Oral History of Mark Leslie

Interviewed by:
David C. Brock
Marguerite Gong Hancock

Recorded July 13, 2017
Mountain View, CA

CHM Reference number: X8268.2018

Brock: Thanks again for joining us and thought we could begin at the very beginning and ask you when and where you were born?

Leslie: Well I'd like to begin the story a little earlier than that.

Brock: Please do.

Leslie: My grandparents were immigrants and my parents were first generation Americans and like many people of my generation, the story of my mother's mother is an interesting story. She came to this country. Her parents put her on a boat to come to America when she was 13 years old and she never saw her parents again.

Brock: Wow.

Leslie: And they sent her to America because it was a better life and because they loved her, they were willing to do that. She came to live with her sister who was married and had a child and, a few years later, her sister died and she had to marry the husband, the widower. The first child from that marriage without love was my mother and so that's one grandparent. All of the other three grandparents also came from Eastern Europe and their stories were similar. The all grew old at a young age-- one died at 48, one died at 59, one died at 63 and the woman I just told you about actually lived until 90. But where I grew up, this was the normal story; this was typical. So I was born, originally lived in the Bronx in New York City for the first three months of my life.

When I was 35, I found out that I actually was around the corner from where my wife grew up, small world.

<laughter>

Hancock: Small world.

Leslie: I moved to Queens from there. I remember hearing the stories that my grandparents got mad at my parents because they said, "If you move that far away, we'll never see you again."

<laughter>

Leslie: That was the mentality: family lived within a block, where everybody can touch everybody every day. So we moved to a town called Rego Park in Queens and were there for three years. We then moved further out in Queens, to a town called Bellerose and that's where I grew up, in Bellerose and Floral Park. I grew up in a working-class home. Whenever you grow up, whatever is around you is normal because everybody else around you looks the same. But I look back on it today and it was a very, very modest. We had financial stress in the family and it was also an extraordinarily unsophisticated world that I grew up in. My parents were high school educated, not college educated. I went to school, was bright, but didn't work hard. How personal do you want to get here?

Brock: Pretty personal if you don't mind. May I take you back a step or two, I was just…

Leslie: Let me just finish…

Brock: Oh, please.

Leslie: …the thought.

Brock: Yeah.

Leslie: I grew up in a household in which the prevailing culture was if you're really smart, you don't have to work hard. And the way you demonstrate how smart you are, is by how little work you do and get away with it. That's as what I grew up thinking was normal. So I went to school and I was really smart but I didn't work hard and I always got reasonable grades but I was only an honor student in my best subjects – math and science.

Brock: Oh yeah, well I was just wondering if there was something acute that was happening in the world to prompt your grandmother's family to send her to the States.

Leslie: They lived in Eastern Europe. It was a Jewish, Ashkenazi community. They lived in what were called shtetls. These were very small towns and every month there was a pogrom where the Russian army and police would come in on horseback and kill people, so they thought it would be better if she moved to America. <laughs> That was their world. There was a great migration of immigrants from Eastern Europe to America around the turn of the twentieth century (1900). My grandmother came here in the year 1900.

Brock: Okay. And what did your…

Leslie: I'm sorry, I think she was born in 1900, she came in 1914, so.

Brock: What did your parents do for work?

Leslie: My father started out originally as a cutter. That is not a surgeon. It is someone in the garment industry who takes a pattern that's been developed for a new product, puts it on top of a very large stack of fabric in different colors and uses a machine to actually cut the pattern so that it can be sewn. It was a skilled trade. That's what he started as, that's what his father was, actually. He then, a few years later, went into business of creating dresses which didn't last very long. He was in another business that also didn't last very long. I didn't really have perspective on this until I was an adult when look back on this stuff. I think these businesses didn't last long because of his prevailing culture. As soon as it gets going, it's like, "Ah, nowI don't have to work so hard," you know. And I'm going to get back to that thought a little later on in the discussion over here. And then he went into selling life insurance so he transferred out of the community of the garment industry. I actually worked in the garment industry when I was 12 years old, my first job ever. I was a delivery boy and I used to have a hand truck and I used to load up the hand truck with a whole bunch of boxes and latch it down and I would take it someplace and drop it off and then I would go someplace else and pick something up and bring it back. And I'd do that all day long. I was making a dollar an hour and I thought I had died and gone to heaven. I was like so rich.

Brock: Is this all going on in the Garment District in Manhattan?

Leslie: Correct, yeah, and, you know, west of Sixth Avenue, Broadway, Seventh Avenue, the whole area there. We used to go in, I was working for my father at that time, we used to go in on the subway which was 15 cents, It was the world I grew up in. I was happy. I always actually liked working, I liked working, I liked earning money and I liked the doing of the work always. I mean I was a delivery boy, but I liked doing it. I liked going out every day and doing that stuff. It was good.

Brock: Did your father's entrepreneurial efforts make an impression on you as a young person?

Leslie: He failed at those and I don't think it left any imprint on me that I came from an entrepreneurial background, so I don't think so.

Brock: Thinking back to your household growing up, what were some of the kind of major themes of the household? Was it religion or politics? Or business, education? Is there something that stands out?

Leslie: So I came from a pretty dysfunctional home. My father was an alcoholic; my mother was a suicidal depressive. It was a pretty nasty environment. We didn't know that it was a bad environment, it was just what it was, right, it was just what we grew up with. The prevailing ethic that I grew up with was

that you had to go to college and then become a quote, professional that was the prevailing ethic that I grew up with. [At that time it meant that you should become a doctor or a lawyer or go into the family business (which we did not have)].

It wasn't a particularly political household. It wasn't the ethic of business [although my folks were died in the wool “Roosevelt” Democrats].When I had my own family, my children grew up around the kitchen table where we used to talk about stock options and IPOs. That didn't exist when I grew up.

We were members of the local synagogue and it was probably very important to my father but it wasn't something where I felt part of that community personally.

Hancock: Were there others in your-- you talked about this, your family being close at hand, were there others either extended family or others in the community that had a strong influence on you in those young years?

Leslie: Well, I have a cousin who's about six months younger than me and we used to pal around when we were little and we truly loved each other. Truly, truly loved each other and I called her up last week to wish her a happy birthday. And every time we talk to each other, we both smile and laugh and remember the days of youthful innocence and how we loved each other. We just loved each other, every time we saw each other, we were just like that and we were off together. So a very strong influence. I also remember very much as a child the idea of “going out to play”, something that doesn't kind of exist anymore. No preschools, we were in this overloaded public school system, because of this immigrant wave and then post war and everything like that. I was born in 1945, so I'm just like five days before the definition of a baby boomer, right? But this was an overcrowded school system, so we didn't actually have kindergarten because they didn't have enough classrooms and teachers.

Brock: Wow.

Leslie: So I didn't actually start school until six years old. So between zero and six, I used to wake up and we didn't have camp or anything. I used to wake up and I used to hang out and when I was old enough to walk outdoors, I'd go outside and there would be other kids and we would play. I'm not really sure what we did but we were happy doing it, you know, and we'd go out and play and play in the dirt so we built a micro biome and an immune system and we ate peanut butter so we didn't have allergies and we did all the things that they tell you now to do, right?

Brock: Were there any—well, you talked a little bit about your experience in school. Did you like school up to high school? Was it easy for you, was it a…

Leslie: Well, math and science were easy. English was pretty easy because I actually had a collection of English teachers that looked at the structure of grammar which was kind of like math, you know, it was kind of getting very logical. History was harder for me and French was a nightmare. French was the bane of my existence. When I went to college after taking French for five years in junior high school and high school, they said, "Would you rather take one more year of French to complete your foreign language requirement or start a new one for three years?" I said, "Spanish."

<laughter>

Leslie: And that's how painful French was for me. And I'll get to that later, it was also an important part of my life.

Brock: Growing up in the '50s, I was wondering what your impressions were about just science, technology in that era, in the culture, were you picking up on that at all or connecting with that?

Leslie: Totally. I was-- I just finished the final episode yesterday of "Genius" on National Geographic. He [Albert Einstein] was a childhood hero for me. - a physicist who changed the world. I mean childhood hero when I was ten, you know, I wasn't a physicist when I was ten. But the idea of someone being that brilliant and having that much impact, to me it was a very inspiring. It was like a baseball player, like Babe Ruth, right, but to me it was like Albert Einstein. And very, very much, I didn't know much about him really kind of in a sophisticated way but the idea of science and the idea of the ability to discover and change, I was very taken with that idea.

Brock: Do you think that was something that set you apart from your peers or were there other kids around who shared that, who were also plugging into that?

Leslie: No, actually, you asked about the culture of home. I think one of the things that-- I think there was a respect for science in my home, right, not that anybody was a scientist but I think that there was a respect for ideas and things like that, so I think that was part of it. But I don't remember my friends, the community I went to in public school and junior high school being particularly moved by that. I was also of the generation of Sputnik.

Brock: Right.

Leslie: So Sputnik went up and everybody said, "Let's teach everybody math and science," and I thought that was a terrific idea because I really liked that. Math was really easy for me. The best course I ever had in my entire life was tenth grade geometry. It was so perfectly beautiful and logical and clean and I just loved it. And when my two sons were in high school and had geometry and I would look back at the

geometry books it was just like it all came back to me. It was like reliving my childhood; it was so great. I look at this stuff, said, "Yeah, this works this way," and everything, and that's both mathematical and spatial, right, and I just, it was so perfect for me, I loved it.

Brock: Did computing come into your consciousness at all in these years?

Leslie: There was no computing. A mechanical adding machine was about the extent of what computing was. You haven't gotten here yet but when I went to college, they didn't have a computer science degree because they didn't have a computer science department because they didn't have a computer.

Brock: Wow. Okay. Yeah, we'll get to that, that's fascinating. I'm surprised that they didn't have a computer at that stage.

Leslie: MIT did but NYU didn't.

Brock: Wow.

Leslie: I mean I graduated college and didn't even-- I don't even know if I ever heard the word computer.

