percent less. And when IBM released IBM 370, which was sort of forty percent better than the IBM 360 for same price, the RCA-- RCA went down overnight. We heard on the NBC news that RCA will be shutting down before the end of the year. This was around September. So, you knew that end of the year, your job is done. And we didn't hear from RCA itself for a good month, other than that "They are shutting down," after hearing that on the news. The chairman of the board of RCA, you know, was also the chairman of the board of NBC. NBC and RCA were both RCA. He announced that they were pulling out of the computer business and, so, that was in the late '71 and I came out West here. And, so, I was in the valley in late '71.

Hancock: Before you talk about your arrival in the valley I'd love to hear about what impact this had, two quick layoffs in succession--

Rekhi: Three!

Hancock: --and then the company closing down.

Rekhi: Well, , it shook [sic] you up, you know, shook you up, because none of my friends were being laid off, especially the ones who went and worked for IBM.

<laughter>

Rekhi: Yeah, yeah. And they would make fun of me. Because I turned IBM down. Which was sort of unthinkable for them. Why would anybody turn IBM down? So, it shook you up as a person, because "Is it me? Am I making wrong choices?" And you don't understand the business side of it fully. You don't understand the consolidation taking place in the back. I was only twenty-four, twenty-five at the time. And I had just gotten married also. Yeah, yeah. As a matter of fact, we had our wedding reception at Jeff's house.

Hancock: That's wonderful.

Rekhi: Yeah. And in spring of '71. And, so, I was-- wasn't sure, but young, not really, but your life-- masters in EE, "I'm sure there's a job for me in America."

Katz: I have a-- before you get off that topic, I have an unusual aspect to you-- to your career here. As a cerebral engineering shy person, you didn't have a lot of physicality to you. But in order to have a party at our house, you helped me to build the fence in the back yard with manual labor, pounding stakes and nailing--

Rekhi: That was first time in my life I did that.

Katz: And probably you got some blisters doing it.

Sorry for the interruption. Let's go ahead here.

Rekhi: Yeah, '71 was also a very bad time for US. I remember. There was a very big recession. Vietnam War had done horribly year-round and there was a lack of confidence in US. Space program was having problems. And US, which was at the top of its game in '67, confident, yeah, was not so confident in '71. And especially on the east coast, which is where the center of gravity was. So, coming out west, it was a different world. You came from Fort Lauderdale to California: Everyone was upbeat, "We own the world"! None of the problems that you felt on the east coast were being seen as problems here. This whole new industry was emerging and, it was a very big change for me as an individual. But it suited me just fine, because here-- I come here and loved logic design, system design and-- yeah, jobs were plentiful here. You could get a new job every week if you wanted to.

Hancock: And you looked at the landscape with all this new opportunity, what were the options that you considered in terms of the different companies and teams and projects?

Rekhi: So, having been laid off three times I did some introspection and I said, "I wasn't smart enough to see these companies were not good companies to work for. They were in trouble before I got there or they will be in trouble soon." And I also told myself that nobody will ever lay me off ever again in my life. You know, I should own my own career. So, I became pretty much expert in résumé and job finding. I had my résumé up to date and I was sending them out and interviewing and having job-- yeah, I didn't want to be caught without a job. So, I was always interviewing and always had a job. I went all over US, any company, you know, anywhere in US, I'll send my résumé. I didn't want to be laid off a fourth time. And it was two- three years before I started feeling, "Oh, nobody's going to ever lay me off again. I'm very good at what I do." But for two- three years I was always sending résumés out and always getting job offers and turning them down. So, it was maybe '74, '75 when I started to feel very good about myself and--

Katz: When you got to California, you must have-- did you have more than one job offer there?

Rekhi: I had a job offer with a company in southern California called SDS.

Scientific Data Systems.

Katz: Mm-hm. Ultimately, they got in trouble, too.

Rekhi: Yeah. They were acquired by Xerox and they got in trouble very quickly after that one. And, so, I had to choose between SDS and this job at Singer Link in Sunnyvale, I liked this area better than Southern California. That was the primary reason I took the job here. But, also, there was a little bit of job stability built into Singer link, a Defense contractor. They had a new contract we had just won. So, you knew they had a stable job for at least two years.

Katz: They were making simulators for the Apollo program, weren't they?

Rekhi: They were making simulators for Air Force, Navy, NASA, private airlines. Almost in every and all planes being built here we had simulators for. And I got hired when the world was changing from analog simulation to digital simulation. I was one of the first set of engineers hired to make that transition happen. It was pretty massive change for the company. Even though I was a junior engineer, I emerged very quickly as the lynchpin, because we built these massive pipelined systems to implement algorithms in hardware. Very complex algorithms in hardware. And it was just the natural thing for me to be doing. So, I would design systems with-- oh-- yeah, two hundred, three hundred, four hundred boards in it. A massive amount of memory-- 64-megabyte of memory. <laughs>

Hancock: Wow! That's a lot. <laughs>

Rekhi: Yeah, back then it was a massive amount of memory. And these systems were running at ten megahertz speed, which is 100 nanosecond cycle. Pumping the data through at a massive rate. To implement a real-time motion of the plane and what you would see out of windows, and what you would see on the radar screen, you know, on the-- pumping data through these pipelines. And within two- three years, by 1975, I was the system engineer on these types of machines. And I had become an asset as per one of the Air Force generals, because some of these machines I was doing for them, they were just loving it.

Katz: I'll interject another personal note here. It was at that time when I finally left SEL in '76.

Rekhi: Yeah, in '76 you did.

Katz: And among other places that I considered was Singer Link at your recommendation. And I came close to taking that job. Instead I went to the semiconductor industry, but I was impressed that you, as a younger guy than I, had achieved pretty high status over there at Singer Link.

Rekhi: Well, yes, Singer Link I became-- see, ideally, they were changing, right? They needed to set up systems. These are the early days of PROMs and ROMS and PLAs, and they needed to be programmed and they needed to be-- So, I took it upon myself to set up systems. And with my background in Fortran programming and my hardware background, I became very good at setting up very complex systems for them, so it would sustain these complex machines without massive effort. And I also learned very quickly when you had this large machine how do you debug this machine. You have to build in diagnostics. And I specialized in building in diagnostics, self-testing. How do you make these machines self-test and report their error? So, there was the very wide-- and there was nobody to mentor me. There was nobody to teach me, because I was one of the first [digital] engineers they hired.

Katz: How did you get that job? How did they decide you were it?

Rekhi: I don't know that part, because-- you'll have to ask somebody over there. But they were transitioning from analog to digital, so they wanted digital engineers. So, I was a generic digital engineer and-- but within three- four years, you know, I would spend fifteen- sixteen hours a day at [the] job, because it was really fun. I was doing things way beyond any of my-- cohorts was doing at the time. I was setting up very complex systems, I was learning new stuff. And, by the way, I also went through all the early bird programs at Santa Clara University through that whole phase-- '72, '73, '74, '75, '76-- I took all the courses. You know, I took power design, database design, also in business and also in law. I was taking all the classes available at Santa Clara University and then eventually some classes at Stanford also. So, there was this supplemental education I was taking to broaden my thinking and base. but it was mostly on my own. If this thing needs to be done, nobody but me is even aware that that needs to be done, I have time, I'll--

Katz: Were there any professors at the schools you went to at that time that influenced you more greatly than others?

Rekhi: You know, the early morning-- early bird programs, yeah, professors don't pay much attention to you, right? Yeah. This is 1979. No. It was me just going for it. It needed to be done. Nobody in management was aware of it and why not this-- if you don't set up a PROM burn-in system, you will be in trouble very quickly. If you don't set up this venture... Yeah, so I would set them up, yeah, and I'll tell maybe a story. So, '76, things are working well and somebody-- I think general manager-- asked, "How do we do this stuff? How do we burn PROMs? How do we make sure they are done right?" Nobody in the staff knew how we do it.

And the guy who was in charge of the area where this stuff needed to be done he came and asked his people, "How do we do it?" And eventually somebody says, "Well, you know, this guy in engineering team is setting up for us and he trained us how to run the system." So, he calls me up, he says, "Why did you do it?" I said, "It needed to be done." He said, "It wasn't your job. It was my job." Yeah, I said, "Oh." And he said, "You shouldn't be doing the stuff that you're not assigned to." And I said, "Okay." I went and shut the system down.

<laughter>

Rekhi: Yeah, I said they don't appreciate it, I'll pull the plug on that one. The whole thing came to a screeching halt. And, all of a sudden, nothing is working in the company. And, so, then the general manager asked-- he said, "What happened here?" So, this guy comes and says, "Yeah, we need your help." I said, "No, no. It wasn't my job. I wasn't supposed to be doing it." And I made him really get on his

hands and knees to beg, because he was about to be fired. Yeah. And, so, after that one nobody ever messed with me.

<laughter>

Hancock: That's a great story.

Rekhi: Yeah, I had become very self-driven, self-sustaining. You know forward looking guy. It prepared me for life very, very well. By the time, I-- I'll give you the end of the story. So, there was a chain of management up New York, the headquarters. I was with Link here. Link was based in Binghamton, New York. And the new general manager came out here and he was-- you know, he didn't know what was going on, what's power structure here.

He looked at all of us, you know, and he said, "You know, there are going to be changes here. You guys have been-- yeah. You've had too much freedom." Blah, blah. Blah. And that's the first time I said, "Yeah, he's probably right. There are going to be changes here. What am I doing here?" And I'm limited here because nobody here is teaching me anything and there's opportunities-- I'm making money, but, yeah, seventy-five thousand a year is not bad money, but-- yeah. And this valley becoming-- this is '78, '79-- this valley is becoming a different valley. Lots of start-ups, lots of start-ups. Earlier there were a handful of start-ups, but now they just start up almost every day.

And why not me? You know, that I decided around that time. And this one person-- I'll use a pseudonym, because he's still around, went and started a company. Yeah, he used to work for me. I trained him and I saw his name in the press as the founder for the company. I said, "David Jackson. David Jackson is an entrepreneur. Somebody I trained. Somebody who worked for me. So, what's the matter with me? Why am I stuck here?" And, well, he started one of the microcomputer companies here in the valley and it just totally destabilized me as an individual. Why not me? And, "Well, I don't speak well, I'm an immigrant-- David Jackson is immigrant!" He was from England.

<laughter>

Rekhi: "He's also an immigrant!" So, after that morning I just could not get rid of the thought of not being an entrepreneur. And it was just a matter of time. Nothing mattered after that point. I had to go see if I can do it.

Katz: So, you went directly from Singer Link to being an entrepreneur.

Rekhi: No. No. So, Singer Link was a defense contractor. And there was too much rumor out there. Singer Link wasn't using microprocessors, wasn't using DRAMs and honestly, I felt that mil spec parts-- mil standard mil spec parts-- all of a sudden, you realize very quickly you're being sort of not part of the mainstream in the valley. And defense work-- so I thought I need to jump from defense into commercial world. And very quickly they said nobody will hire me. I interviewed maybe fifty companies, nobody would hire me. Nine years at defense contractor, ten years, you know, you're a lifer. How can you be any good? Look, because commercial people don't think very highly of defense people. And I thought of myself as the best of the best. And nobody would hire me. So, I took a job at Zilog with a big pay cut. A forty percent pay cut.

Katz: When was that?

Rekhi: 1980. Big pay cut. I got a job at Zilog and this guy looked at me and he says, "Why should I take risk with you? You have been at Link for nine years." I mean he was pretty insulting, but I started up. I took the job. Within six months I was at the top of the world, you know. Their computers didn't work. Their systems were chaotic. You know, we had these minicomputers and a network-- just didn't work. Just wasn't reliable. Computers would crash. Every machine they produced had a different emphasis. So, I came in as the hardware manager and within six months I cleaned up the family of machines. It became a reliable network, made them reliable, and, all of a sudden, they're starting to depend upon me being driven--

Katz: You were working on systems level stuff for the back room or were you working on products that were selling?