Brock: Wow. Well that makes your decision to go to IBM all the more curious. But maybe a few other questions before we get to that. Were you at all into science fiction in these years?

Leslie: I was, yes. I read a lot of science-- I don't remember what I read, Isaac Asimov and I read the authors of the day and I was taken with science fiction and I remember watching the original "Star Trek" series, which I thought it was the greatest thing ever on TV, you know. That was in '64 I guess, a little later on. Yeah, I loved science fiction, it was great and it's something that you-- it's a fantasy that stimulates this fascination in me, right and I carry that today in this valley, I look at the things we do and I think about the future and how the future will change and I'm still fascinated by it, it's just great, I live and breathe it, it's who I am.

Brock: We talked about maybe your very earliest work experiences in the garment district, did you carry on working there through high school or what was your work like?

Leslie: So I remember-- so I was 12 and I was working for my father because I wasn't legal, you had to be 14 to legally work, I worked off the books like a lot of people, you know. And we used to get our payroll in an envelope, right, it was in an envelope of cash.

Hancock: Cash.

Leslie: I didn't have a tax statement but they used to have room for all the taxes on the outside, a little brown envelope, right? But from the time I was eligible to actually work, I always had a job, I had a job over summers, I had a job during the year. My friends used to complain that there were no jobs but I always had a job and the reason I always had a job was because I needed a job and because I needed a job, I found a job. So I had a very strong work ethic very early on, I was always very determined and I liked work actually. I always liked working and making money and having a sense of independence that came from that.

Brock: Was there any particular kind of theme in the jobs that you found or were you just finding what was available?

Leslie: Yeah, they were jobs, they paid me and I did what I was told. I worked in a camp. I drove a Good Humor truck, I worked riding shotgun to guys in the tobacco industry that were stocking the shelves with cigarettes and I was out giving away samples of a new cigarette, not selling but giving away samples of a cigarette called Lark which was the first charcoal filtered cigarette. I used to cut open the filter and open it up and show people and give them a four pack, a little pack of four and have them try it and stuff like that. I remember vividly I went in to interview for this job and I didn't have a driver's license which I didn't know was a requirement. So I go in and I fill out the paperwork and I go interview and everything like that and I don't get the job because I don't have a driver's license. And I'm sitting out, I'm just bummed and everything and I go back into the office and I say to this man, I don't remember who it was, I say, "If you hire me, I will have a driver's license by the time work starts."

<laughter>

Leslie: I have no idea, I was probably too young to have a driver's license, but what the hell, I wanted the job, right? So he said, "Okay," and I got the job. It was a little lie, not a big lie. It was important for me to get the job. Another early job I had that was kind of-- I think speaks to character, right, I think this is what you're asking about…

Brock: Yes.

Leslie: …I got a job working in a shoe store and this was a low priced family shoe store. If you've ever heard of the shoe store, or shoe chain called Miles, it was Miles. And so I get this job and it's like around, I don't know, February or something, February or March and they're hiring different people and you had to work for a week for free to learn where the inventory was, that was the deal. I mean, who knew, right? I didn't know I had any rights. So I worked for a week and I learned where the inventory is and everything and they're hiring people. And what I don't know because I'm just a kid is that they're hiring for the Easter

rush and at the end of Easter they're going to lay everybody off. They have like four or five long term people who are doing this professionally and they have a bunch of young guys that are coming in. I don't know this. So anyway, I'm working in this shoe store and we're working on commission. We're getting, I don't know, five or ten percent commission, very small commission and the shoe store has these rows of chairs and the sales people in the store own a row of chairs, I own this row and he owns that row and he owns that row. And when you're a new guy, you own a row in the back 40, right?

<laughter>

Leslie: That's true, I mean you own a row in the back-- and I was standing in the back 40 and they never get to the back 40 because they walk in and someone seats them and-- and I'm like sitting there and, "This is not good." So I walk up to the front of the store, I greet people at the door, "Would you like to buy some shoes? Follow me." And I walk them over to my row of chairs. And I don't know, I'm just doing that because I have nothing to do [and also, I want to make some commission money]. And it turns out when Easter comes and goes, all of the new employees of this store get laid off except me and the reason I don't get laid off is because I out-booked everybody in the entire store for the last two weeks. So go figure, right? But I didn't know that I was doing that, I didn't know what the score was and I didn't know that my job was in jeopardy. If I didn't do that, I just did it, and then I said, "Oh, that's cool," and I worked there for a long time. You know, I just did anything, I was a stock room boy in a toy store, got laid off at Christmas time, I didn't know that, so that was the way of the world.

Hancock: May I ask a question on this one about your…

Brock: Please.

Leslie: And I was making in most of these places a dollar an hour, a dollar and quarter an hour, I mean that was the-- a dollar an hour was the minimum wage at that time and you got a good job, you got a dollar and a quarter an hour, something like that. I made more money in the shoe store, it was a good job.

Hancock: Well with those spoils, with the commission, with your success, do you remember what kinds of things you used your money for, was it needed for your family, did you have discretionary, what did you do…

Leslie: I did not give it to the family, I did not get money from the family, so it was the money I used to support myself in high school, and in high school and in college too I worked but in high school, it supported myself for being able to buy the clothes that were fashionable with my cohort, right, and to be able to join in the social events and stuff like that. I paid for it with the money I earned and they all paid for it with the money that mommy and daddy gave them. But I never felt that I was cheated out of anything, I

never had a negative tonality to that, and in fact, as I grew up and we had children of our own, I said to my wife, I said, "The greatest gift we can give our children is the ability to take care of themselves and to be confident in that." And my kids started working on a paper route when they were 12 and worked in all kinds of things and it builds character and it makes people-- it's not even building character, it's building an internal sense of confidence that they can be okay and they don't have to depend on others, it's just an important thing in life I think.

Brock: Well we talked a bit about French not being so friendly during high school but math and technical subjects.

Leslie: So I should tell you in-- do you want all these stories by the way?

Brock: Yes, please.

Leslie: Okay. So French, in New York State, when you finish whatever the course of study is, you have to take a statewide examination called New York State Regents Examination. In French, in any state regents examination, there was a rule that said if you weren't passing the course but got more than 75 on the regents exam, they were forced to pass you and if you were passing the course and you got less than 55, they were forced to fail you, that was the rule. And the night before the regents, I learned three years of French, walked in and got a 76, went home.

<laughter>

Hancock: Seventy-six.

Leslie: And, you know, I mean it was a nightmare, I mean I just hated French. By the way I became a great language student later on but that's another story.

Brock: Did you have a mentor or a teacher in particular that was important for you in kind of deepening your connection to technical subjects, math, anything like that?

Leslie: I don't think I ever remember in my life having what I would describe as a mentor in any phase of my development. Solo journey truly.

Brock: And was that similar when you were getting toward the end of high school and thinking about what to do next, were there other family members who had gone to college and who were giving counsel in that direction or how…

Leslie: I had an older brother who went to college, who struggled, and he gave me no counsel or was not a role model for me. I mean I was the-- had an older brother and a younger sister, I was the Great White Hope in the family. <laughs> I was the smart, driven, the one who was going to be successful, my brother had a lot of psychological problems. What a mess, huh?

Brock: Well, you know, you seem to have made a lot of it.

Leslie: And I have a good family now and they all love each other, it's really good.

Brock: Well how did you figure that whole landscape out as you were finishing high school applying to colleges, where to apply to, that…

Leslie: Well it wasn't complicated, when I was growing up, if you were a woman, you became a teacher or nurse or a wife or a combination of those and if you were a man, you became a doctor or a lawyer or you went into the family business. That was the spectrum of opportunity that we could see. We didn't have any family business to go into so that left doctor, lawyer, I was clearly a science guy so I went to apply to college to be a pre med.

Brock: Okay.

Leslie: I didn't spend much time thinking about it. It was just what everybody did.

Brock: And was part of the reason that you chose to go to NYU, was that financial or could you commute there or what was…

Leslie: So NYU at that time had two campuses that they don't have any more. Well they have many now, but at that time they had a commuter campus in downtown Washington Square and they had a residential campus in the Bronx. That residential campus was the second best school in the New York Metropolitan area after Columbia and it was a faster track to medical school or law school than the CCNY or Queens College or Fordham or anything, or NYU downtown, so this was a school that had a good reputation for getting people into the graduate school of their choice, that's why I went there. It was expensive, I had a scholarship that paid about 80 percent of my tuition and then I earned money on my own every year and then my family helped, and it was very difficult for them to do that.

Brock: What was your experience, well you start out pre med, at some point, you switched to physics and mathematics, could you walk us through that change for you?

Leslie: Of course. So I start out pre med and in my sophomore year of college I'm now taking my second year of Spanish…

Hancock: <laughs>

Leslie: …doing okay, I'm getting As in Spanish and one day my professor walks into class and reads the normal announcements for the department and says, "There's a program, NYU sponsors a program to spend your junior year in Madrid, if anybody's interested, go to the office." And that was just an announcement at the beginning of class like many announcements and I was kind of sitting there thinking "The Bronx", "Madrid", <laughs> "The Bronx", "Madrid" and, you know, I'm 18 years old and there's nothing more exotic and romantic than spending a year in Europe. So I go to the office and I get all the information and I come home and tell my parents that I want to go to the University of Madrid and they say, "Well look, we can't afford that, if you can figure out a way to pay for it, then you can go, but that's not going to happen so don't worry about it." So I write a letter to New York State where my scholarship came from and tell them the story about how I'm going to go to NYU in Madrid, I'm going to get full credits for it and yada, yada and they gave me a full tuition scholarship. I earned the money to go, for my round trip fare and I told my parents I needed 100 dollar a month stipend to live there. They were in disbelief of course but they had made a deal. So I went off to the University of Madrid which is a seminal event in my life, Franco was in power…

Brock: Wow.