Rekhi: No, products they were selling, which were unreliable and customers were very unhappy. I came in as the head of the hardware division. Yeah. They had this thing called Znet. They had this machine called MCZ machine, which was a Z80-based CPM machine and they had, yeah, this-- it was full system level stuff, but it was very unreliable. You know, systems were flaky and software would run on this machine and would not run on that machine. And I discovered very quickly how they had timing problems in the environment which-- you know, I fixed the whole thing in six months. The whole thing was in a different-- and that's when I said, "Yeah, I'm ready for the world."

Katz: Mm-hm.

Rekhi: So, I was there at Zilog, six- seven months and maybe a year. And within six months I left to tend to my plan. And--

Katz: For whom did you work there?

Rekhi: Mm?

Katz: Who did you work for there?

Rekhi: Yeah, there was this guy by the name of Doug Schwartz, who was the computer system group-- yeah. If you remember, Zilog was owned by Exxon.

Katz: At that time, yeah.

Rekhi: At that time. And, yeah, Exxon was ready to take on IBM and they were buying companies left and right. And there was this guy by the name of Manny Fernandez. You know, he was the president of Zilog. Well, nobody else saw him. Nobody knew what he does. He was out there. And so, the guy who ran the systems division, you know, who hired me, Doug Schwartz, he left six-- right after I made things work, he left to build his own start-up. And, you know, the software guy working with me and all that-- this group left-- Judy Estrin--

Katz: Mm-hm.

Rekhi: --and Ed Donamo [ph?], and what-- Bill-- what was Bill's last name? Bill left to start up-- it was called Basic Work [ph?], right? Well, so I was hired to replace Judy who was the hardware engineering manager before me. So, they left to start Bridge Computer and they left this mess behind that I cleaned up. And then after I got done there I said, "Mm.. Yeah, networking is something which is happening." IBM PC was announced in '71 [ed: '81] and then Ethernet spec was announced in '71 [ed: '81].

And, so, there was this thing in air that [the] world was about to change. The personal computers, networking will happen, servers will happen. And when the IBM, Digital and Xerox announced Ethernet they also announced that chips will be available in three to four years. Intel said their chip will be ready in about three to four years, and business relationship will begin in about four to five years. And I looked at the specs and I said, "Oh, this is easy stuff. I can implement this today." I sat down and I designed an Ethernet board— for, if you remember, we used to do that on the drafting board. This design should work! And once I became very convinced this design I should be working on, we left to start--

Katz: You were still at Zilog at the time?

Rekhi: Yeah. Yeah. I said, "This design should work off-the-shelf with no special-- with some PALs and PROMs," which were available which I needed to program. But that design that worked. And I said, "If I make this design work on Multibus, which is the original bus that we used, "and Unix-bus and q-bus and-

- I will have a system that works and translate different computers." And when I made it work for the IBM PC bus and I made it work for the Apple— Mac, yeah-- net. So, we had the same design, we were able to shoehorn into all these machines. And that was the basis of Excelan. You know, excellence in local area networking. And we really were the first to offer the heterogeneous networking at full speed, bus speed, for PC to Unix to Vax And that was our main message: Come to us if you have a PC, Unix machine, perhaps we can do file transfers. We can do what you're needing. And, so, Ethernet specs I implemented, you know, into hardware because of my synergies. You know, I was a magician with hardware. But in networking it's all about software. And, you know, Digital had their DECNet. Digital and Xerox announced their XNS, Xerox network systems. And Intel adopted OS, ISO portals and none of them was really out there in real world functioning well. Yeah. And clearly, they were all proprietary to them. And I said, "Yeah, if I was a user now what do I need? I need to do file transfers from here to there to here and I looked around and TCP/IP was being used by the Department of Defense for that purpose alone. You know, it was a multi-system portal. And the problem with TC/IP was it was designed for the slow haul wide-area networks..

Katz: They were all telephone based.

Rekhi: They were all telephone based, you know, and they were error-prone Networks, so it was designed as a heavy-duty protocol to be free from errors and it was slow. It didn't have to be fast because, you know, the underlying network was slow. So there was this belief that TC/IP is totally unsuited for this high performance, high speed reliable Ethernet. And I said, "Ooh, maybe if underlying network is fast and reliable and all those error would and determine your teams by what we needed. And probably software can be tuned up to become a little faster -- it shouldn't be slow." So I was the first one to adopt that. And as developer Judy Estrin, you know, who was at Bridge, looked at me and said, "Yeah, at one of the conference, you know? Yeah, we brain[stormed] that to do yeah, put TC/IP on Ethernet because it's like putting a horse into a finely tuned car."

<laughter>

Katz: I see.

Rekhi: I said, "Okay. All right." Yeah. But it does work. It does transfer, you know, and it turn out be, not that slow, not that, bad,. So TC/IP worked really, really well. We were the only people in 1984-'85, who offered you a solution, who could transfer files at full speed between the PCs, UNIX machines and all sorts of minicomputers, both VAX and all the PDP machines and eventually to the mainframes and also to the Apple Macintoshes.

Hancock: I'd like to go back, just if I may, to the time when you were founding the company. I believe it was 1982.

Rekhi: Yeah.

Hancock: You've talked about the technical solutions that you were bringing to the users. What was the time that catalyzed you to actually found the company when you sort of realized what your business model might be and the founding of the company?

Rekhi: So maybe a story around the founding of the company. By 1981, December, I was sure we have a design that would work, you know, to implement Ethernet portals.

Hancock: What made you sure?

Rekhi: Intel had two-board solution and nobody else had a solution. We built a network where we used Intel on one side and I'm trying to remember who, maybe it was 3Com. Maybe 3Com had a board and our boards and we made them work very easily out a 4, 5 machine.

Katz: 3-Com was <laughs> was to some extent from Zilog, but mostly from PARC. Xerox PARC.

Hancock: Xerox PARC.

Rekhi: Yeah. So when Xerox-- I mean when Zilog was doing ZNet that I was fixing, you know, Zilog had hired 3Com to do the Ethernet designs for them to replace ZNet.

Katz: I see.

Rekhi: So it was a contract, you know, that never totally-- I mean they got paid to do the work but Xerox-- I mean Zilog was falling apart so it, you know.

Katz: They never implemented it.

Rekhi: They, yeah. So Bob Metcalf left with that design to do ---. So Bob Metcalf had a plan which was similar to the plan that we implemented at Excelan. He was going to do the boards. He had a Multibus board and he was going to do all the boards for all the machines. But then the IBM PC was announced. So they dumped everything and focused on IBM PC only as this, you know, so PC to PC, communication. So 3-Com, did that one. But most of the designs became very clear, you know, so we thought, we will start a company and ran into the problems of funding. The VCs who looked at the plan and say, "We love what you're doing but you guys are engineers here. There's no business guy in the team here." And after

about 50 VCs telling you that, you know, it's because, you know, there's no white man in the team. You know, you Indians are in the backroom, all three partners were Indians. And, there was also a fear that sales and marketing and finance is not an Indian expertise. And even if you are able to do it, you will have to hire the people and they may not work for Indians. The tradition of Indian bosses were not quite there yet, right? So John Bosch at Bay Partners looked at me and said, "You know, I love the plan you guys have. Why don't you go hire some business people to help you implement" And says "If you are in need of sales and, you know, that's the dream." He says, "Well, Indians have not been entrepreneurs." And then he says, "Why not? Why haven't they been entrepreneurs?" and, you know, he says, "Maybe it's time to try one." John Bosch says, "Maybe it's time to try one." And then he looked at us and he says, "Tell you what? I'll make you an offer and you have 15 minutes to decide."

Katz: He said this or you did?

Rekhi: He said that. "I'll make you an offer and you have 15 minutes to decide."

Katz: Just like a "Shark Tank," huh?

Rekhi: Yeah. But he offered us \$2 million for half the company. I thought that was very fair offer, very fair offer. Said, "No problem, we'll take it. We'll take it. And we-- yeah, we didn't need 15 minutes. We didn't need <laughs> we didn't need 15 seconds."

Hancock: <laughs>

Rekhi: And, you know, so it's \$2 million offer for 50 percent company. That was pretty standard offer in the Valley, by the way, at the time. The offer used to 50 2 million-- two and a half million for 50 percent of the company and then 20 percent fully setup, so 40-40-20 was but only a 40 percent owned by the investors, 40 percent owned by the founders, 20 percent for the employees. And that's the model that we have, yeah. And so, you know, John Bosch, by the way, did very, very well, At the end he made over 100 times his money. And yeah, he used to brag about that he discovered Indians in the Valley.

So by the time we got funded there was this company called Vast [ph?] Computer Company, Vector -- Vector Computer. This guy, I'm trying to remember his name. He was the head of sales at Altos -- Altos Computers. And he made 20, 30, \$40 million. So he left Altos and he wanted to do one of the UNIX hot boxes. He wanted to build a UNIX machine and he hired Doug Watts, my old boss, to design the UNIX machine. And Doug Watts called me up and says, "Hey, we need an Ethernet board for our machine. Yeah, can you do Ethernet board for us-- our machine?" And I had this design that I had done, you know, a Multibus design that I told in starting any machine. I say, "Yeah." So he gave us \$100,000 contract and we said, "We can do that in three months." And he says, "If you can do it in three months I'll 150, but I need it-- definitely need it in six months." So we got \$150,000 from him. So they had this machine, And by

the way, by the end of '82, '83 there were about 35, 40 machine companies doing the UNIX hot boxes, including Intel, including Intel. You know, Multibus, you know, Multibus 286 from Intel, there was National processor, you know, if I remember right and Sun was there, Apollo was there. There were about 35, 45 companies and we about 30 of them as our OEMs. We had everybody, you know, except--

Katz: How did you get that? How did you-- what did you do for sales to get into those companies?

Rekhi: OEM sales, we had an OEM sales guy. And there were very few people offering, you know, what we were offering. And most of these people weren't serious they needed the checkbox [check the box], I have Ethernet, you know.

Katz: Mm-hm.

Rekhi: And so yeah, we were a cheap way to the checkbox. But for what happened to us, you know, Sun and Apollo emerged as winners and we didn't have those two guys as our customers. The other 33 ones we had they weren't doing much revenue. So, NCR was a customer, Maelstrom was a customer? So we're doing \$5 million in revenue and I'm saying, "Wow, we have almost all the potential customers and there's not much revenue. So we were in big trouble. We were in very big trouble because our revenues were not materializing and because these guys have to go sell their machines to have create volume for us and yeah, and they were losing out to Sun and Apollo. So that's when I decided to go direct, you know, to the consumers. We ended up packaging our solution for IBM PC, for Macintosh, for standard UNIX machines and minicomputers and sold as a TCP/IP Notes, you know, to the consumers directly and that turned out to be a very good decision.

Katz: Through what channel?

Rekhi: There were no channels. So in this today's parlance you would say online. We advertised heavily, operators standing by, 100 percent money back guarantee, And so it was-- so maybe another point I want to make here. So to be sold over the phone by advertising heavily and the pricing became a big issue. There were no models for software pricing out there. Hardware, it cost you \$200 to build a board, price it \$1000, you know, and it give customers 50 percent discount and said at \$500 that you have 50 percent margin. That was pretty standard practice, right? Everybody wanted yeah, 50 percent disc-- volume discount. Software? How do you price software? And so we had TCP/IP software for IBM PC, for UNIX machines, for microVAXs, for VAXs, you know, for PDP machines, for mainframes. So my partner was yeah, but then he had priced everything at \$60 for software, \$60 per copy. That's what we were charging the OEMs and that's what he thought we'll charge the end-users. And the math, that didn't work! So he got fired. By the way, when the company was in trouble and my partner got fired by the board and I became the man. And so I decided yeah, I'm going to raise prices.

Katz: So you had split the responsibilities at Excelan?

Rekhi: Yeah.

Katz: You did hardware? You did sales?

Rekhi: No, I did all the engineering work--

Katz: Engineering.