Leslie: …nobody in the country spoke English, nobody except the other American students, 12 guys and 120 girls, it was a pretty nice program. Who goes on these things, right? And we were living in this foreign country that is-- there aren't foreign countries anymore, wherever you go the World Press carries the same news and you see the same stores every place and everybody speaks English now [and they all have the same shops you can find in Stanford Shopping Center and Madision Avenue]. This wasn't like that, this was truly foreign. When you wanted to communicate, you wrote a-- do you guys remember what an air-letter looked like? You wrote an air-letter, this, you know, kind of onion skin paper that you folded up because it was cheaper to mail. And you sent it off and you got a response three weeks later. That was the communication channel, there was no email or anything. So it was a very. very foreign experience. I was 18 years old and put on a suit and tie and got on an airplane for the first time in my life. Went on TWA and flew to Madrid with two bags to go live there. I mean it was amazing, right? It was very frightening when I got there because I couldn't explain to the taxi driver where to take me, I had to write it down.

<laughter>

Leslie: I'm just screwed, right? But I spend six months, after six months I spoke like a native, people actually thought I was from Spain, they thought I was from a different part of Spain but I spoke, I don't use the word fluent because I didn't have the vocabulary but I was 100 percent conversational. I could have a conversation with anybody about any subject and do it and think in the language. We had to write our papers in the language, do our research and our books were in the language, lectures were in Spanish, so it was immersion. And I really loved the experience of learning another language and the nuance and subtlety of words as they-- words never actually translate. They actually approximate each other and you get to see that when you learn another language. And by the time I was there six months, because I'm now out of the context of the track at NYU of everybody doing pre-med. I say, "Look," I said, "After you graduate from college, it's ten years of penury to become a doctor." It's true, it's four years of medical school, it was a year of internship, it was two years in the army, which was required for physicians at that time, and it was three to seven years of residency, and during all of that time you're living in poverty basically. I mean close to poverty. And I did not have the economic resources to sustain myself through that to be able to pay for medical school and live through that and I couldn't wait ten years after graduating high school to start living my life, so I gave up that dream. [As I think back on it, maybe it was more my mother's dream than mine]. I was taking physics courses and I didn't actually have to learn anything because it was just revealed. I don't know if that makes sense to you but they would talk about things and I would sit there and I'd say, "Well, of course." It was just like so…

Brock: Intuitive for you.

Leslie: Yeah, it was inside me and I didn't know the formula, but once you show me the formula it was like, "Well, of course," right? And my first two years of physics classes were like that, it was just like revealed, there was no learning going on, it was just a revelation. It got harder later.

Brock: <laughs>

Leslie: But I'm in Spain and I'm having this great time and having romance, you're 18 years old, what are you thinking about, right? And I come home, and then I decide to come home and to major in physics and math. I didn't actually decide to major in math but I ended up majoring in math because every time you take a physics course, you got to take a math course. So I come home and for the second semester, the summer and the following year all I took were physics and math courses. I took 18 credits of technical courses in my senior year, which is like unheard of, and I took six credits over the summer and I took 18 credits in the second half of my junior year and I completed my physics major. And I was very proud of myself. It's the Marine Corps of college, right? There's nothing harder.

Brock: <laughs> Right.

Leslie: And I loved it, it was great. I finished and was applying to go get a graduate degree, to apply to a master's program in physics, I was doing that in my senior year. And I'm sitting there and I'm filling out the applications and I'm saying, "Well what does a masters degree in physics actually mean?" I mean I had enough sense to ask that question. I said, "Well what it means is that you've earned the right to carry the briefcase of someone who has a PhD." Right, I mean you're a masters degree in physics, you ain't nothing, right? And then I said-- I graduated college at 20, I said, "When you're 20 in the field of physics, if you don't have ideas, you're probably not going to be great." And I didn't want to go take a path where I was not going to be great, where I didn't have the opportunity, where I didn't have the potential to do that, I couldn't see myself emerging as an Einstein or a Niels Bohr or pick your name, right, and I didn't have any ideas, I was still on that learning curve rather than the thinking curve, if I can describe it that way. So I gave up that dream. I graduated from college in 1966. It was the height of the Vietnam War, I was 20 years old and you can get drafted between the ages of 18 and 26. So I had six years of jeopardy in front of me, of danger. I don't know how much you have studied, you're not old enough to have lived there, it was a very bad time in this country and I did not want to go to that war. I did actually volunteer to become an officer in the Coast Guard which I was on a long line of other people who volunteered and didn't get that. And after I made that gesture, I decided I had done enough, and then I decided I had to find a way to stay out of the army. I was not alone. I don't know anybody who didn't want to go who actually went to that war. It was a terrible time, there was demonstrations, it was almost a time-- you know, Kennedy was shot in '63 and I marked that in my life as a time between the '50s of prosperity and peace and kind of life was good, to a time of turmoil. It was marked by that in my mind by that moment in time. And then it just got worse from there. It just got worse and worse and worse. So I looked around at all the different options and I went and got a teacher's license. They had a program over the summer where you could become a teacher, temporary substitute teacher which you can then go earn more credits to get credentialed, but you could start and that was a draft deferred vocation. So I go to teach physics in math in high school [– of which there was always a big shortage]. So I finished that program and got my certificate and my temporary substitute teacher's license and before the new school year started, I was in a motorcycle accident and I broke both of the bones in the lower left leg. They were severed actually at a time when we didn't have screws and plates and whatever. And that actually kept me out on a medical deferment for two years. Of course it shouldn't have kept me out more than like a year, but I milked it as much as I could, it kept me out for two years. And I decided to go get an interview to become a systems engineer at IBM.

Brock: Now that's a very interesting shift from substitute math teacher.

Leslie: Well I didn’t have to be a math teacher then because I had a medical deferment; it was called a 1-Y, right? So now I had an opportunity to look around, I could teach and I actually did teach for three days, on three different days in three different places. But now I had an opportunity to actually do something real, right, which I didn't have before, I couldn't have done that, I would have gotten drafted if I had done that. So I had a cousin who was a very good math student and had become a systems engineer, I didn't actually know what the job was and I didn't know what they did, but I thought it sounded so cool that I wanted to be one and I'll tell you right what it is later. So I call up and I get an interview, and I remember because I'm kind of walking around with half a cast at this point in time, right? This is a few

months after the accident, and I was casted total six months, different variations of cast. So I'm walking around with a cane and a half a cast and everything, and my brother drives me into Manhattan. This job is in Manhattan and we live in Queens, and I said, "Okay, I'll be out in an hour or so. Just come and pick me up, or you can just kind of circle or do whatever." So I walk in, and the first thing they do is they give me a short interview and then they give me a PAT test, Programmer's Aptitude Test. Then, they gave me three more interviews, and then they called me finally into the office and I meet with this guy. He said, "We want to offer you a job," and I said, "Okay," and I said, "Well, how much does it pay?" And he says it pays-- actually just to give you some background, a teacher made $5,400 a year. A liberal arts major with a good job made $6,000 a year. An engineering or science major made $7,200 a year, and if you made $7,500 you had bragging rights. So I said, "Yeah. Well, that's great. How much does the job pay?" And he says it pays $675 a month, and I'm sitting there looking at him and looking at him and looking at him. [I am totally blank]. He says, "Is there something wrong?" And I said, "Well, how much is that a year?" <laughs> which is kind of embarrassing, right, because I was supposed to be the smart math guy, right? He said, "It's $8,100 a year." I said, "I'll take that job." <laughs> I liked died and went to Heaven. It was making so much money. It was like-- I'm rich now, but for many years that was the richest moment in my life was that day when I got that job. It was like, "Oh, my God." So I took the job, and I didn't know then. I look back today and the perspective is just if you could pass a PAT test and fog a mirror you got a job because they were desperate to build a company around this technology that nobody was trained in. I was a graduate from a high-quality university which didn't have a computer science department. So they had to go build their own people, essentially, and I went-- after I joined the company, they sent me to a three-month boot camp in, of all places, Newark, New Jersey. We were in a hotel, the Robert Treat Motel-- Hotel in Newark. I remember it-- six days a week, 9:00 to 5:00 classes, homework, live with a roommate, very intense, and in that three months I believe that we actually covered the curriculum of what you get today in an undergraduate computer science degree so: numbering system, data representation, operating system construction. We learned about all the different machines. We learned about the compilers. We learned assembly language. We learned to actually write programs in all these languages in three months. It was pretty amazing.

Brock: And did you-- did you take to that? Did it feel-- did it feel kind of...

Leslie: It was like...

Brock: ...natural the way that physics had?

Leslie: It was revelation. It was perfect. It was beautiful. It was-- I loved it. I was-- I couldn't take it in fast enough, and I think I knew at that time that's what I wanted to do. I didn't know that when I started. I didn't know anything about computers, but I-- when I finished that program that-- I was-- hard to call it a love affair, but I was just intrigued and fascinated and amazed and taken with it, infatuated.

Brock: Before we turn to you have your first real assignment with IBM after the training, I did want to go back and ask you about just this period of time of the mid-'60s in New York. You mentioned the growing uncertainties and turmoil in the country, but this is kind of a unique place and time in U.S. cultural history...

Leslie: It is.

Brock: ...all sort of histories.

Leslie: It is. It is.

Brock: Were there elements of what was going on for you as a young person in that time, in that place, that you also found exciting or positive along with kind of the negative and unsettling aspects?

Leslie: I wasn't engaged politically. I wasn't marching. I wasn't in the civil rights movement. I wasn't marching anti-Vietnam war. I wanted a job. I didn't think about those things because I was thinking about what I was doing. I wasn't moved to try to change the world socially in any way. I was moved to try to survive, for me. So it was all around me, and it was-- I felt at the time that there could be revolution in this company, that's-- in this country. That's how strong the momentum was at the time. It was really terrible. People-- I don't think history appreciates today how uncertain things were. It was terrible-- the Nixon impeachment and it just went on and on with this stuff and-- but I wasn't-- that didn't engage me. What engaged me-- I went to work for IBM, and I thought it was the coolest thing ever, so that engaged me and it was very important for me always to be able to have a job and make money.

Brock: Yeah. Well, could you tell us about that first assignment then, for IBM?

Leslie: Yes. So it was very interesting. First of all, I was totally naïve. I had-- I knew nothing. I was living in a world that was a sophisticated business world, and I was totally and completely unprepared for it, which I didn't know until many years later. But it was awesome. I was doing this all the time. I was looking around like, what's going on here? Although everybody is trying to act sophisticated, right, but I was-- I had no idea. I can see in retrospect, so my job as a systems engineer was to help the salespeople sell computers into big companies. I worked for the New York Insurance Office, and we used to have a table-- a chair and a table at the office, but where we used to work was at the customer site. We used to have offices at the customer because we were kind of-- the tentacles were into the customers. <coughs> IBM owned these people in terms of their data processing. So I worked at Commerical Union Insurance Company (now long gone) in what was then the Pan Am building. I worked as a systems engineer and I was totally happy and about two months later, this insurance district was part of the New York-- excuse me-- this insurance branch, this part of the New York financial district. So the two-- so the multiple branch offices are reporting to a district office, and one of the other district branch offices was the Wall Street

office, the finance office. And some account at that office wanted to be able to-- the kind of commercial system that people used at the time was a system called DOS or OS but DOS was the prevalent system and some-- and there was also--. IBM had a time-shared system called RAX, R-A-X, that offered people the ability to have terminal-based time-shared Fortran and BASIC programming. And one of these firms had such a system installed as well as a DOS system, and they came to IBM and they said, "We want to be able to read and write files between these operating systems, so I want to be able to write a file in DOS and read it in RAX. I want to be able to write a file in RAX and read it in DOS." And they went to the people who were the RAX development group which is up in White Plains, and they said, "We'll do this for you, but you have to give us a head count." And I had no idea what the conversations were but I got tapped on the shoulder and they said, "We'd like you to go to White Plains and work in this development group and build this file system." And I didn't have any idea what they were talking about. And I said, "Can I get someone to pay my car expenses?" That was my question. That was the principal question I had, and they said, "Yes, we can do that," and I said, "Okay." I'm 21. I know nothing, right? I may not even have been 21. I may have still been 20. I don't know, and I know nothing. So they sent me off to do this. Many years later, in Veritas, one of two principal products was a file system, right?

So I go off, and I have to learn what the DOS file system is. I have to learn the RAX file system, and then I have to go into RAX and I have to go able to write DOS files, and I do this. It was-- there was-- they were doing a release of the operating system, and my job was to go do the file system, and I had help. People told me what to do and everything like that, and I finished the job and I said, "All of my peers are making progress as systems engineers, and I'm stuck here in development." I think I was sent there because I did well in school probably and scored well, right? That's probably why I got sent there to do-- this is doing operating system development work. This was the pinnacle of technical work, right, but I-- and I was-- I really liked it, but I had-- I lacked social interaction. So there's a world where you write your code on a piece of paper and they go and punch cards and you have to wait for that to happen and then you want to compile it, and you have to give it to someone and you wait for that. That's a lot of dead time in there, and whenever there is dead time I go around and bother everybody because I'm looking for someone to talk to, right? And so that wasn't good, but I didn't-- and I really wanted to go see the customers and I wanted to go be current with what was going on in the field, and so I finished the project. And I said, "Okay, I'm ready to leave," and they said, "Well, before you go, we've got an interesting project for you if you'd like to do this," and-- because they liked me there. And I said, "Well, what's the project?" And they said, "Well, we want to go add two devices to the-- terminal devices to the operating system, two brand-new terminal devices, and we're going to do a separate release for that. And if you want to do this, we'll let you do the whole thing to release the operating system yourself." <laughs> Well, that's pretty cool. That's pretty cool, right?

Hancock: Amazing.

Leslie: So I said, "Okay," and I got to figure out how the whole thing worked and everything. It was just totally cool, and I finished that job, and it was successful and we released a product and everything. And it was a time when operating-- when the computer had 32K of memory in it so the operating system was

an 8K. It was a different world than it is today, so-- and I said, "Okay, I'm ready to go back to work in the field," and they said, "We actually have something that might interest you." That's the way it worked, right?

Brock: Yeah.

Hancock: Mm-hmm.

Leslie: It was-- and I say today there are a lot of people who haven't been engineers that don't understand engineers. They like to be interested in what they're doing, and a lot of people don't understand that. They think, "Well, you tell them what to do, and they engineer something, and you get a product," but they like-- it's important that they do something that is fascinating to them, that's interesting to them. So I said, Well, what is it you want to do?" They said, "Well, remember when we read and write the file system for RAX and DOS?" I said, "Yeah." "They want to run both operating systems in the same machine at the same time. They want to do it in one machine." I said, "Well, how do you do that?" They said, "Well, we're going to send you-- if you want to do this job, we're going to send you around to the IBM research centers," San Jose, Kingston, it was-- forgot the name of the-- there was a...

Brock: Yorktown?

Leslie: Yes Yorktown Heights. it was a big research center in New York state, and there was a third one, "And we want you to go out and to design this thing if you can. Go learn what you can learn and come back and tell us what you know." So I got my first business trip to San Jose. It was-- this is the third time I'm on airplane on my life, right? The first time was to go to and from Spain. Now this is the third time when I'm getting off an airplane. I'm in California and I'm looking around, and I got to-- there were no GPS, right?

Brock: Yeah. <laughs>

Leslie: You got instructions and maps and it's ridiculous, and I come back from this trip. I'm-- it's a-- I don't know-- a week or two trip, and I come back and I said, "I know how to do this. I can see it in my mind. It's crystal clear about the-- this thing." So I stayed around, and I basically did an architectural design of this first-ever software hypervisor. First ever software hypervisor. I was the architect of that, and it was a long development project and I didn't stay for the development project, but I was the architect and it was an elegant thing. I don’t know how techie you-- anybody technical here?

Brock: I could probably understand the gist of it.

Leslie: So in the operating systems, there is a whole bunch of things that go on with asking for services and getting results, and you do this context switching and they had a thing called a program status word that would switch and stuff like that. And so what you do-- the first thing you do is you build a layer that when you ask for something to be done it doesn't go to the hardware. It goes to this layer, and then this layer says, "I'm going to go make the request for you and remember who asked me." So that's the hypervisor portion, and then you have to go figure out-- and I was-- I was working with operating systems. I used to sit at a console in the middle of the night on the Model 50, which is the size of a football field, in a semi-darkened room stepping it through an instruction at a time and reading out all the registers and the lights and converting it from binary to hexadecimal and then into machine language. That's what I did for a living. I used to go to the store and they'd make change, and I would do it in my head in hexadecimal. I was doing it all day long.

Hancock: <laughs>

Leslie: So the first part was to be able to do all the services and interrupts and everything like that, and that's essentially the hypervisor portion. The second part was to create a scheduling system that be-- that can schedule the work because everybody wants to do work, right? So you schedule the work to have a-- you create a work queue of the highest priory is time shared because we're all sitting at terminals...

Brock: Waiting.

Leslie: ...and then every time you come to the bottom of that queue, you go into DOS and say, "You can do batch work." That was essentially what this operating-- the architecture of the operating system. I remember today, seriously. So from that-- I say it was very interesting. For many years, I didn't tell people what I worked on because nobody-- because the word hypervisor didn't exist until VMware and it was too hard to explain. So I just said I worked on technical stuff and whatever, but it was fascinating. It was just-- I just-- I loved the epiphany of seeing it. I went around and talked to these different people and was taking notes and learning and everything, and then one day I could see it and it was a great day. I really liked that.

Hancock: Can you just-- that's amazing. You've used this metaphor of revelation, epiphany. Can you say more about how those pieces-- how would you describe that sort of discovery in your mind when all the pieces came together?

Leslie: I had another epiphany much later in life. I was teaching at Stanford, and I wrote a paper called "A Sales Learning Curve," which is a very seminal paper in the Valley about how you go to market and I was trying to teach the students. I was trying to figure out how to teach the students about the problem of company phases of development, they complete their product development and declare “

General Availability (GA). Then they hire a bunch of salesmen, they go to market, and a year later there is a catastrophe, and that was a pattern I could see over and over and over again and I was thinking about this and I had this epiphany. I don't know how to describe it, but I was thinking about how to describe it, thinking how to verbalize, thinking how to explain it to others, right? And when you think about how to explain it to others, I guess you go through a mental process of trying different things and I have this epiphany. It was a very, very strange thing. I have this epiphany and I'm working with this very senior academic professor and I go to explain this to him and I can hardly get-- I can hardly explain it, and the words I used with him is-- and he's looking at me like I'm out to lunch. I said, "But no," and I kept going on and on, and I said, "But probably this idea exists." So he said, "Probably it does," so we do a literature search and it doesn't and I had this thing where-- so this is a new, brand-new idea in the world and I thought of it. It isn't relativity, but it felt really good.

Brock: Yeah. <laughs>

Leslie: And it was an epiphany. It was-- why you have an epiphany, I don't know why you have an epiphany. I've had others. Certainly the seeing how to do hypervisor was an epiphany for me, no question. One day-- I'm learning and learning and learning and one day I see it. I see the wholeness of it, right? I see the whole thing, and the rest of it, in a sense-- I described when engineers get into the business side of things, they're always confused because they think engineers are the smartest people in the world. They get into business, and they have all these problems and they have to make decisions and they don't have enough information. There is never enough information, and they have to make decisions. In engineering is all the information because you have an endpoint that you have a clear definition of what it is, and the engineering is only the journey to get there. So you never have not enough information. You always have, "Oh, we'll try this. We'll try this. We'll try this," but you always know the endpoint. In the business, you don't know the endpoint. You make a decision. You think you're going to do the right thing, and then who knows? Sometimes it works, and sometimes it doesn't. So this idea of epiphany is not like engineering, so when I see this-- finally when I see this hypervisor for the first time in my mind, I see this whole thing and I see really a lot of detail on it and stuff like that, the engineering is easy. It was the epiphany that was hard, right? What-- it wasn't-- isn't the doing it, it's the a-ha moment that's the hard-- once you can define it and put it on a blackboard and define all the pieces of it, then you just do it. You just write it, so anyway.