Rekhi: -- and he was selling and marketing. We were co-CEOs but he was a front CEO. You know, he was seen as a CEO and I was the backroom guy. So once he got fired, I took over everything. So overnight I raised the prices tenfold, from \$60 to \$600. And my, VP of sales was pretty upset. He says, you know, he says, "Floppy disk, how can charge \$600 for that one?" And I said, "Let's go see," and the prices stuck. And then I said, "Oh, I messed up." You know, prices, you know, nobody-- not one customer objected.

Then I started looked around. I said, "Digital sells DECNet, which is a comparable solution, to ours. How much do they charge?" And they start-- they start-- is charging \$30,000 for a board and DECNet software. Yeah, in my world that was \$2,000 for the board, 60, you know, \$600 for the-- probably \$600. I said, "No, no, that doesn't make sense, you know, if we need to raise prices." And I said, "We are not Digital. We don't have a brand. But we'll sell them at half the price of Digital. So we'll sell-- listed price at \$14,995. And everybody around the table looked at me and says, "Sure." And I said, "Money back guarantee. If this doesn't work, you know, we'll give you money back." And that price stuck and we sold lots of boards for VAXes Ylif you do the math the prices-- software prices were no,

Katz: Your customers had to be companies that were able to put that kind of money out. They weren't individuals, right?

Rekhi: Oh, this was all companies. Oh, but no individuals were buying machines. No individuals were buying. See everybody-- every company had couple of PCs, handful of PCs, had couple of UNIX machines and a Digital machine in the backroom, number 20, right? PC, you know, remember this is now '82, '83, PCs are still a novelty. All these UNIX machines are being bought from all over. So there was not a massive volume out there. So I did the math at one time. The number for all the computers sold by non-PC people, you know, IBM, Digital and there were less than 50,000 computers sold by that time. And IBM had sold about maybe 4,000 of them, 5,000 and about 25,000 were sold by Digital, smaller machines. And I did the math. If you have VAX and a few UNIX machines and 10 PCs you need me. Because besides me, now there's no easy way to transfer files. There's no easy way to do the PC to VAX.

So if this one is charging you \$30,000, you know, you'll rather buy from me at \$14,995 or \$15,000. So those machines, sold well, a couple hundred a month. And that's good money. And 90 percent plus margin, right? And then I priced the same solution for UNIX machines at \$9,995, Digital and mini computers. And I priced the same solution for the micoVAXs and micro supermicros at \$5,000. You know, so all a sudden prices are matched with the--

Katz: It's all the same product?.

Rekhi: Same product. Same software, same product. And same product was being sold for IBM PC for \$2500. And the IBM PC, because that's those are the prices yeah, which were, you know, so comparable to the market. So I learned very quick-- very early on, you know, that you price stuff, to what the market would bear. And, of course, by '85, '86, we were doing extremely well, profitable, growing nicely, all this thing we had. So we had transitioned from being an OEM supplier to the end-user supplier. And the OEMs now will come back to us, you know, and buy the fully packaged solution from us as it is just raw technology. So we'll give them the start of the list.

Katz: Would it be sold under your brand or theirs at the time?

Rekhi: I didn't care. I didn't care. Siemens came and bought from us. They made us sign the papers that we would never tell the world that Siemens stuff is our stuff. Yeah. And so once we became popular, you know, Siemens came back and asked for permission to announce to the world that their stuff is our stuff.

<laughter>

Rekhi: Because, you know, by '86, the PC/IP implementation from Excelan was this time oh, you have to work with us to be accepted as TCP/IP implementation. Eric Schmidt at Sun, who was the head of engineering, he and I used to sponsor a thing called TiEcon, you know, which will be set up a network and we choose yeah, where everybody's booth will be networked, you know, so they could talk to each other to demonstrate, you know, that TCP/IP is fully operable. You know, Eric and I used to sponsor probably 2, 3, 4 years. And this Dan Lynch, I don't know if you ever heard of Dan Lynch?

Katz: I've heard of him.

Rekhi: Dan Lynch was a guy who came out of UCLA. See, TCP/IP and Internet at least came out of UCLA. So when that accepted that they were going to launch the network, the ARPANET, the ARPANET, so he was the guy who took the tape out of UCLA and went and started Oxford, AT&T, Princeton, Berkeley, the original nodes of the Internet. And so I hired him as a consultant to help us in '85, '86. And

he organized a show called "Interrupt." You know, "Interrupt" was the show about interoperability of a TCP/IP and Ethernet. And so it was set up with my help.

Dan Lynch became a pretty high-profile guy because he was the original investor in all this Internet startups in '95, '94, '95-- I mean '92, '93, I should use was. And so by late '80s, early '90s, you know, I was or except TCP/IP in the Valley because, you know, we were the only people till about '91, '92 who had bet the whole company on TCP/IP. Yeah, people were still waiting for the IO/OSI Intel, especially and IBM also. And digital had-- started to say that they will abandon that to do OSI. And OSI was going to be the next future. And I kept saying, "It's not going to happen. All these machines are not talking to each other, if they were doing very reliably. , people will have rip up a working solution to put this new stuff and never happened. And so I used do speeches at TCP/IP is it, all these one ruled by TCP/IP because it's evolving, getting better, faster, in every respect why would anybody change it?"

Katz: Interesting. Yeah. So you essentially were doing all the marketing as well then--

Rekhi: Oh yeah, absolutely. Absolutely. Absolutely.

Katz: -- and figuring out who would pay money for it.

Hancock: Yeah, pricing it to the market and the users.

Rekhi: Yeah, we had sold about a million machines before the word Internet was ever used., and so if you remember most of these machines were talking to each other in-- on campuses and it was a large number of machines talking to each other. And then a company Cisco came along yeah, with a router which will bridge this LAN to that LAN. So you-- so if you are a large company like GM, you have campuses across the country, they could make your local campuses to a national campus. So Cisco, brought you WAN, with the TCP/IP mindset. And initially they had a multi-portal drivers but then, between TCP/IP drivers. And along the way, somebody said, "We can have this private network talking to each other." So there was just no organized body. which said, "Let's do Internet." LANS became building to campuses to nationwide and then there was this group called, I'm trying to remember the name, that said, "Why don't we have a period point where we can exchange traffic between different companies LANS?" And so they set up this parts, pinpoints and all of a sudden you could send stuff from me, WABC to somebody else. And this, by '93, '94, stuff was easily being transferred back to the companies. Before that if you are Company A and you needed to send to somebody so you have to find your way to Berkeley and then those that have to find some way to where they have this basic Backbone Network so the address just to be and we already one of the one of the main nodes I'm at zero at ABC, at XYZ, at this, at this, at this, at this, at Excelan at Berkeley address would be this long. And then I will send yeah, this guy, blah, blah, blah at--

Rekhi: Forward. And it was overnight transfer, right, for transfers and email was overnight transfer, maybe half day. So there was this offer why don't we offer each person a name and domain name and routing will be supplied by the service? And once that happened he says, "Why do we need to have anybody know whose where? Yeah, why don't we have this domain name service we set up, connects, people to each other?" So by '93, '94, now you were able to transfer stuff. But we were the main underlying technology,

Katz: Were you following any of the ARPANET stuff because of who they were big on TCP/IP--

Rekhi: Oh yeah. That's when--

Katz: -- wide geographies.

Rekhi: No. That's where we--

Hancock: That's where they--

Rekhi: That's where we started.

Rekhi: We took the original ARPANET software and commercialized it. We didn't implement-- we didn't build TCP/IP from ground zero. We took the ARPANET software which was available to the public domain and we commercialized it, and we made it happen on all the machines. It's like the Open Source stuff now. We were the original Open Source guys who were selling the TCP/IP on all the machines and fully supporting it.

Hancock: For the record, could you talk a little bit more about when you say "we"?, who were the co-founders that were really the prime movers for your company?

And your roles, your respective roles?

Rekhi: So, there were three of us in the original team, came out of Zilog, Dr. Indir Mohnsen, Dr.Naveen Jan and me, a non-doctor but hardware wizard, Kanwal Rekhi. So we started in '82 for-- I mean we started in December of '81, that's why we did the incorporation, but '82 December is when we got funded. But yeah, before that we had done the board, we sold to Victory Computers. First paying customer was Plexus. I don't know if you remember that one, was right here down the street.

Hancock: Down the street here.

Rekhi: Yeah.

Hancock: Mm-hm.

Rekhi: And yeah, Plexus. So three founders Indir got fired by the board in '84, '85. Because of the pricing, going nowhere, over-promising, under delivering. The company was in trouble, and I took over as a CEO January, February of '85. And by end of '85, middle of '86, we were doing really well because I changed from OEM to the end-user company.

Hancock: It doesn't sound like that was an easy leadership transition.

Rekhi: No it was not easy. It was not easy leadership--

Hancock: Do you want to say more about that?

Rekhi: It's not-- it was not easy at all. As a matter of fact, it was very painful, because the company was out of money. The board fired Indir, and they said, "Have this and don't spend much money and make the money last." And I said, "Well you don't spend the money. If I don't do what I want to do, you know, be out of money within seven to eight months." So I told the board, I say, "What they going to do, fire me? Because they can't fire me because there's nobody left." But, six, seven months of very hard relations. But once money started to flow, once I changed prices was-- first time I change prices with \$600 all of a sudden they were ready to jump and they took notice oh, maybe there's something here. And then I started to change the prices for the other machines and all of a sudden now we were doing well, and we're not burning cash anymore. And yeah, so the team went from me being "a bum" to me being oh, you know, he's- "he's not that bad", to "he's very good". But maybe I should tell you the rest of the story. So by '86, we are doing extremely well. We are doing extremely well. The company's profitable and doing very nicely, we're going to go public.

Hancock: That was going to be our next question, about the road to IPO.

Rekhi: We're going to public. So now John Bosch, the guy who gave us the money, he comes and talks to me. He said, "You know, this thing is worth a lot of money. You've done a superb job. The company's profitable, growing nicely. We should take it public." I'm feeling well, he said, "We need to bring a CEO here." "What do you mean CEO? I'm the CEO." He says, "No, no, no. You are the operating guy. We need to have a CEO or looks like the CEO on the Wall Street." You know, "There's no Wall Street Indian

CEOs," he says." So, he asked me, "What do you want to do? You want to get rich or you want to be a CEO?" "I want to be-- oh sure, I want to get rich, you know, and I want to be a CEO also." But he said, "What if the Wall Street doesn't accept you as a CEO and the IPO fails? What happens?" And so I said, "Well, I don't want that to happen." So we brought a CEO in. We brought a CEO in from HP. A man by the name of Dick Moore. And he looked like a CEO, 6 foot 8, you know, the HP guys, right? You know, all the HP guys were six foot. They probably didn't promote anybody unless you were 6 foot 5 and above, right?

<laughter>

Rekhi: That was the HP model. He ran HP's calculator division, you know, the HP 35, HP 45 out of Oregon. So, he came on board and we went public. I was made chairman and did the IPO. But he turned out to be a super dud. He turned out to be a super dud. By the time he hit the road, we already knew he was bad. He couldn't even tell the story straight. But numbers kept happening. Then he got in trouble. In today's world, sexual harassment. He ended up having an affair with one of the employees and the board fired him. Right after the IPO the board fired him. Like three months after IPO I became the CEO and I stayed CEO till the very end. So this guy got fired from being CEO not because we were doing poorly but, So he was--

Rekhi: I don't think we have these issues of there anymore. Indians have done well in the Valley, right? Yeah, we have yeah, a lot examples of that now. But--

Hancock: You were part of that first generation, right--

Rekhi: Yeah.

Hancock: -- There was Suhas Patil at Cirrus Logic and you and that were-- you were the first. Is that right? The first--

Rekhi: Yeah. The first one in the Valley here to take it public.

Hancock: -- in America and then to yeah, take it public in NASDAQ.

Rekhi: Yeah. Yeah.

Katz: Were you part of the Road Show team?

Rekhi: Oh yeah.

Katz: You must've been.

Rekhi: Oh yeah. Yeah. Yeah. I mean Dick wouldn't have been any good on the IPO.

Katz: Yeah.

Hancock: Did you feel that there were people responding to you differently as not being the kind of CEO they expected or was your story just spoke for its own?

Rekhi: No, no, no. So by the time we hit the Road Show it was very clear that wouldn't have been an issue. Yeah, when we fired Dick Moore, there's no issue at all, you know, there was no issue. People knew by that time I was the one who built the company.

Katz: What was the date of the IPO?

Rekhi: IPO happened in February of '87.

Hancock: '87.

Katz: '87. Yeah.

Rekhi: Yeah. And April 27, I mean it's February 27th. You never forget those things!

Hancock: Tell us about that day.

Rekhi: Hm?

Hancock: Tell us about what you remember about that day.

Rekhi: So--

Hancock: You say you'll never forget.

Rekhi: So there's several things I remember. The IPO process is a very intense process. And, you know, you're in the middle of all this decision-making to what is right, I tell you. So we have done the prospectus and we are going to go public. The night before ... so we said \$9 to \$12 on the prospectus and I thought that was terrible. It wasn't a very exciting number. The night before the banker comes and talks to me and Dick Moore. He says, "You know, we are in trouble. I don't think this IPO will take off tomorrow. We need to lower the price down to \$8. And Dick says, "Yeah, let's do it." I said, "No, we aren't going to do it. Let's postpone the IPO. Let's postpone the IPO. We don't need to it tomorrow. We don't need the money. We have the money in the bank. We're doing well." And the banker is taken aback. He says, "No, no we can make it happen at \$9." I said, "No. \$9-- I'm not anything at \$9. You know, you are going to take it at \$12 or are we going to postpone it." So we went at \$12. The next morning it opened at \$18. See this is when you don't need the money, you're doing well, you don't need to go public. The banker's interest is very simple, they're customers that are there, all the funds -- they want to sell them [the funds] a cheap stock.

Hancock: Mm-hm.

Rekhi: They do one deal with you, they sell them over and over, right? So, I realized very quickly that bankers do this to everybody. Yeah, let's lower the price because, yeah. But this guy was absolutely shocked that I was so firm. If you're not going to do it at the top of the range, let's not do it. Yeah. And then I just heard later they had the whole damn thing sold at 12. You know, they build the book, right? You know, they build the book and, you know, the book was built three times, four times over demand at 12. And he was just trying to sweeten the deal for his other guys. So that was one thing where I, you know, stood firm and Dick agreed right away "Let's lower the price." I mean it was amazing how quickly he folded his hand. So, there were situations on the road, where he'll start to wander off, talk about the reliability of washing machines and dryers as it is.

<laughter>

Rekhi: Yeah as it is, you know, reliability of our solution. So we-- the IPO was very successful and we never look bad, our numbers stayed very, very good.

Hancock: What were your revenues going out-- going in?

Rekhi: So we went public-- yeah. The day we went public our revenues were \$22 million and profit of \$3 million.

Katz: And what was the total raise?

Rekhi: We raised-- the company was priced at 140-- \$120 million and we raised about \$10 million. You can multiply all those numbers by a factor of 10 now to reach what will happen today. If \$22 million revenue back then would be \$200 million of revenue now. And \$3 million of profit would be \$30 million of profit, right? So we are doing about 15 percent--

Katz: So what'd you do with that money?

Rekhi: So a couple of stories and so we be in trouble. Six months, eight, six or eight months after the IPO they-- so there was this company in Walnut Creek that I wanted to acquire. And they had this technology which made the AppleTalk work on Ethernet. And so there was a very easy way to connect. Our solution was to put our board into the Macintoshes. He came up with a solution. had a solution where you connect the AppleTalk straight into our network.

So I wanted to acquire them and I went and talked to them. Did a deal at \$6 million, well, acquired them at \$6 million. The founder himself spent weeks and then even the thought today he says, "Oh this guy" he tells Dick Moore, "This guy's raping him." I'm raping him. They want a lot more. You know, they should be worth over \$10 million. He does a deal with Dick at eight and a half million dollars after he had shook hands with me-- at six. And Dick comes and says, "You know, he was very unhappy so I have to give him more." I say, "We don't have to do this deal. You know, we don't have to do the deal. They are making \$100 million revenue, they are unfunded and they are doing very well. So there was this issue that yeah I don't, you know, you can't be varying on the price. You can't be giving somebody more because he's unhappy right, on the deal. And so we did the deal at \$6 million. I didn't say if he shook hands with me and he doesn't want to do the deal, that's it, you know, we don't want to deal with him." He came back and said, "No, no, he wants to do the deal, that's it." So we used part of the cash there. But if you're profitable you don't need cash from outside, right? The company was building cash as we were profitable. We did another acquisition after that one before Microsoft and Novell came calling. They would acquire both of us. They wanted acquire us.

Katz: Individually or were they partnering with each other?

Hancock:

Rekhi: Well, they both offered partnership. But see I had a theory that both of them would need us. You know, both of them would need us. But Microsoft I thought especially would need us. Microsoft was very, very bad in technology They were good at PC and they had this Windows solution where four or five Windows Two, if you switch from Window one to Window two you lose everything that you had in the other window, right? And especially if you had networking, I switch my applications I need to maintain my network connections on the other application, otherwise application will die. And we taught Microsoft how to maintain your state-- there was this technical product that I'm trying to remember the name of the

product which was competing with Windows and it was very, very popular during the Windows two time. And we had made their solution become very good. And we also if you are using a PC you could use NetWare on one side, you could use batches on the other side. You could use the mainframe and we will do the switch within our software. So I knew we had become very good product for the average business which was NetWare and the mainframes and even the batches. And Microsoft said "Hey, can you give us the technology solution that you gave to acquire that?" We spent a lot of time with them to make their Windows become-- maintain the state when they switched the context. And yeah, similar thing we were teaching Novell. NetWare would take over the whole wire. If you put NetWare on that wire, nothing else to do on that wire. You know, Ethernet was designed to have multiple products on the same line. Novell would not let you do that. We had to teach Novell how to do that too. How do you make-- have them change the NetWare? So I knew both of them would need us. We were a technology rich networking company. And so they, when they started to, they put us, each one said don't work with the other. That's not going to happen. You know, we are independent company, we maximize our stuff. -

Katz: Were you aware that you were ripe for acquisition?

Rekhi: Oh yeah, yeah. I was very sure they were, their products.

Katz: Was that part of your long range plan is to get acquired?

Rekhi: You see by that time, you know, this is now '89, '90. You know, by that time I had a lot more financial here in my mind. I knew these guys took, they will try for a good premium or what you're making in the marketplace. Yeah, I had no long term thinking as individual, right? I was there to make money, I've done this thing So they both came, and I knew that either of them would do well. But I chose Novell, And that turned out to be one of the best decisions I ever made. Within a year after the merger normal day was 50, 60 percent premium over market to do they deal. Within a year Novell stock went up tenfold. Well, your stock deal, so if you bought the shares in that slot at the time of the IPO you would've made 15 times-- 16 times your money within two years out of that product. And John Bosch did very, very well because he held the stock, you know, through the merger with Novell. And so I ran Novell for two years. You know, Novell's CEO was very hands off. You know, —Ray Noorda was very, very hands off. So after the merger I ran Novell for two years.

Katz: Your title there was CTO, wasn't it?

Rekhi: I was a EVP, CTO. I was a member of the board. And I was part of the office of the president.

Katz: Ah.

Rekhi: So it was a very broad, [role]. See Ray was very hands off, so he loved to have me drive products. I was CTO, right? And I basically ran the company because, you know, yeah, the company had become very large and complex by that time, Novell, and we had started to become, yeah, we were doing-- Excelan was doing the-- at the time of the merger with Novell we were doing \$60 million in revenue and Novell was doing \$200 million in revenue. And 18 months later my company was doing close to a billion dollars in revenue and was worth about two and a half billion dollars in the market. And so, very rapid growth. Very complex product like now because yeah, Novell went from being the server for PCs to connection to VAXs to UNIX machines to mainframes. You know, but a very complex environment. So how do you evolve that? So I, yeah, I then essentially Novell '91, '92, you know, and '93 is when Novell got in trouble.

Katz: How'd that happen?

Rekhi: So Novell is a Utah company. Sort of Mormon company.

Katz: Were you physically based there?

Rekhi: I would travel to Utah three days a week. And I never lived there. But Novell had a very strong presence in the Valley because of Excelan and another acquisition they had done. Yeah. So maybe 40 percent of the employees were here in the Valley, 60 percent were in Utah. But it was run out of Provo, Utah. Novell had a jet. I would go on Monday morning, come back on Wednesday evening, spend Thursday here and go back on Friday morning and come back on Friday night. So I'd spend three days a week there.

So we acquired UNIX from AT&T after the merger. NetWare was a file server and I said, "let's go acquire UNIX and make that as an operating system for this-- all these Intel-based machines and we will have a application server and the file server." Microsoft was desktop and Microsoft was getting to the back end with NT,. But we had this very reliable operating system.

When we acquired UNIX from AT&T —but it turned out the NetWare guys hated UNIX. They had always seen UNIX as their enemy. And especially UNIX, which came out of New Jersey, and not California. And I am running Novell and they said I'm favoring UNIX over NetWare. And so they started to say, "Hey, I need to put somebody from Novell-- I mean from Utah". And so this big Utah/California stuff happened and they put this guy in charge of NetWare-- I mean UNIX and yeah. Eventually, it made him a part of the office of president and they just wouldn't accept UNIX as owned by Novell, even though they owned it and that UNIX/ NetWare fight sort of started. So finally I had to leave.

Katz: You left because you lost a technical battle?

Rekhi: No. No. I lost because it became very painful to stay. We were doing well in the marketplace. We were at the top of the world and we were fighting this nonsense about Belgian trade???.

Hancock: Internally.

Rekhi: Yeah. I kept telling, "Yeah, we own UNIX. What do you mean UNIX is the enemy? It's our own stuff. Yeah, what is based in New Jersey and what difference does that make?" And, we set up a UNIX development center in Utah, but that wasn't enough for them. And Ray became sort of a-- yeah, they would tell me, I am taking Utah people. They say, "We are public company. Yeah, you need to take care of your shareholders." They say, "I need to take care Utah people and eventually it became nonsense, right? And so we weren't starting business anymore. And so I'm putting in the time and energy but it's not fun anymore. I don't think they would have ever fired me, because I was on the board. The board loved me. The boss, he loved me. By that time, I was very popular on Wall Street. But it wasn't fun anymore.

Hancock: So you lost that love of it and there was this conflict internally. How to did that process end for you?

Rekhi: You were spending energy fighting the battles out there. No one spent the energy fighting the battles inside. Especially the battles inside which were nonsense battles, right? We tried to split the company into two divisions. Our UNIX division and NetWare division. But that wasn't enough, you know, and it became Utah vs California, Eventually my sense was that this thing was decide by the Mormon Church. Mormon Church had decided that (if you remember) Novell bought WordPerfect also.

Katz: Mm-hm.

Hancock: Mm-hm. I remember WordPerfect. Sure.

Rekhi: Yeah. Which was totally nonsense, thing to do. So the church, in my opinion, had decided that Microsoft was the enemy of the church. Novell's future was software and that would defeat Microsoft. And I would say, "No, no, no, Microsoft is a partner. They do the desktops, we do the servers,", because it was now our solutions. No, no, no, Microsoft is evil. No more evil than anybody else right? And so they had decided while the WordPerfect to get into desktop business and then they acquired DR-DOS. DRI, right, Digital Research, to then bring DOS into the company. Now we going to be DOS, WordPerfect and they acquired the Quattro Pro from Phillippe Kahn, you know, the right here, yeah. What was that company here in Scott's Valley?

Hancock: Borland.

Rekhi: Yeah. Yeah. Borland.

And then they tried to merge with Lotus.

Hancock: Yes.