Hancock: Fascinating. Thank you.

Brock: Well, could you describe a little bit for us what the software development process was like in IBM in this period in terms of specifying it beforehand, writing description of what you're going to do before you get into the actual coding. Was this kind of the classic waterfall sort of software development mode?

Leslie: No, this is a different universe, actually. It was go write a file system. This is what it's supposed to do. I don't think there was a document that-- we just talked about it, and I went off and did it.

Brock: Wow.

Leslie: It was primitive. It was-- this whole operating systems group had eight, nine people in it. We go talk to each other anytime we feel like it. I don't remember that we had much in the way of meetings because we were all doing our work. The process-- the physical process was very primitive. <coughs> We had what's called an assembler, which is a representation-- a one-for-one representation of machine language. So you have an operand, which describes what the operation is, and then you have an operating field and you have a field that you're operating on and you do something, and assembly language that one-for-one, for every physical machine operation there is a command in assembly language and that's the way we programmed. We programmed on paper. You write all the stuff. You get a coding pad that, depending on what you're coding and if your Fortran or COBOL you get a coding pad for that. But if you're coding assembly language you get assembly language coding pad, code all this stuff up, send it away for key punch. You get it back. You get a deck of cards, and the deck of cards is your source deck. You compile that-- or I should say assemble it was the right-- correct word-- you assemble that, meaning you convert into something that can be read by the machine as machine language rather than as English language and you then take the other modules that are floating around and you put it through what was called a link editor. I'm just remembering all this stuff I was-- you put it through a link editor, which takes everything that I depend on somebody else and connects those things. I guess that's why they call it a link editor. And you roll that up and that's it and then you install it and that's the operating system, and that's what we did. I don't remember any specification papers. There probably were some. I have no memory of them. Memory was extraordinarily precious. The constraints of memory were unbelievably precious. I remember one of the things which today would be a cardinal sin-- today in programming it would be a cardinal sin in an operating system to do what we used to kind of think was the coolest thing ever. I have this 30 instructions that do something, right, a little module.

Brock: Yeah.

Leslie: And in real time while it's in the operating system, I can change 4 bits and now it does something else, and when I'm done I'll change the 4 bits back and then you say, "How fucking cool is that?" <laughs>

Brock: <laughs>

Hancock: <laughs>

Leslie: And that was like you got a badge for that one.

Brock: Yeah. I forget who is-- Margaret Hamilton. We did an interview with her, and she used to call-- people were known as tricky programmers and that sounds just like it.

Leslie: That's what you-- that was what was cool, when you could do that. You could say, "Yeah, I got this thing. Look what I did over here," and it was totally cool.

Brock: You-- I'm sorry, Marguerite. Did you have a question?

Hancock: Oh, I was going say here, this theme, this idea that you had to love what you were doing or be intrigued with the puzzle or with the challenge.

Leslie: Puzzle is a good word. It's a puzzle. It's a puzzle.

Hancock: Yeah. Can you say more about that? Because you were changing project after project quickly in a sense of-- in a short succession of orders. What were the things that were..?

Leslie: They kept me there with the puzzle. They kept giving me a better puzzle. Go build two operating systems in the same-- what could be more intriguing? They must have liked me, right? They must have thought I was smart . I didn't know anything, and they gave me this task and I could see it and I was intrigued with it. It was so cool and it was a puzzle and it was a fascinating puzzle. It pulls you in. I remember when I was in college studying physics, and there were times when you would go to a new plane where the world would fall away beside you and you'd be all in your head and you'd be in a different state. I don't know how to describe it. I remember one-- kind of the crowning moment for me was later on in physics, and I derived personally $e = mc^2$, right? I did that personally, and I looked at that when I was done and I knew where I was going. But I looked at that when I was done and I said, "Yes, I get it." And I'd been in this trance for an hour, right, and I was all done. It's yeah, it actually works. It's true, and that to me was a reward to be able to do that. It was a dopamine rush.

Brock: <laughs>

Hancock: <laughs>

Leslie: It was. It was total. It was a dopamine rush.

Brock: Well, for how long were you with IBM overall?

Leslie: Two years.

Brock: Two years.

Leslie: That's all. <laughs>

Brock: That's a lot in two years.

Leslie: And then I went back to the field and did some work there, also. Within all those two years I did all this stuff, and it was very rewarding for me. I really loved it. When I joined IBM, I told them that-- oh, when I was working on this project actually, up in White Plains on this-- where they're paying my car expenses, <laughs> I told them that I needed a draft deferment because my medical excuse was going to expire, and they assured me over and over again that you're doing-- this operating system was being used by Hughes and by Boeing. It was being used in all the defense manufacturers; <sniffs> so they told me, "Don't worry about it. We're going to-- we'll get you a draft deferment." Well, two years came and went, and I came in and said, "It's time. I need to get-- you guys need to get me a letter," and the world had changed and the government had cracked down on companies that were writing draft deferments and they basically wrote a draft deferment letter that said, "Mark Leslie is a nice boy and we like him a lot and we'd like to keep him here,"-- kind of paraphrasing here-- and didn't put in there all the things that would be compelling to get a draft deferment, so I was kind of adrift and the senior manager on this development project had left the company a few months earlier and had gone to another company called Scientific Data Systems. He had given my name to the local office and they called me about coming to work for them in New York City as a systems engineer, and I only had one question. It was, "Do you have draft deferments?" And they said, "Yes," and I said, "I'll be right over." <laughs> And I had-- I don't know-- I had appointments and stuff to do and I just said-- I canceled everything and I just walked out of the office and went over there and it wasn't hard to get a job in those days. There were-- <coughs> there was a shortage of people who could do the work, so I walked over there interviewed and I got a job and I got a draft deferment.

Brock: Where-- was that local office in Manhattan or..?

Leslie: It was in Manhattan. Scientific Data System was selling time-share machines which is why that manager of the RAX project moved over there, and for me it was kind of a lay-up to go into this. It was a much more technical company than IBM at the customer interface level, which I loved. I was talking about computer architectures and stuff like that, and the work was good and I liked the company a lot. It was a really great experience for me and I was draft deferred. We didn't really do draft-deferred work. We actually had one customer in Manhattan, which was a research institute run by Columbia called Riverside Research. I guess I can say this now that I'm 71 years old and I'm not going to probably be drafted anymore: everybody in the office in systems engineering was assigned to that account even though only one person actually ever visited it. So they were just getting us draft deferments. It's because they wanted us to work, right, because they would hire people, so I thought that was the best deal I'd ever seen. So that's how I stayed out of the-- they wrote me these great letters. "The world will come to an end if you take Mark Leslie out of this job."

Brock: <laughs> Yeah.

Leslie: That's all I needed, right?

Brock: Right.

Leslie: So I did that. I liked it a lot, kind of palling around with a sales guy and wandering around Manhattan trying to do deals all over the place. It was a lot of fun, but yeah, the computer industry, I don't know if we ever had anyone in the computer industry in those years that was over the age of 30. It was a very, very, very young business, and we're all making believe we're grownups. <laughs> Truly. We're all making believe we're grownups, and I'm doing that for a couple years. Then I say, "So wait a second. I'm a systems engineer and he's a sales guy and I do all the work and he has martinis and dinner and he's making all the money. What's that all about?" So I said, "I can do that." And I was always money motivated, so I kind of raised my hand and say what I wanted to do next is transition from systems engineer to sales, and in my mind I say, "If it doesn't work out, I can always be a systems engineer, which is something we tell ourselves which never happens, actually.

Brock: <laughs>

Leslie: And I went into Sales, and I was with them for two years in Sales before I left the company. Now, Scientific Data Systems was the most important experience I had in my life. I had gone to work for IBM and then I joined Scientific Data Systems. By the time I joined Scientific Data Systems, SDS, I had a picture of the world that was static, that companies like IBM and General Electric and Goldman Sachs, whatever-- pick a name-- they were all there before I was born and would all be there after I died. You could start a company to be-- to manufacture water bottles. You could start a company to manufacture tables. You could start a candy store. You could start a restaurant, but you couldn't start a real company, like the big-scale change-the-world kind of company. And I'm working for SDS and I'm there a few months and one day-- one day I pick up my head and I say, "So, we're building these-- we're designing, manufacturing through an extremely complicated process, these $2 million scientific computers that we're selling to these big corporations and servicing them. We have 1,000 employees and $100 million in revenue and the company is on the New York Stock Exchange and it's nine years old. And I said, "Well, if it's nine years old, that means 10 years ago some guy woke up in the morning and said, 'I'm going to go start a computer company,' " . I didn't know you could do that. I had no idea. An epiphany, right? Another epiphany. And I looked at that and I said-- and this is-- to me this is very important-- I grew up thinking-- the culture I grew up in said Jewish people didn't work for big corporations because they were anti-Semitic, which was true in the '50s. The technology business was not anti-Semitic because they just needed smart people. They didn't care whether you were black, brown, big, little, or whatever, so the guy who started this company was a Jewish guy named Max Palevsky. You probably know this here.

Brock: Yeah.

Hancock: Yes.

Leslie: So I said-- so 10 years ago, this guy who's Jewish wakes up in the morning. He raises a whole bunch of money. He starts this huge computer company, and it's gigantic. To me, it's gigantic. It's not IBM but it was big enough, and I said, "Well, if he could do it I could do it. And that's what I want to do." And I was 23. And it was stake in the ground. I said, "When I grow up, I want to go found, build, and run and important computer company in this industry that had stature and impact and changed the world." I knew that when I was 23, and from that day forth every decision-- every professional decision I made wasn't based on an A-B-C comparison. It was only based on a comparison to where I was going.

Brock: So actively trying to get the kinds of experiences and connections?

Leslie: Knowledge, experience. So I knew what I wanted to do, and I knew I was not capable of doing it. I knew I was not prepared. I knew I didn't have the knowledge and understanding, and manufacturing and engineering and finance and executive-- I knew I knew nothing, basically. So I set about to try to fix that.