Rekhi: That was all being done to have a fight with Microsoft. And I kept saying, "It's not our fight. We are networking. We are in the server business. UNIX our server business that's even stronger. Why do we have to fight with Microsoft? Microsoft, is not our enemy." All this nonsense became very, very painful.

Katz: Then Microsoft came up with Windows and so much for DOS.

Rekhi: Yeah. Oh, and so and Microsoft did put in Windows some code such that if it's on top of DR-DOS, trash. Yeah, which by the way, Microsoft paid \$100 million in damages to Novell. Novell was able to discover that Microsoft had gone out of its way to make the Windows not work with the DR-DOS. Yeah. Yeah. But Windows 3 took off, Windows 3 took off, then Windows, yeah, '95, then Window, I think by the time I left, you know, Window it was still Windows 3.1, or 3.11, whatever.

I had been working for long time, and it's very hard to be number two guy in the companies when you've been number one. And for a while I thought I was going to be running Novell. And once they decided, that wasn't the case, it became very painful.

Hancock: So we were just talking about sort of the financial position that you were in and what you had done to—prepare for the IPO.

Rekhi: So NetWare had done very, very, well They started at the same place as I did at the same time in '82 and they had gone three times as far and they acquired us. So I was very aware that, they had done three times better job than I had done at Excelan. Even though I was very proud of what I had done at Excelan, He acquired me. Right? And so I thought I'd learn from him. But I pretty soon discovered, he was in the PC business which is much faster growing business than I was. He wasn't even that good. He wasn't that sharp. His ideas were pretty wacky. So NetWare had this product, NetWare, they wanted to come up with this cheaper version of NetWare. Well, NetWare Star- Star NetWare, which charged more for a number user advanced NetWare. They had these five versions of NetWare, just because you want to change prices on them. And he had five development teams doing five different NetWares with five different sets of sources, five different set of documents.

And I got there and I said, "What is the difference with this stuff? Well, it's all NetWare." "What interoperate yeah, interoperate, you know, why do I have different sources?" "Well, this and that for light, you know, this is this, this is that." Just but he was charging for 20 users roughly about oh, a thousand dollars for NetWare. And he wanted to have five user version at \$295, yeah, wanted to have yeah 40, 50 user versions at \$30,000. So I came in and I said one day, I said, "No, no, we are going to do one NetWare. And we're going to sell licenses at 5, 10, 20 users." And by doing that one very quickly brought the development team down to half the size. And they said, "Oh, what if these people cheat?" People can't cheat. And we are selling them a licensed version of this. They have to insert that to make it happen. The R&D effort went down from about 35 percent of the sales to about 20 percent of the sales. You know, 15 percent improvement in profit simply because I said, "We are going to have one version-- one source, one team, one set of documents, one-- and simplify the business." Yeah. So I brought this whole thing into the light. And then I said, "Okay."

Katz: Did you have to run a big layoff to do that?

Rekhi: We had grown so rapidly that we didn't hire people. we didn't hire people. But yeah, we did do a small layoff. We did do small layoff.

And then I started to think through, all right, how do we raise prices on the high-end? Normally when you have the same software, every time you raise the number of users you cannot double the price you-- raise the price by 40, 50 percent. So I came up with this new version of NetWare, which was same source, but marketed and packaged slightly differently. The NetWare SFD, which was a fault-tolerant NetWare -- and we tripled the prices of that one. We didn't sell too many of that. But for everyone we sold, there was a high margin. So I was able to use old logic, how do you price to the market? See I come from the old sentiment of the value is in the eye of the customer. And it has nothing to do with your cost. Whether it cost you \$1, \$10, had nothing to do that one. What's his choice? What's his alternative? You know, if he's spending \$100 on something right now, he can do the same thing for a dollar, you should sell it for a dollar or two, right? You should sell him--

Give them some reason to move, some reason to move. But not you reducing the margins. Your margins are whittled down by your competition. If alternative appears to offer an alternative solution at lower price, that's what you need to beat. You don't lower the prices on your own, right? So Novell had become one of the most profitable companies. They were doing 40 percent pretax. Better than Microsoft back in '91. Microsoft was worth \$20 billion in the marketplace. Novell was worth \$12 billion in the marketplace back then. That was the high-water mark of Novell. Microsoft is worth now \$500 billion.

Katz: So ultimately you got into the internal strife and that kind of soured you. Was there a push or a pull to get you to do something differently?

Rekhi: So I turned on Novell-- I mean Ray Noorda, at the board. And Ray got very surprised because, you know, he thought I was his underling. And when I opened up on him that his nonsense, you know, happened to be at the board, he got very depressed. And he stopped coming to the company, he stopped coming to the board. Then he announced that he was going to resign as a CEO and chairman. And I was sure that I'm going to be CEO and chairman, but same thing happened. You know, we need to go get a CEO. So we got another CEO from HP at Novell. And we have acquired -- we had announced a WordPerfect merger, we hadn't finished the merger yet. And I'll tell you a story about Lotus, also in a minute. So we had this guy, Bob Frankenberg, you know, Bob Frankenberg was running the PC business [at HP].

Katz: I know him. Yeah.

Rekhi: And after Bob Frankenberg I realized that, HP is not training their people right. Bob Frankenberg comes to Novell. We are a business software company and we were in the process of acquiring WordPerfect, which is a business software/consumer software. And so I said at the first board meeting that, "Maybe we should cancel the merger with WordPerfect. Let Bob Frankenberg come on board, let him get settled, let him decide the strategy and then we do something. Why do we all saddle him with this merger?" And Bob looked at me and says, "The only reason I'm coming to Novell is because of WordPerfect merger. He wouldn't accept as ownership."

<laughter>

Rekhi: Yeah. So I knew that I had started on the wrong foot with him. And so after that one, he comes on board and he spends 99 percent of his time at WordPerfect, not only at WordPerfect, but WordPerfect had this consumer software for children that they were just starting up, and he got enamored with that one. So, NetWare got in trouble and after a while it was just too painful for me to hang around.

Lotus merger. So a year earlier Novell announced its merger with Lotus, right? But a very strange announcement, because there was no deal, there was no merger deal done. You hear in the press that Ray Noorda and Jim Manzi have agreed to merge Novell and Lotus. How many board of Novell? There was never a decision on the board [to merge with] Novell. And where's the deal? A deal is to be worked out. How can you announce a merger when the deal has not been worked out? So Jim Manzi, understands that the main company will become Lotus and he was the CEO of the new company. And here Novell is a lot more profitable, a lot bigger company than Lotus. How did they determine to be Lotus? So I say, "Oh, it's not going to happen. This merger is not going to happen. Ray is just playing."

And so Ray becomes unavailable after this merger deal is announced, and Jim now is looking to do the details. He can't find somebody to do the detail words, right? So he comes and sees me. He says, "We need to do the deal." I says, "What deal?" He said, "The one we announced. I say, "Yeah, working with

Ray, go do it. He say, "I can't find Ray." So I say, "Ray hasn't told me about any deal and what the deal terms are. I can't do anything." And Jim, he says, "What the heck is going on here at Novell?"

So he finally finds Ray. And Ray says, "Why don't you come up with the merger document. I'll sign it." He comes up with the merger document, that's when Ray will sign it? That's all very interesting." So they do something and now the deal comes to the Novell board. So I speak first. Larry Sonsini's on the board. Larry Sonsini speaks for Novell. Ray is a genius, he's done so many great deals. This is one more of the big deals that he's doing. He will build a large, powerful company. "Yes, I [Larry Sonsini] suggest everybody support the deal." I looked at the deal. I says, "I don't understand the deal. It doesn't make sense to me at. But if Ray wants to do it, I'll support it,." So the other board members stood all around. After I said, "I don't understand the deal," they all say the same thing, "I don't understand the deal. If Ray wants to do it, let's do it."

So Ray is the last, everybody has to deal with Ray, yeah, we'll support it. So Ray says, "You guys don't want to do the deal?" "Yeah, no." "So why are we doing this deal? Because, you know, you want do the deal." I said, "No, no, I don't do this deal. If it doesn't make sense to you, why should we do the deal?" And he pulls the plug on the deal.

And I knew from day one that he was going to do that, because you don't do a merger where all the details, terms are not fully agreed, right? You don't know the last detail, you announce a definite merger deal, by the time you announce. And so, you know, so it was like that, you know, and a little bit. But he got \$100 million worth of publicity from that announcement. That put Novell on a very different trajectory. So Novell, I wrote a blog, you know, you can find that on the Internet. I said, "Excelan Novell merger made in heaven and hell."

Hancock: And hell. Right, that was the wording.

Rekhi: Yeah, I know you saw that one, right?

Hancock: Yes.

Rekhi: Mm-hm. Because, it was a lot of problem in the building, when we were building the company. But then it became all nonsense. Yeah. Yeah.

Hancock: So in '95 you retired from-- is that right?

Rekhi: Yeah--

Hancock: -- from--

Rekhi: -- from No--

Hancock: -- from--

Rekhi: Yeah. Well, I-- '94, retired '94. Yeah. So Bob Frankenberg came on board at the end of '93. Yeah and so '94 I was there in name only. I was on the board. I'll show up for work maybe once a week. Because Bob didn't want me to leave. He didn't want me to leave. He wanted me to stay. And he said, "Take your time,". And by the end of '94 it became very clear. Staying just didn't make sense, because he wasn't utilizing me and but he didn't want the appearance of it that I had left, but I had to leave anyway.

Hancock: So how did you decide what's next? Somewhere along the line there were Cyber Media for part of the time.

Rekhi: So I left on January 1st of 1995 because I had to stay at least a day to get my full separation salary. There was a full, there was a big chunk of money. So I decided not to do anything like -- just became very active at TiE [The Indus Entrepreneurs]. You know, and--

Katz: Was TiE already in existence or did you start at that?

Rekhi: TiE was formed in '92. But it was sort of not very active operation till about '90, late '93. Yeah, '91, 1993 was a handful of us just discussing. So '94, March, it became visible to people, and we did a TiE conference to all -- a workshop for entrepreneurs. That was a very big hit and that put TiE on map and became very active. So I was-- it was in March of '94 when TiE really happened as we know. And in January of '95 I came out of Novell and I had no place to go to work. And my wife would say, "You are in my space. Go out and come back at 5 PM. I don't want you home before 5 PM."

<laughter>

Rekhi: And yeah, because we've been married for a long time and that's the way the life was right? And so I set up an office at TiE. TiE office would open on weekends and during the week it would be closed. So I set up an office, and I'll open the office in the morning. And people would drop in to bounce ideas off me, show me their plans, talk to me about the issues they have. So I became very busy very quickly, because the word was out that you could spend time with me. For me, I loved it because I had nothing to do there. I had my New York Times; I had my Wall Street Journal that I finished reading. and there's not much else to do right? But people were dropping in and through that process I became a mentor to lots of

entrepreneurs. I would send them to the VCs that I knew, and they're still not get funded. This is '95. I'm scratching my head here. It's been eight, nine years since we went public. A few other guys have done well, and the VCs are still not funding the Indian entrepreneurs. And I said, "Okay, we'll fund some of them ourselves." And '95 I funded seven companies. I brought little bit of a syndicate.

Hancock: So you were started as an angel and then you started a little syndicate work?

Rekhi: Yeah it was mostly of Syndicate of Angels. Every time I invest offered--

Katz: Were the other syndicate members Indians as well?

Rekhi: Half of them are Indian, half are... John Bosch, and John Boudrie They would invest in anything I would touch. They would jump right in. And there was a guy, Shea Homes -- Ed Shea. He became friends with me in the '80s and he invested with me in 50 companies. And so I invested in seven companies in '95 and all seven of them did very, very well. One of them was Cyber Media.

Katz: Was your role there as an advisor as well as an investor?

Rekhi: Most of the places as mentor to the founder and maybe board member.

Hancock: So you take board seats as well?

Rekhi: Yeah, I took the board seats at least half the companies I invested. I invested in 54 companies in about 8, 5, 7, 8 years, and I think I was a board member in about half of them. But I was a mentor in every one of them. That's what most entrepreneurs wanted.

Hancock: I'd like to for us here at the museum to get on record the beginning of TiE. So, it started with you said some informal conversations and then the conference. Could you take us back to that?

Rekhi: I'll take you back to TiE. But just to come back, you know, that seven companies I invested in '95, the first one got acquired in '96. I made more money than I invested in all the seven companies. <laughs> Then I say, "Oh, this is easy." You know, and after that I never looked back. You know, 23 companies-- 31 companies went bankrupt, 23 companies were either public or acquired. Six of them had the IPO. So it was phenomenally successful yeah, 10, 11 times my money cash on cash business.

So by '92 I had done well, the company had gone public. I was still at Novell. Suhas Patil, I think he's on the board here?

Hancock: He was just here last, actually last Wednesday. He's on our honorary council.

Rekhi: Yeah, Suhas Patil--

Hancock: Yes.

Rekhi: -- had started Cirrus Logic and had pioneered this whole fabless chip company. And there are three or four other guys, developers had done well. We didn't know each other. We weren't friends in the sense that ... But there was a Indian government bureaucrat who was in town. He invited us out for a lunch and we were all there. And after lunch we said, "We should to get to know each other. We should meet each other." And we set up a dinner between eight, nine of us once a month. And that's about I say '92 that we did that, '92. By '93, early '93, we said, you know, we all have-- we all just shared our stories and we all realized that we had similar experiences. We had to work our way to the top. We had to fight and nobody believed in us; nobody encouraged us; nobody inspired us. And it was very hard. It was lonely journey for most of us. And somebody said, "You know, it shouldn't have been that lonely. We should help our younger people to being entrepreneur. We should inspire; we should become role models; we should become mentors. And that was the genesis of TiE. We should start a workshop for entrepreneurs.

Katz: Were any of those nine the spark behind all the rest of the activity?

Rekhi: Suhas Patil and I did most of the... but I think they were all very active. The others were not as successful, had not taken companies public. So as you know, the entrepreneurs are very brutal. If you haven't done well how can you mentor me?

Katz: Yeah.

Rekhi: So entrepreneurs decide, you know, who they use as mentors. But Suhas had done well and the others had done, yeah, they put a lot of energy into TiE. So we thought we will get maybe 100 people for that workshop. And we prepared to have 100 people at-- we made the announcement and 500 people signed up.

Hancock: Hm, where was the location that you want had--

Rekhi: Fairmont, Fairmont in San Jose.

Hancock: In San José?

Rekhi: Yeah. All of a sudden, we had to change the room from small room to the ballroom. And now we said 500 people are coming here. We can't do on this random and what should we do to prepare? So it went through pretty yeah, massive preparation work -- have the presentations ready, have the material ready. And so, the first workshop was run in April, March/April of '94. And that was a very successful workshop and that put us on the map. And of all of a sudden we felt the burden of hey, there's a need here, there's a demand here and we volunteered to do it.

Katz: They were all from the Bay Area?

Rekhi: Yeah, mostly from Bay Area. I think there were a few random people from east coast -- maybe a dozen or so. But also the story was that it was not all Indian group. You know, the Japanese and the Americans also showed up, where 10 percent of the population was non-Indian. So even though it was Indian group. And so we made it very open TiE between on non-Indian, non-Chinese, I mean not, yeah, open to everybody. Even at this late stage, maybe a third of population that meet at events is non-Indian. And so '95 that I set up the office at TiE, TiE became more tangible. People would come and I did almost all of my work under the TiE--

Katz: Back up just a little bit more; how to TiE get its name?

Rekhi: So it was the International Entrepreneur, the Indian Entrepreneur and I stood up and said, you know, "No. No. It's Indian/U.S. entrepreneur, I-N-D capital U-S.

Katz: IndUS.

Hancock: IndUS.

Rekhi: IndUS, and all of a sudden I said that Indian/U.S., you know, the Indus Valley civilization, yeah, seems to fit. And we want to be red, white, and blue Americans, so TiE colors are red, white and blue. As it is, India's are in green, orange and white, right? So we wanted to be mainstream America so it was the name IndUS that put up with a capital U-S, you know, everybody loved it.

So the one thing I discovered, I was a hardcore cerebral engineer but my best work was done as a marketing guy: pricing, packaging, positioning. And so I became very aware, that how you do that has a

bigger impact than, what's in the box, right? If that's what you need to do to get in the door, if you don't get in the door, they don't even open your box to see what's in there, right? So, by that time, I had become pretty much a marketing guy in my thinking. And so TiE, when I set up the office of TiE, all these people were coming now. And in the building, I'm loving it, because it filled up my day. But there's endless demand. I couldn't get home at five. I couldn't get home at eight. And so I set up a system, you have to sign up ahead of time to come and see me. I hired an admin, my old admin from Novell. I hired her to, manage my time, but demand was unlimited. I mean I was doing 7 days a week, 8, 9, 10 people a day. And so I did that for about maybe 5, 6 years, maybe 7 years, and then I started to feel health problems. I needed to do more about my health. I was overweight. I was out of breath. If you read my blog see there's a blog out in 2002, where I said I need to go put, emphasis on myself, regenerate myself. I lost 70 pounds that year.

Hancock: Dramatic weight loss, right, and a change in priorities?

Rekhi: Yeah, a lot of weight loss. Weight loss from hiking, bicycling, becoming fit. So by the end of 2002, I had become, you know, very fit. The dot.com burst had happened and I had not seen it coming as clearly. I mean I knew dot.com and companies were not real in many cases, but I didn't expect everything to go, right? And so I had self-doubts, yeah, self-doubts in 2001, 2002. How could I mentor people, when I didn't see these big things like that happening, right? So by 2002, I had decided that I need to go fix myself. And so when I came out of that then by 2003, I was feeling very good and I started to see, that even though I had self-doubts, I should have been a little bit more forceful in my opinion. So I said I need to be a little bit more hard-nosed than I was. Even about the Valley, there's a lot more hype than reality. -

Hancock: How did you come to that conclusion?

Rekhi: Because I looked at the whole thing in totality. There were companies we had done, which had done extremely well. Even of the companies that I was involved, I missed the macro picture but at the microlevel, I was still very effective. And I was starting to see... And I engaged with India in 2000. I went to India and we did a seminar in New Delhi on *wealth creation Silicon Valley style, entrepreneurship and wealth creation*, and got this revolution going in India. And I was starting to see the impact I was having there. So it became very clear that I'm being unnecessarily harsh on myself. Yeah, the system as a whole failed, but I didn't think I had personally failed.

Hancock: I'd like to talk in a little more detail about your investments at the time. You gave a kind of some summary numbers about the total number of companies and your multiplication of your funds. But can you talk about how you decide what, you know, when you're looking at companies, are you looking at the jockey or the horse? How did you make your decisions about what you're investing in?

Rekhi: I have developed, and I had developed even before, a pretty strong core belief system. It is all about an entrepreneur. You know, it's not technology and market. Technology and markets change all the time. Every day there's a change in the marketplace. So if you're betting on a trend or a technology initially, well, the only constant you have is a person. So I became very aware that you need to have an entrepreneur who is a pretty much a free-spirited. He has doubts; he has convictions, but he has doubts. I describe doing startups as driving on a mountain road at night, where road bends. You've got to stay on the road, you can only see through your headlights. So you need to be very much focused on what you're doing and pay attention. So entrepreneurs became a... Once I start to like you as a person and it took me a while, maybe 3, 4, 5 meetings, I'll bet on you. But incoming, only one or two percent of the population succeeds as entrepreneurs, right? So 98 to 99 percent people don't succeed. So incoming person my answer is no. What are you telling me? My answer is no.

Hancock: <laughs>

Rekhi: I'll spend an hour with you, and help you, but don't ask me for investment. The burden was on him to break through that barrier.

So maybe 1 in 20, 1 in 25 people. My other rule was if I'm only teaching you, I'm probably not going to invest in you. I need to learn something from you. If you have a new way of thinking, if you are doing something that I haven't seen before I will-- a new way of-- so once I start to learn from you, I got hooked. Then say, "Hey, this is something, maybe together we can do something. So that became one of the tests for me. "Am I having fun? Am I learning something new?" What I realized very quickly [is] that, you have to be in the trenches to keep up with the technology and markets, right? You can't be back here and know what's going on. The entrepreneurs out there, they have to tell you when they're engaged in the customers and markets. So I became very quickly enamored with the people who were starting to teach me the new way of doing things. And I have found that to be very useful. And then I'm learning that from ten different people, and now I'm starting to synthesize. This is how the world is shaping up. So I started to become engaged with the people who were teaching me stuff, Most of my investments were like that. And I almost always went out of my area of expertise to invest.

Hancock: Can you say more about that? So you mentioned two criteria that they're teaching you something, and well, free-spirited and then that you're having fun.

Are there some more attributes.

Rekhi: Intellectual honesty. If somebody walked into me and said, "You know, my last company failed because my VP of Engineering didn't get the part right," or, "My last company failed because my

customer canceled the order on me," or, "My last company failed because the VCs wouldn't give me any more money." You know this guy's blaming others.

Hancock: Mm.

Katz: Mm hm.

Rekhi: And he's not honest-- next time he's going to blame me. <laughs> You know? So I don't like the guys who blame the others. I like the guys who said, "You know, I wasn't smart enough to see my guy was falling behind and needed help." "I wasn't paying attention to my customer's pain." "I wasn't aware that my VCs had started to not--." The guy who owns the failures are the guys I love, because they are learning. They are learning. And so I like the guys, who are learning right after me-- There are a few other things. One of them is, I don't like to work with the guys who have done well in their first startup. They come and say, "You know, NeXT, Steve Job's NeXT." I need to do-- the guys who have done well, they think they have made it.

Katz: Sort of like Kanwal Rekhi.

Rekhi: Yeah, they think they have made it. they think they have made it. They're used to living the good life now. They have the Mercedes; they take the European vacations. The family doesn't understand, you know? "What do you mean we can't take our vacation? We don't need any more money," right? The family support disappears. I like the guys, the first-time guy, I don't know, he's an even chance. But the guys who have done, who have failed once, I pay attention to them. You know, they have paid-- somebody else has paid their tuition. And they have twice the fire in their belly, and they want to prove it wasn't them. They're highly sensitized. So I like the guys who have not done well once. And still are back for a second time. So there's an intensity there, right? And I found that to be-- I have several guys who have done very, very well. Went with them and that was a smart decision on my part.

Hancock: Many people talk about failure or failing fast being a mantra here in the Valley. And how do you distinguish between people who have actually learned something, or the--

Rekhi: This is back to intellectual rigor. If he's hanging on to an idea, when the market feedback is bad, you know the guy's not paying attention to the market. So the guys who are in tune, who are listening. This is the point I made... if you have been on the abandoned road. You know, I'm off the road and I'm still believing that something-- you know, the guys who start to be the dreamers. You don't want to work with dreamers either. You want to know the guy who's very is calling a spade a spade. "This is not working out." The guy, you know, failing is built into this whole thing. Acceptance of failure is very much part of being a good entrepreneur, right? And failing fast is a cliché, because <coughs> you don't want to force them to fail. You don't want-- to do things to make it fail. But you don't want to hang on to things

where the market is telling you it's not going to go anywhere. And some people will start to poo-poo their competition. They don't take their competition seriously. People who start to say, "I will work twice as hard as the next guy." You don't want to invest in them either. Every entrepreneur works very, very hard. And the other guy has a perspective that you need to take time to understand. You start to say, "Oh, that guy is stupid," you know, you have this issue, right? So I like the guys who are very intellectually honest in rigor, and they take competition seriously.