Brock: So you were-- it was not long after you joined Scientific Data Systems that Xerox purchased them.

Leslie: Oh, it was in about six months after I got there. It was so-- yeah, it was SDS. It became Xerox.

Brock: And so you saw also that Max Palevsky could wake up one day, decide to create a computer company, and then sell it for...

Leslie: $984- million. He personally made $84 million and that was more money than I could conceive of. When I was 10 years old, I used to watch a television program called, "The Millionaire." Did you ever hear of that program?

Hancock: <laughs>

Brock: No.

Leslie: It was a fantasy program. There is this reclusive rich person, and every so often he finds somebody and he sends out an emissary and he gives them $1 million but he makes them swear not to tell anybody they got $1 million and where it came from. And then each week there was a story of that

person, and I thought $1 million was enough money to buy Chicago. I had no-- it was so inconceivable, that amount of money. So this guy, he builds this company, and it gets bought. It was legendary at the time. $980 million was legendary at the time. And he makes $84 million for, I think, seven years of work at that point in time, and it's like $1 million a month - and I look at that and I'm just astonished by it. Nobody in the industry can stop talking about it. But I was astonished by it. So that was an important part of the dream, right? I want to be him one day, right?

Brock: Had other engineers made that route into being a salesperson?

Leslie: Oh sure. Yeah.

Brock: So that was...

Leslie: So I was a development guy, a systems engineer, which is a field position, and then I went into sales. That was not an uncommon route. You find your-- all young people start out, and then they find their way. I loved the technology and I loved the puzzle, but I didn't like talking to myself, right? It was-- it's very singular work that you do. The work you do is-- you sometimes need to talk to other people, but most of the work you do is alone, right? You write code and you debug and you do that all alone. It was much more fun to go talk to people and help sell stuff and then sell stuff. That was just much more rewarding for me. So I found myself over time.

Brock: When you went into...

Leslie: And I...

Brock: Oh, I'm sorry.

Leslie: Now-- so now I knew technology, and now I was learning sales. There was another element of how do you build a company, right?

Brock: And a place like IBM had a very deliberate kind of training and methodology and culture around that. Was there something similar to that at..?

Leslie: It was not at all similar. They gave you a territory and a map and a quota.

Brock: <laughs>

Hancock: <laughs>

Brock: Yeah, so the opposite. <laughs> Well, could you tell us about...

Leslie: And a car allowance. <laughs>

Brock: ...how you approached it-- yeah, very important to you-- <laughs> how you approach that and the sorts of organizations that were buying these very expensive machines?

Leslie: Yeah, so we were selling to-- well, we try to sell to… The company was expanding and they would create these new territories and we were trying to sell to places that were-- would not be kind of the traditional place that would design the company and products for. I got a territory of-- a new territory of Westchester and southern Connecticut; it was not a good territory. And I was a young guy and that's what you-- you know, when you're the new guy-- you're the new kid on the block. Remember the shoe store?

Hancock: Fab 40.

Leslie: It's the shoe store, yeah, it's the same as the shoe store. <laughter> It's the shoe store all over again, right? So, I'm doing this stuff and there's two things you can sell-- two classes of things you can sell. One class of the things you can sell is these big timeshare computers, also being used for communication switching at that time, which was a brand-new application. And then-- which I worked on as a systems engineer and we put in-- we replaced paper-tape message switching with a computer. Paper-tape message switching was, paper-tape comes via this teletype and you roller-skate over to that teletype and you send it out to the person it's supposed to go to. That was the-- that was what message switching was before computers. So-- and the other thing we could sell, we had, you know, that was a Sigma 7 line was the big line. The other thing we had was a Sigma 3 line, which was a real-time-- real-time kind of operating system that did Analog to Digital and Digital to Analog conversion, so computers could interface to laboratory instrumentation and things of that nature. And I was selling-- I could sell whatever, you know? And, it was okay, I mean, I wasn't-- I was very frustrated because I was in a region where in the year-- the last year I was there, which is why I left, of 16 salesmen in the region, there were only two new accounts. So, this was not like easy to go door-to-door and sell this stuff. It was really hard. And while I'm there, somebody calls me up from the mini computer business, brand-new industry, I've never heard about it. Guy calls me up from Varian Data Systems.

Brock: Oh, yeah.

Leslie: And wants to hire me to come to work because they were selling laboratory systems. So, the low end of the SDS line is what mini computers are now doing at a fraction of the cost and fraction of the time

and, you know, just much better suited for it. So, I was intrigued and-- but, I said, "Well before I do this I'm going to go investigate the mini computer industry." Which was nascent at the time and I went and interviewed with I don't know six, seven, eight companies. It wasn't hard to get an interview. I mean, it wasn't hard to get a job, you know? And this guy that originally contacted me, he was a great. I loved that guy. Wined and dined me and my wife, took us out to dinner, I felt like I had a mentor to learn about selling. He was really-- he's a really good first-line sales manager, but I ended up not going there. I ended up going to Data General. And I went to Data General because when I was 23 I had an epiphany that said, "I'm going to go do this thing in my future." Data General was an entrepreneurial company; it was $30 million. It was on a roll. It was a place where I could see more of how it was all done and it was a place where I could advance my career more quickly. And I hated the guy I was going to go to work for. <laughter> But, it didn't matter to me because I knew it was the right thing to do. It was an interesting-- it's very hard to do that in life. To say "I really like this--" most people go in an interview and they say "I want to work for that person," and I never wanted to work for a particular person, you know, that sentence. I wanted to go do what I wanted to do and if I had to put up with someone and they didn't-- that I felt was a pain-- pain in the butt, I did that and just did that, so.

Brock: So, would that be a reason to get a better view on a company closer to its founding, you know, on the upswing.

Leslie: Totally.

Brock: Is that why you would choose Data General over let's say, DEC?

Leslie: Totally, I interviewed ...

Brock: Or Honeywell, I guess.

Leslie: I interviewed at everybody.

Brock: Okay.

Leslie: And Data General was a hot company and it was nascent. They just finished a-- I joined the company in December. That year, they finished the year of $30 million. It was white hot. I mean, it was ascendant. They didn't have sales executives; they had sales engineers, because it was a very, very technical sell. I was the first sales engineer they hired that had a software background instead of having a EE degree.

Brock: Oh, wow.

Leslie: And the reason is, because when I was interviewed they were asking me about A to D and D to A convertors and I could talk the language because I had learned it, right, in my last job. And they said, "Okay, well, he can sell this stuff." So, it was a very technical-- the whole mini computer industry was very technical, but Data General like I've said, it was sales engineers. And DEC, you know, they didn't actually have-- they didn't have any respect for sales at DEC, so there was no point in going there. It was not a place to be ascendant in the company. It was-- the product sells itself, you just guys-- you guys just go take orders, right? So, I had-- it was the right decision. I mean, I had-- I never had a regret about that decision or second thought about it. It was the right decision.

Brock: And did that entail-- did you move for that job or did you...

Leslie: My territory changed from White-- from Westchester and Southern Connecticut to northern New Jersey, not bad. <laughter> Not bad.

Brock: Different commute.

Leslie: Going south on the Garden State instead of, you know, north on whatever.

Brock: And could you describe for us, you know, just how the-- your trajectory unfolded there at Data General ..

Leslie: Sure.

Brock: ... and what you learned?

Leslie: So, it was a very, very-- I have-- I have great memories. I remember we used to have to put in a forecast once a month and we used to give it to the office secretary to type. <laughs> This is a very primitive time, right? There was no computer entry. There is no-- there was nothing, right? So, you take-- so, I used to do this all the time, I used to take last month's forecast and I used to go through it, and I used to cross out the dead stuff, which there is always a lot of. And then I would be embarrassed to hand in something that-- so then I go out and prospect. <laughter> And, it's the-- this is the shoe store all over again, right? So, I go out and prospect and, you know, you basically get these lead cards and you just start calling people up. And sometimes there's no answer. Sometimes you get someone on the phone who's got-- who's too busy to send me something. And sometimes you get a guy who's willing to talk to you on the phone. So I talked to him for like five minutes, I say, "You know, why don't we just get

together?" And he'd say, "Okay" , and I'd say "Look, what are you doing right now? Why don't I just drive over there?" And that was me, right? It was me walking to the front of the shoe store and saying, "Well let me help you, come on follow me." Right?

Brock: Right.

Leslie: So, I get in my car and I go over there and I find an opportunity. If the guy's willing to talk to me it's probably is an opportunity. And I'd put it on my forecast and I'd say-- you know, I mean, that was kind of who I was at the time. I had a great-- I loved it. I had a great time. I enjoyed my work.

I brought home a computer to the house and I got this big, you know, this big chassis over there and a big teletype next to it and everything <laughter> and we had it - in order to demo our computer, I mean, it's hard to remember how primitive things were. We had to load the APL, the Automatic Program Load program manually from the console switches. So, you'd load a word, put it in, you'd load another word and you'd be like 16 words, 20 words-- I forgot what it was. And when you're all done, then you can press the start button and it'll go down to that location and execute that and that'll boot the system. For $400 you could buy an automatic APL, but they didn't give us that because we were sales guys. I mean, it was ridiculous, right? <laughter>

So, I took over this territory-- I went to Data General and I took over this territory from a guy who was , the buddy of the manager that I mentioned early who I did not like.. They were close together. And the guy had done very badly in the territory for a long time and they finally fired him and they gave me his territory. And they told me that he and I were going to overlap for a month and then he was going to leave. And I went on-- you know, the first week we went on calls to the different places where he called accounts which were-- I mean, I was sitting there rolling my eyes and after the first week I said, "You've got three weeks of vacation. You don't have to spend any more time with me I'm fine." He took me to an account that had just bought a competitive machine at an educational institution, which means they weren't going to buy anything for five years, and he said, "We're calling on these guys" and I am sitting there like, "Why are we calling on these guys?" Right, it was-- the guy was-- it was ridiculous. So, I went out and I was-- I closed some new accounts and inherited an account that was-- it was pretty nice.