Hancock: So among the people that you took bets on, can you tell us about some of the companies that you're most proud that you were associated with, the entrepreneurs that you mentored, or--

Rekhi: Exodus was a big company, right, and we really--

Rekhi: Exodus. So the two guys, you know, this is '95. In '95, Internet was happening. Netcom was offering you Internet at \$19.95 a month, all you can eat. They're mostly dial-up efforts, right? AT&T's offering, you know, network at \$20. And so network is becoming-- everybody's signing up on the Internet. Yeah, for twenty dollars a month. So these guys come and talk to me. Said they want to do the ISP, Internet Service Provider, side becomes very common place. So these guys want to do BISP, Business ISP. "So what does Business ISP mean?" He says, "Well, all these consumers are getting on internet, you know, the businesses will have to get on internet, too. And they will need something different than the consumers. They will need more reliable network. They need flexible network. They need a lot more bandwidth. And so we need to offer them a different service." We can charge them ten thousand dollars a month. And I said, "Oh, let's talk more," all of a sudden, it was certainly out-of-the-box thinking, "Why would somebody pay you ten thousand dollars a month because thus and such?" And we will build the data centers, will manage the power, will manage the bandwidth. We'll guarantee them, we'll build a mirror data center in New York, and gateway. So there was this very evolved thinking, you know? And so it started to excite me. But they had a massive nonsense, "We will do the applications. We'll manage the applications, we'll do," you know, and I said, "No, no, no, let's build the data centers. Let's become, you know, their reliable infrastructure provider. Let them do their own applications. Let them do their own stuff. Let them build their own servers." So Exodus became a very big hit very quickly, because they came in '95, just when the internet was happening. And everybody needed help. It turned out that even line from the telephone companies. So we put the data centers. Rented big fiber lines from telephone companies, and built our own network in the back, and simplified their business thinking. I made the final deal. I will learn from them, but collaborate really, we can do something together. So I simplified the business thinking by almost 95 percent by not doing the applications, not doing the application management, not doing these other management. "We will supply you a reliable bandwidth, reliable power." "A reliable environment, SE, and we'll offer you mirror imaging." We'll build their centers. And we had a plan to fill data centers in about a year, and they filled up in six weeks, the first data center. So we knew we had something. We built 50 data centers, When the .com burst happened, they were super exposed. Because they were doubling every six months in capacity for several years, and so 50 percent of the new data centers was being built when the .com burst happened. So all of a sudden, they were trapped. And so they went under very fast, but the company was worth \$30B at one time.

Hancock: Hm. And right before the bubble burst?

Rekhi: Yeah. I did fairly well as the individual in the investment. But I was on the board, I wasn't able to sell fast enough, but I still made 86 times my money.

Hancock: Not bad. <laughs>

Rekhi: Yeah, but if I was able to sell it, I would have made thousand times my money.

Katz: Well, were there any of those companies on which you bet, and even started participating as a board member that you had to pull the plug on? And how did you decide when and how to do that?

Rekhi: Oh, several, Thirty-one companies failed, and they... You can tell when a company's not doing well, because market competition has emerged. But you can also tell the company's not doing well if the entrepreneur is not paying attention, or he's always dreaming. It's very easy to work with the entrepreneurs where the competition has emerged, or market is slow to materialize. But it's very hard to work with entrepreneur, who's ignoring everything, right? So you pull the plug on the guys who are just not living in the real world. And it's very easy to pull the plug, because the demand on your time and money is infinite. Where do you want to put your money and time, right? So in our business the squeaky wheel doesn't get oil. <laughter>

Hancock: Hm.

Rekhi: Right? You know, because you want to replace that wheel. You know, very quickly. You got to be a bit of heartless, right? I have another rule. I'll want to come and visit you, and if I feel drained emotionally after that visit, I don't want to come back and visit you a second time. But if I come and visit you, and I feel very energized, I want to come back again. So I had this thing, you know, the good entrepreneurs have to be sources of energy. Or have a sense of energy. If they are draining you when you meet with them, they're going to drain their employees; they're going to drain their customers. They're not going to go anywhere.. So that's a very big ... if it troubles me ... if I start to have trouble with you, it's like come out of the meeting shaking my head, and, "Boy, such waste of time," you know, I'm not going to go back there. No. So it becomes easy in a way. Yeah, it does. This is not a charity business, right? Even in charities, though, you have to be heartless sometimes. But these charities that start to fail, and they become very shrill, "Hey, you got to support us," "All these people," and so forth. Those charities you have, you have no way of knowing if the charities been good or not, right? In businesses, if they start to become shrill, they start to drain you, and I don't have to like you as a person, as entrepreneur. I just want to-- that's not my requirement. Yeah, I just need to feel energized. I need to learn something from you. I need to feel, "Hey, we're doing something here." And tough marketplace, tough competition, I understand all that. But I don't like as you become overconfident very quickly, no.

Hancock: I'd like to turn now to the time when you started Inventus and had a formal fund. Can you tell us about the genesis in the next chapter as you became a venture capitalist?

Rekhi: John Dougery and John Bosch were the two VCs who invested in Excelan. So John Dougery's son wanted to do a fund, and by that time, - I'm still doing small angel investments, after 2002/2003, I'm looking to see what's next in my life. So he comes and talks to me, and he wants to partner with me, and do a fund, which is a U.S./India Fund. "India is emerging, and we can invest here, we can invest there. Indian merchants have done well in the Valley." And you know, he's 20 years younger than me. And his dad had told him to go get me as a partner. And he wasn't going to let me go. <laughter>

But I said, you know-- this is now, I'm 62/63, yeah, early 60-- yeah and, "I don't want to do it." You know, he said he'll do most of the work. I just need to mentor him in the investment, and all that. So he wore me down in a way. But then I started to like the idea, because it's structured fund-- you know, it's hard to do investment in India from here. You know, the travel, the structure provided me a way to travel five/six times a year. So we ended up finding a partner in India, so the three of us did the Inventus One in 2007.

Katz: So there's a branch of Inventus in India?

Rekhi: Yeah. The fund was U.S./India fund. And so we had a partner in Bangalore and two partners here, the three of us started the fund.

Katz: The total investment, how does it separate out percentage-wise?

Rekhi: So we hired one more guy in India, so it became two and two. And roughly half-and-half. You know? We did 18 investments in Fund 1. And I think we did ten over there and eight here. And in Fund 2, we did 23 investments. We did 12 here and 11 there. So the same--

Hancock: And the scale?

Rekhi: Huh?

Hancock: What was the scale of those, the funds was--

Rekhi: Yeah, 50 million dollars and a 100 million dollars. Small funds. And you know, Fund 1 will do very, very well. Fund 1 has Poshmark.

Hancock: You said Poshmark, right? It's a big, big--

Rekhi: Yeah, Poshmark is doing phenomenally well. Fund 1 has Poshmark in it, Credit Sesame in it, redBus in it. Fund 1 will do very, very well. You know, Fund 2 is-- too early to tell. And so I'm thinking of moving on now, because saying, "What's next in my life?" has been--

Hancock: What is next?

Rekhi: I don't know yet.

Katz: Well, we're getting to the point where you have to tell us how people younger than you can get to be as good as you got. But let's first hear what you're planning is.

Rekhi: I'm 72, right? You know, so I mean, I love what I do. I love to work with entrepreneurs. I'm still having impact. You know very quickly if you're having impact or not. You know? And like I told you, entrepreneurs, they're very brutal people. If you are wasting their time, you know, they won't return your phone call, right? You know, entrepreneurs, they need to get value out of you.

Hancock: So that's the one way you measure success or fulfillment?

Rekhi: And the fear that once you pull out of the fray, it's how to get back in it. This world changes very rapidly, you know. The technologies change, market changes. Processing. But on the other hand, you know, you say, "Well, how long can you sustain?" I traveled to India every couple of months. So I told my partners, you know, maybe another five years. You have to give them notice that, "I am not going to be-- so this new fund we're doing now, I'll help invest, but I won't help harvest it."

Katz: Is there an heir apparent to take over in the next five years?

Rekhi: Yeah, really. My nephew, my brother's son joined us about five/six years ago. Oh, he's a fast learner. So he's done the fund. But John Dougery has become pretty good. I found it very, not necessary, but very helpful to have been an entrepreneur. To understand the dynamics of a startup. A startup is a roller coaster -- high-high and low-low, right? I'm sure you heard, one day you're at the top of the world, and the next day, you fall off. Part of your job is to provide that even keel. Say, "Hey, things are-- when things are, you know, too good, don't get too exuberant, and when things are down in the dumps, don't get too depressed." And I do that fairly effectively. John is learning that. You can't lose patience with the entrepreneurs. And entrepreneurs do make mistakes. And you've got to understand. It's the guy who's making stupid mistakes. I tell people, "I don't mind at all if you make a new type of mistake that nobody

has ever made before. <laughs> You know? But I don't want you to be making the same mistake that everybody has made before you, and you haven't learned from them, right?" You have to have this love/hate, where you love the one part, but you hate this other part. And I also become very invested emotionally in my mentees. Just not the money. Their success is my success; their failure is my failure. I mean, I don't wash my hands of that easily.

Hancock: When you have these mentees, as you say, founders who are looking for advice, not just money, but really you as a mentor and sort of matchmaking and all these other things... What are the things that they are saying that is most important that they're learning from you, or gaining from you?

Rekhi: Like I told you before, the demand for me to be the mentor is infinite.

Hancock: Mm hm.

Rekhi: Yeah, infinite. Both here and in India. So I don't ever fall for that. Once I deal with you, I decide. I decide. Where I'm learning, where I'm having fun. Something new for me. Very few people succeed, right?

Hancock: Okay.

Rekhi: I do the whole mentoring process. By the way, I should tell you that Michigan Tech-- you know, my alma mater-- and I and David House are from Michigan Tech. You know, David was at Intel, right?

Hancock: He's on our board here, too.

Rekhi: Yeah, 15 years ago David House and I decided to go back to Michigan Tech and help them transform. And we have had phenomenal impact, phenomenal impact on Michigan Tech. I've been going there, mentoring professors, students. You know, preaching the gospel of entrepreneurship and wealth creation. That has been one of the missions in my life. How do I transform Michigan Tech a Midwestern, a 70-year school, into a hotbed of entrepreneurship? And they are starting to get their-- we have three, four startups out of there. One of them we do, it's doing well now. And the goal was to have one to two startups every year coming out of that Fund.

Katz: Are they local in Upper Peninsula?

Rekhi: No, so that's a problem, nobody wants to stay local once they start as a team. <laughter> You know? They move. I can't imagine somebody would stay. One of them is still local. And this is a professor

startup. And the other one moved, the whole team moved to San Francisco. We handshaked. And so Michigan Tech became one of the personal missions for me. I had done that to IIT Bombay. IIT Bombay is a very hotbed of entrepreneurship. I set up an incubator there, and I started mentoring them in 2001, the year before Michigan Tech. And they were fast! We have had 50/60 startups alone out of Bombay in the last 15 years. Michigan Tech took a lot slower, a lot of time, but it's started to happen.

Hancock: You've talked about being a catalyst, really, for building these hotbeds of entrepreneurship. I'd like to hear your perspective on the Valley, you've lived through boom and bust time. What do you think accounts for this place? It's ability to recreate its leading edge.

Rekhi: Well, this Valley's like a nuclear reactor, right? There's enough fuel here, right?

Katz: Critical mass?

Rekhi: Yeah, of technical talent, leader talent, marketing talent, finisher talent. Right? There's enough of that, and they are rubbing shoulders with each other all the time. And there's just such a history. And there's just such, you know, people like me, who are from that, who plow back. So I think Silicon Valley is a one of a type. It's very, very hard to get this thing going. Here's my thought. For you to become an entrepreneur, you have to get off this-- out of your comfort zone. We all get into daily routine, doing a project; they are going to work; this project, this delivery, this thing. Right? You know, heads down. Somebody has to shake you out of that one. Either yourself or something. And to step out of your comfort zone. In my case, it was David Jackson. Somebody I mentored, somebody who worked with me, had become an entrepreneur and I said, "Why not me? Why can't I be an entrepreneur?" So somebody has to shake you up, right? But for that, you have to have this belief that people like you can be entrepreneurs. Role models become very important. And people of your background become very important. In my case, there was no role model. So that was a very unusual case. But I have learned that if somebody who has similar background to you becomes an entrepreneur, it becomes easy for you to imagine that you can be one, too.