He had done about $180,000 in that territory. And before the end of my first year-- -- and before the end of the first year I was at $1.3 million. So I was rocking and rolling, it was great, way ahead of quota. And before I finished the year they asked me if I wanted a promotion to a district manager job. <laughter> It was an industry where, you know, they were growing and then, how-- where do you find district managers? You go take people who seem bright and talented and you give them the next job. So, I had a choice, I could go-- the district manager's job in Seattle. Seattle was like-- you know, when I came home and said Seattle, we went to the encyclopedia, to find out if it had polar bears and icebergs. <laughter>. We're in New York, right, I mean, the furthest we'd been was New Jersey and they're talking about Seattle. We don't know. So it's like polar bears and icebergs as far as we were concerned. So, anyway--

so I had the opportunity to go open a district in Seattle which is Northwestern United States, or I can wait for six months and open a district in downtown Manhattan. It's got to be much better. The only problem with that district in downtown Manhattan is now I'd be working directly for the guy I didn't like, instead of once removed. I didn't like that man. So I went out for the interview on the West Coast and I met the guy running the West Coast and thought he was great, just a really fabulous guy and we shook hands and I told my wife, you know, my wife and I talked about it and we said, "It'll be an adventure." We had one young child and she wasn't yet pregnant with the second one. But, we had one young child and, you know, it'll be an adventure. We'll go live on the West Coast and eventually we'll get promoted back into the home office in Boston - and Boston is close enough and far enough, for family.

Brock: Yeah. <laughter>

Leslie: Close enough to see them, far enough that you don't have to. That was the plan of record. We go off to Seattle. It's beautiful, but it rains every day. It's, you know-- I remember vividly, because I go out there a month before her and I'm bird-dogging the real estate and when she finally comes out it was, like, miserable; dark, raining, miserable day. And she comes out and the sun peeks through a little bit and I'm like, "Oh, thank god." You know, <laughter> and her memory of that day was like, "It was dark and rainy all day." I mean, for me it was like, a little bit of sunlight over there, right? And I tell her when she comes out there, I say, "Okay, so I've been bird-dogging this stuff and we had acquired a condo in Westchester. Condos were pretty new at that time and I said, "We're going to go-- I'm going to go show you all these different houses, pick the one you like the best. Money's no object." Because real estate was free over there, so we-- <laughter>. So we bought a four-bedroom 3,000 square foot house for $52,000 in a great neighborhood, Bellevue.

Brock: Wow.

Leslie: It was beautiful, I mean, it was just physically, you know, just a green and it had all these fir trees and it was just a really beautiful area. And I had a great time. Eighteen months later, they called me up and they said, "We'd like you to open a new district in San Francisco." San Francisco and East Bay. They had a district already in Palo Alto. So that was a bigger, more prestigious thing and I moved down to-- we moved down to-- they gave us a-- I remember this. They gave us a three-day house-hunting trip and we were going to sell our house, we ended up selling it for $60,000, that's pretty good. And we said we could spend $75,000 and we came to the bay area and it was a nightmare. Like, it always has been. It was then, it was always a nightmare. We looked at all these $75,000 upper-limit houses, couldn't find anything. And we ended up spending $86,375 for a house, I remember that nymber, burned into my brain. And I put down a down payment of $36,375 because I was afraid of having a mortgage bigger than $50,000. I was afraid-- I was-- economic security was always important to me. Having a mortgage that you-- if you couldn't work you couldn't pay the mortgage was, to me, very frightening. So, we were very conservative. So we moved to the Bay Area and we had looked around in different parts of the Bay Area and they told me, because I was looking at places in the East Bay, and they said, "Don't move to the East

Bay. Move to the Peninsula, so you can be accessible to the regional office." And the message there was, "someday you'll be the regional manager." That was the message, so, "Okay." So we moved to Belmont and we figured we'll be there for a year or two. We ended up staying there for 25 years. Our family grew up there, it was a very nice family home. It was very-- it was fairly modest by my standards today, but it was very, very nice. And I got promoted to a regional manager about, I don't know, maybe a year or two later. And then one day I came home to my wife, we had been away from New York for three, four years at this point in time, and I said, "Do you remember that I promised we would go back to New York -- or back to the east coast?" She said, "Yeah" I said, "I'd like to talk about that, because my destiny is in California. This is Silicon Valley," which I didn't-- when I came out here originally I didn't know I was going to Silicon Valley. But, after I was here for a while, I said, "I have to stay here because this is where I'm going to start a company and this is who I am. This is the place." So, we talked about it for about a year and then she finally agreed to do it and I could see it. I could see that I had to stay out here. I mean, I didn't know anything about how to start a company. But, I knew I had to do it here. It's kind of-- it's just-- I just knew that.

Brock: Could you see other people or was it a buzz? Or what was giving you that signal?

Leslie: The word, buzz didn't exist. Like, today there's buzz.

Brock: Okay.

Leslie: Didn't exist. Silicon Valley, I'm sure you've done these interviews-- Silicon Valley was an extremely humble place at that time. These were guys walking around with a pocket protectors, the best hotel in town was, like, a dump. <laughter> It was Rickey's Hyatt House.

Brock: Yeah.

Leslie: It was-- I mean that was the best hotel. You got a meeting at Rickey's Hyatt House, that was, like, hot, right?

Hancock: Big deal.

Leslie: And it was completely engineering-driven. Everybody in any-- who had started a company was an engineer. And-- but, it was the place to be. I just knew that, I mean, you know, there was-- I remember the startups and, you know, there were startups. I mean, they were a little beyond what I was planning to do. They were like Intel startups and things like that. But, they were starting and this was-- there's something about it that this is the place. I knew, I'm not even sure why I knew. But, I knew it was a place.

Hancock: What year was that Mark?

Leslie: Huh?

Hancock: What year was that? When you-- after you negotiated your deal that brought you to stay, you said you knew it was the place?

Leslie: It was probably -- let's see, we moved out in late 73, probably 77, 78; something like that. And I knew that I didn't want to go get transferred anyplace else. Well, I also liked living here, right, like I liked the weather and I remember the first time I'm driving down 280, I got-- I came from the east coast and when you come from the East Coast and you move out here and you see the brown hills, it looks burnt out. It looks-- it's a very hard on your eye to see that. And I was driving down to 280 one day and I turned around to my wife and sayid, "It's the golden hills of California." And I said, "Oh, my god what did I just say?" Right? So you could just see that I had fallen for the dream , right? There was a spirit out here that was different. It was everywhere. And I just knew I had to be here. I just knew I had to be here.

Brock: What-- could you describe what it's like or what it was like for you to manage sales? To manage a region? What's a day like for you in this period?

Leslie: So, I loved it. I mean, it was very-- sales has a cadence to it. Has an immediacy to it. You're always working-- so first of all, we were in a time where the company was exploding in size, so we were always worried about hiring more people, developing more people, promoting more people, staffing the territories. It-- you're always working on your quota. You're always working on your forecast. You're always working on the deal of the day. It has a lot of immediacy to it. It's a very consuming thing to do. And I loved it, I mean, I loved every moment of it. It was-- there is hardly a time in my professional life that I didn't love what I was doing. But, there was one time, but I loved doing it. I loved working with salespeople.

I had an interesting experience. You know, everybody thinks salespeople are motivated by money, which they are. But, they are profoundly motivated by recognition and psychic reward. And I had this experience, I was a regional manager and we were having a quarterly regional meeting and at the quarterly regional meeting we give out plaques. And so I go talk to all my managers and we kind of decide who's getting the Salesman of the Year, and the Salesman of the District, and the Rookie of the-- all these different things, right? And, you know, it's kind of like it's a work product that we're developing, right? We're doing all this work and I have an assistant-- a secretary. Not an assistant, a secretary to go out and buy the plaques and don't spend too much money because we're always on a tight budget, and get the plaques and make sure they're right. And then we got to get them delivered to the place where we're having the-- all this logistics and stuff like that. And then you got to go say something about each person and everything, so this is all, like work, right? You're all doing this-- you're all doing these little tiny

tasks that collectively end up doing this thing. And then one day I'm in Boulder, Colorado spending the day with our local sales rep. He works for a manager who works for me and I'm out in the territory kind of meeting some customers and stuff and he invites me to his home at the end of the day. And I walk into his home, a fairly modest home and this is, you know, we were-- everybody was upwardly mobile but nobody was rich, you know? And in his living room, over his couch, is the plaque that I gave him, on the wall with nothing else in the room on the wall. And I looked at that and I said to myself, "Any time somebody walks into his house he wants them to see this thing. This has so much meaning to this person" and when I was doing it, it was like work for me. But, to him it's like, he was recognized for being a special person and that was a very humbling experience for me to say, "Well, this is much more important than you think it is, to do this really, really well." So, I have a very vivid memory of that. It was a very-- I was like, "Wow, this has so much meaning to this person." And he was a great salesperson. He was a star, right? That was on his living room wall over the sofa.

Brock: Was that part of going-- were you traveling a lot in this period?

Leslie: Oh, yeah. I was...

Brock: Were you kind of like the ultimate person to bring in to clinch a deal or something like that?

Leslie: So, I was traveling to the districts. So, look, I had a headquarters location in Palo Alto, I certainly spent much time there, a lot of time on the phone. A lot of time writing memos and whatever. Travel to the districts. Chasing the forecast all the time. Going out to important accounts. Interviewing some of the-- if the sales manager wanted to hire a salesperson, I had to interview him to sign off on the deal. I was busy all the time and in addition to that, I was probably back in the home office every other week, either for some event that they created or for some reason that I had to go talk to someone about an account, or some customer problem or something like that. So, I used to commute pretty regularly on a TWA/SFO to Logan, a lot of guys did. This was a very popular flight, L-1011's.

Brock: Certainly the day that Data General was a huge hit. Was there-- I was curious about the sort of-- was there a change in the people who were buying them? Or was it an expanding-- was it kind of like a certain type of customer, but then you are getting more and more of all of those types or was it a diversity of types of customers were coming in?