Michigan Tech was that problem, because there was no information tap other than me who was an entrepreneur. It was very shocking to me. I was not average Midwestern, <laughter> meat and potato guy, right? So it wasn't very easy for them to relate. But I persisted there. So you need to have role models. You need to be able to challenge yourself, "Why not me?" Because nobody from outside can challenge you. You know, your parents will say, "Settle down! Get a job! You're not a kid anymore!" You know, entrepreneurs are not seen until they succeed, as desirable, right? No mom says, "Son, drop everything and do that for the next three years." <coughs> You know, so the emphasis to conform, to be disciplined and so-- and it's a painful process. Two/three/four years of substandard salary, opportunity costs and all that. So you have to decide. You have to put pressure on yourself. And so I tell people "this journey into unknown has to be self-motivated."

Hancock: As you look at the Valley and look ahead, none of us have a crystal ball, but are there things that you think are threats or concerns that would change the Valley's ability to be an incubator for next generation entrepreneurs?

Rekhi: This Valley is somewhat troubled, right? Facebook and Google are soaking up all the talent, right? Facebook and Google are producing roughly about two million dollars per employee as revenue. Which is unthinkable, right?

Katz: Yeah.

Rekhi: So they can pay salaries which are unbelievable. They can have this fancy, I mean, if you go to-- have you been to Facebook Campus?

Hancock: My two kids work at Facebook. <laughs>

Rekhi: Yeah, it's a Disneyland, right? The Main Street, with nice-- so because they are able to produce money, right? Have money. It becomes very hard to compete with them. Very, very hard to compete with them. So I worry about that part. Because, you know, the notion that if you produce two million dollars per employee revenue, you can pay \$250K salary and spend another 250K on the perks, and you still have a million-and-a-half. So it becomes harder for those kids to leave and start entrepreneurial business. Opportunity cost for leaving Facebook is very high. Not only salary, plus bonus, plus the stock option price. So that's the other part. But I left. Part of this journey, I was making \$75,000. You know, opportunity cost was very high for me at that time. \$75,000 back in 1982 is making \$300/400,000 now, easily, right? In purchasing power and all that. So there's the issue of that. But I think the Valley is becoming bigger, right? In the old days, we used to talk about, you know, of not even missing East Bay, let alone the East Coast, right? I think the Valley has expanding beyond. And with the Internet, location becomes less and less and less important, you know? The lecture I give at Michigan Tech is, "Hey, fiber here puts you on par with people in the Valley." You know, you have the same sources of information. You just need to travel to go find the people.

There was this professor who came looking for me from Michigan Tech. He's doing the nano satellite thrusters, extending the life of nano satellites. And I was impressed, you know, he got, developed, you know, we funded him. Half-a-million dollars was not too tremendous, but my own syndicate invested a million-and-a-half in him. And he's doing this stuff out of Michigan Tech, and he's having-- My sense is it's very hard to know what will happen. The Valley will maintain itself for the foreseeable future. Facebook, Google, these are too big and too powerful to maybe even suppress some of this growth, right?

Hancock: Hm. What about other places? You've been so active in India. And trying to affect regulation change, and also spawn entrepreneurs there. What's your view on how India's evolving as a place for entrepreneurship?

Rekhi: India is evolving at an unbelievable rate! You know, when I started to talk about entrepreneurship, people would say, "Huh? That's America. That's not something which will happen in India." India has the third largest pool of entrepreneurs in the world now. And you know, Bangalore is like Silicon Valley. Almost everybody here is in Bangalore, and I'm thinking it will beat China, to tell you the truth. Because India's a lot more free-spirited than China is. China has done well, fortunately, in the Chinese market. You know, Baidu, Tencent? They're not a little bit outside channel. They're not-- do you use Baidu, Tencent, Alibaba?

Hancock: Aliba-- no.

Rekhi: No? Nobody. But Indian companies starting in the U.S. like you wouldn't believe! You don't even know they're Indian companies. And so India is very open. It's just like U.S. Another 20 years, you know, but 20 years is not that much time.

Katz: We'll be in our 90s.

Rekhi: Yeah. Yeah, I used to say that I hope, you know, that I live to see it happen. But I'll tell you the change I've seen in the last 20 years is unbelievable. You know, unbelievable change.

Hancock: TiE, just returning back to TiE--

Rekhi: Well, TiE has 70 chapters worldwide now. Yeah, 70 chapters. The chapters in the Middle East, chapter in Singapore, chapter in Malaysia, chapter in Hong Kong. Couple of chapters in England. Couple of chapters in Australia. And chapters opened in New Zealand now. And Africa is starting to build up. So the TiE phenomenon is a self-help phenomenon. Where successful people locally come together to help younger entrepreneurs, right? It has nothing to do with us, -- we provide you the recipe. We provide you the content, and we provide you the speakers. But local guys have to build this system. And I was in South Africa three/four months ago. They're starting a chapter in South Africa-- in Cape Town.

Katz: Do you have to go through the same thing you did in India to make sure the regulations for investing are adequate?

Rekhi: Yeah, you taught-- almost everybody in the world is now looking at entrepreneurship as way, right? So it's a lot easier now than it used to be. I talk about that venture capital, angel capital and noble capital. You need to make it feel very, very strong. You need to provide the safeguards it needs. Entrepreneurship is, valuations, operation, activity for the whole society, not for the individuals, right? I do speak a lot, but I don't have the same followers that I had 40 years ago. <laughter> How many things can you change? How many things do you want to change? Right? But, you know, in part India has been-- in part, India is in the Valley here has been phenomenal.

Katz: I think we've come to the point where we have to ask you the question, what advice would you give to young wannabe entrepreneurs and/or venture capitalists?

Rekhi: The entrepreneur. I tell people... By the way, I speak at universities in the U.S. a lot. I'm going to University of Indiana. They discovered me. Said they wanted me to come and speak to them in March. And so I ask them, "How many of you want to be entrepreneurs?" And a few hands go up usually. And then I ask, "So the rest of you have decided not to be entrepreneurs, right?" "No, no, we haven't decided." "So how come your hands didn't go up?" And, "We don't know yet." So I tell people that, "Nobody's going to tell you that you have to be an entrepreneur. I don't think anybody's parents ever tell you to be an entrepreneur. Your friends, typically, don't even tell you to be entrepreneurs. But once you become entrepreneurs, you have no fun anymore! You don't have time to go to football games. Time to go to movies. Time to hang around and have beer, right?"

'So nobody from outside is going to tell you to be an entrepreneur. And as a matter of fact, the odds are so low, two percent of the population becomes entrepreneur. That 98 percent of the population, people put you into the 98 percent bucket. You have to have fire in yourself to say, "I belong in that two percent! And I need to prove it to them." And so this journey has to be self-initiated, self-motivated. If you don't decide to give yourself a chance, nobody else will give you a chance to become an entrepreneur. It's not, "You're a very young person" "Come work for me as an entrepreneur." <laughs> So that's one thing, and the other part is there's this two/three/four years of journey, before you start to see the light. How do you sustain yourself through that period? By the way, TiE provides sustenance. You come to TiE, it's like going to church, going to temple. You know people of same faith, believe in the same things that are there, right? So you're not an oddball anymore. <laughs> You know?

Hancock: Mm hm, a community.

Rekhi: "You're not an oddball. You don't feel-- and so TiE provides that. And then also TiE provides the opportunity to find the potential partners. You know, potential investors." So I tell the people, "You need to decide, and then you need to go mingle with the people, so you can start to.... It's a journey. It's not something, you know, very few people are like Mark Zuckerberg, you know? That or Bill Gates, who can drop out and become entrepreneurs. You know? A typical entrepreneur is in his late 20s, or maybe early 30s, and takes time to prepare yourself. Yeah, both financially and emotionally."

And I tell people not to become entrepreneurs with your friends, "Don't partner with your friends, because you end up-- you're not very objective towards your friends, you know? You forgive too many failures, too many mistakes. You want to have a pretty objective relationship with people, right? I'm the best, I want to associate with the best. And we need to hold each other accountable. In friendship, somebody misses something, you don't want to have hurt feelings. Right?"

Katz: And you don't want to lose a friendship.

Rekhi: You don't want to lose friendship, yeah.

But in my opinion, the world is heading towards being more and more entrepreneurial. You know, with the internet, the corporation is like the old days, you know? Economies of scale are disappearing. I can have an idea. I can have somebody in India implement the software. I can have somebody in India, in China, manufacture. I can have, marketing. So this is back to the old days, everybody works for himself, and finds a way to make things happen. Companies are less and less likely to hire you as a paid employee, because I can outsource the work to India. Right? We have seen this over and over, right? I can get those people just as good at one-third the price. And you become entrepreneur either by choice, or you're forced to.

I tell the story about-- my IBM story. All these guys who went to work for IBM, you know, and I didn't go to work for IBM. They laughed at me for the next 15, 20 years. They were being laid off by IBM in the late '80s and early '90s. When they were in their, 40s. And they hadn't worked for anybody else ever besides IBM. And they were going through this process of "Why me? Why IBM? I was so loyal to them, right?" So I told them, "Hey, you're smart! You know the market. You know the technology. Why are you dependent upon IBM for life? For your livelihood? Go do you own thing!" So a lot of these guys, who got fired by IBM, were pushed out of their comfort zone by lay-offs. And many, many of them became entrepreneurs. So it's not that you sometimes do it voluntarily. Sometimes you're pushed into it, right? Your life goes on. More <Inaudible>, children's education, and I still have to worry about my retirement, right? So when they force you out, then you go through this process. Yeah, "Nobody's ever going to do that to me ever again," right?

Katz: Mm hm.

Rekhi: So entrepreneurship happens either voluntarily or involuntarily.

Hancock: We have a tradition with Exponential interviews of asking somebody to crystalize your advice or inspiration for our next generation entrepreneur in one word. And then to share a personal story about what that is. Could we close with that? If you could think of one word.

Rekhi: One word.

Hancock: Mm hm. An attribute, or a word of inspiration, or that you think would be important for a young entrepreneur.

Rekhi: Well, I'll say, "Prove it!" Yeah, "Prove it that you're good." I mean, it's more than one word. I'm a strong believer in, you know, I hate people who tell me that they're getting bored at a job of that has-- work is not very challenging or very exciting. And they're not shining. I say, "If you're that good, you should be able to do whatever it was given to you in two hours, and spend the other six hours showing them what--," which is what I did during my days at Link. No matter what you assigned to me, no matter how complex the project was, six months project, I'm done in six weeks! And I'm looking for more work. I was like a genie. "Give me more work." And my bosses used to say, "You can't be done in six weeks." You know, "I'm done. You go see." And so, you need to-- you can't tell me you're good. You can't tell me you're great. You got to show it to me. And show through that. And give yourself the chance. Nobody else will. Nobody else will. And it's all right, if you don't want to be an entrepreneur. I'm not saying that everybody is. But don't tell me that, I need to raise money, I need to do this, I need to do, "Just do it."

Hancock: Well, Kanwal, you've taken us on a journey from your early beginnings, technologist, entrepreneur, executive, investor, venture capitalist, ecosystem builder. It's been a pleasure. Thank you so much for being with us.

Rekhi: Yeah, I've been at the right place at the right time. I think Silicon Valley was made for me. I took to the Valley--

Katz: Well, your first two or three layoffs didn't give you that impression, but--

Rekhi: No, I'll tell you, when I reflect, those layoffs were the best thing that happened to me.

Hancock: Why is that?

Rekhi: They toughen you up! They toughen you up, and you say, "Nobody's ever going to do that to me ever again. Why did I put my life in somebody else's hands?" And you also become very aware the job is not for life. The job is something ... they keep you as long as they need you. And you should have the flipside. You should set the agenda so that you need you. Loyalty gets in the way. Right? So it frees you up as an individual.

END OF THE INTERVIEW