Leslie: So, two-- I had two formative experiences during the years as a district and a regional manager. So first, the company, like all companies, wanted to expand its opportunity. So, the original Nova was an OEM machine, kind of like an embedded chip in a real-time system would be today. So, the original CT scanners had Novas in them, right?

Brock: Okay.

Leslie: Voting machines had Novas in them. So it was an embedded machine, and it was what's called an OEM business. You sell it to someone who builds something and then resells it. So, you're a supplier to them, your stuff gets kind of mostly hidden, sometimes not. And once they design you in, they just keep buying more. So, it's a design-win business. And the company is expanding its horizons and they come out with a product called an Eclipse. And the Eclipse is designed to compete with the HP 3000, and the DEC 750. That's kind of the class of machines.

Brock: Okay.

Leslie: And, I think I was a district manager at this time and the strategy of the company-- at the time, the OEM business was starting to come under pressure from microprocessors. You could do-- instead of buying a box you could buy a board, as an example.

Brock: Right.

Leslie: Companies had come out with a board-level computer, you just slide it into whatever you're doing and you could see it was commoditizing them. And in the world of the HP 3000 and the Digital 750, the VAX 750, that was a system sale where you go in and you kind of hug them up and you provide them with support and, you know, compilers and all kinds of stuff that make them happy. So, Data General, I concluded and I raised my hand at a district managers meeting to give this input. We had a day with the executives of the company and I said, "I think we have the wrong strategy," which is something that the execs of the company love to hear, somebody-- some jerk from-- some sales jerk, you know is coming in to tell us how to run a company. So I said, "Here's the problem" I said, "On the low end of our product line, in order to maximize revenue; we're bundling. We're forcing our customers to take more stuff than they want. We're bundling stuff. You can't buy it alone; you have to buy it with a paper-tape reader and you have to buy it with a compiler and you have to buy it with this, that and the other thing. And we're doing that to kind of hype revenue. But, the market's--" I didn't know the word commoditizing, but "...the market's commoditizing. So, we're going exactly in the wrong direction. And at the high end of our market, we're selling what we used to sell in the OEM business, which we used to call “hot hardware and a handshake”. 'Our stuff is faster than your stuff.'" And I said, "Unfortunately our customers are unhappy. We put this stuff in, and it doesn't work and they run into problems, and we don't have any support for them, and we leave behind a trail of unhappy customers. So what we really ought to be doing is we ought to be bundling more comfort and warmth with the high end of the market and got to be stripping down the low end of the market and ultimately our competitor on the low end of the market is not DEC, it's Intel. That's where the market's going." So they told me, after thinking about the fact that I was a really bright guy and had a vision, they told me to shut up. <laughter> There's no doubt in my mind that I was right. That I could see that and I was right. And the lesson I learned from that is just, so you work in a company and these guys who started the company are gods. They're the founders of this company that's successful. It's hot, It's amazing. You know, Data General was a hot, hot, hot company and they've got this strategy and I'm making a suggestion, and they said I'm wrong. They're smarter than me, right? I

mean, what do I know? But I learned that day that sometimes just because someone has power and position doesn't mean they actually are smart. Even though they have a track record of having been smart. So that was an important moment in my life at Data General. The other important moment in my life at Data General, and I date this to probably 1975, the first time-- and this goes to how I started my first company-- the first time I saw an 8080. In the computer industry, up until that time, you start by designing an instruction set. You implement that instruction set in silicon.You build the system around it that has busses and IO devices, which you design and build. You build software to sit on top of it and then you sell it. And every system is a complete vertical construction, proprietary and closed and an island. They didn't even network them at that time, and it's a complete island. So IBM was IBM and Data General was Data General and DEC was DEC and they were just completely, you know, unique. Each line was completely unique. You know, the big thing I remember we did with the Eclipse is we went from a 16-bit architecture to a 32-bit architecture and had a bigger memory. I mean, it's unbelievable, right? But this 8080 and I had this vision. I said "It's all going to change," and I said, "People are going to find ways to take these little tiny chips that we kind of poo-pooed, we kind of spit on them at that time, you know, they don't do anything." I said, "People are going to find ways to take these things and architect them to solve big problems. We're not going to build instruction sets; we're going to build computer architecture." I could see that in 1975 and it was clear to me that that was going to happen. The whole world that we knew was going to be replaced by a whole new world, which is part of what I love about the technology is this idea of disruption equals opportunity. I could see the disruption. I didn't see the opportunity, but I could see the disruption. It was crystal clear to me. Not something I acted on in the moment, not something I shared with people, but crystal clear in my mind that it was all going to change. So that was something that I experienced. And you know Data General was going out and doing Data General stuff, and I see this happening and they're not doing anything about it. I could see this. I mean, I could see that this is going to change the world. So I was with Data General. I was always on the fast track. In 1980, they sent me off to HBS for the Program for Management Development (PMD), and that was kind of like finishing school before you become a VP. That's what it was inside the company. <laughter> You had a choice of going to Harvard or Stanford. I was on the West Coast. I picked Harvard. It was, like, a one-semester, five months, three cases a day, six days a week and we basically covered in one semester what an MBA program covers in the first year. So, we covered all of the required courses of, you know, finance, accounting, operations, organizational behavior, whatever. We just, you know, all of the basic courses were covered in this period of time in this certificate program. It was a great time in my life. It was the first time I was in an academic environment where I wanted to learn faster and more, and just give it to me. I mean, and I knew that what I was doing was preparing myself for my future. I knew what I didn't know and I knew when I went to Harvard Business School, one of the elements that I was profoundly missing was financing and accounting. I didn't understand how money worked in a company, and when I got there and I got an opportunity to learn that stuff, I was like, "Oh, this is great." I couldn't get it fast enough. I had a great time. I had to finish school. Prior to that I had actually started working on my very first business plan with a guy who I eventually partnered with and I remember after we had worked on the business plan, and you know working on the business plan, you write the business plan, you type it up, you make a change, you retype it. You do the financials, you change a number, you got to redo the entire set of financials because there was no Excel. Everything, one number changes, it rolls through all the financials, which I was doing with the textbook sitting next to me on ledger paper with a pencil with an eraser, which is the way you did it in those days. And then we said, "Okay, well, we're going to go raise money," and so

we had to go find venture capitalists. I didn't know any, and I didn't know where to find them. So I took out the Yellow Pages and I opened it up to V to look for "venture capitalists." This is a true story. Of course, there was nobody there. They didn't advertise in the Yellow Pages. <laughter> I said, "Well, that's not going to work, so who do I know that knows someone in the venture capital business?" That was the next question I asked myself. And how can I get introduced? So we finally made our way and we got some introductions. At the time-- the first time I was raising money in my first company, my first company called Synapse Computer, I was-- there were probably 40 venture capitalists in the world with $40 million apiece. You know, they were in Boston, New York and Sand Hill Road. And then there were a few scattered in a couple of different places. Mostly, they were in those three places. I used to drive by with my wife and I used to just point out, I said "3000 Sand Hill Road-- that's where they keep all the money." Because nobody knew. It was a mystery. It was a secret, right? Sequoia Capital was there at the time. I remember seeing their offices with the old beat-up desks and everything like that. I was going to go start a computer company. I mean, what the hell? I mean, I want to go start a computer company. Why not, right?

Brock: Well had that-- so that discussion with your colleague and working on a business plan, you had started that before you went to the Harvard Business School?

Leslie: We had been working on it before we went to Harvard Business School. We tried to raise money, but we were unsuccessful. We put it on ice. I went off to Harvard. We said, "Well, maybe we'll get back together, maybe not. We'll see what happens." I came back from Harvard and we started doing it again. It was all after-hours and stuff like that. And we're just sitting-- it's all kind of been in your mind, right? You take it in your mind and you put it on paper and your creating, you know, a pitch. You know, we didn't have pitch decks because we didn't have power point, but you'd create a written document and then you would talk about it. And you iterate it a lot. Every time you kind of change something, it iterates the whole plan. So we worked on that a lot. We spent a lot, a lot, a lot of time working on that. We're trying to recruit other people into the company before it was a company, which is very hard to do.

Hancock: How did those first conversations go with your-- about funding?

Leslie: Well, the first time we tried, we didn't get any money. It was interesting. I had an interesting experience the first time we tried it. One of the things they would ask us, "Well, what are your roles?" And we say, "Well, you know, I have the sales background. He has the engineering background. I guess I'll be the CEO, and if we have to hire a CEO, that will be fine." And that didn't work out, and the second time we started raising money I said, "I'm the CEO. Anybody got an objection to that?" <inaudible> But it was like I just declared I was and then everybody just moved on, so I thought that was pretty cool. Why not, right? So we actually got pretty far along and I remember going back to-- I'd been promoted again. They had converted seven US regions and Canada as an eighth region into three areas. I was promoted to be the western area director, so I had gotten yet another promotion and I was on my way. I had 1/3 of the domestic revenue. I was responsible for that, and I had about 200 people, sales system service working

for me on the west coast and I was the senior executive on the west coast and I'm working on this, you know, thing on the side. And I've got to go back to this meeting, and in my pocket I had my resignation letter. And we were out talking to some VCs at that point in time, so I get called into the-- I got called into-- do you know the name Herb Richmond? You must know that name. He just died last week. He was the-- one of the-- he was the sales guy who was the founder of Data General, and of all the things going on in sales, he was the number one guy. So wherever you were, you worked for Herb Richman. So we're back there, and me and another guy in the company, who I was partnering with, we get called into his office and one of the board members of Data General was a VC and they found out that we were on the street. Fred Adler, if you know the name.

Brock: I have heard that name.

Leslie: Crazy guy. I knew Fred from Data General and then I got to know him later as well. And it, you know, I said, "Well--" I pull it, "Here's my letter." Before he could fire me, I resigned. And this other guy with me as well did the same thing, and they were afraid we were going to contaminate people with the disease of starting a company, and they walked us-- they had security to walk us out the door.

Hancock: At that moment?

Leslie: At that moment in time. There was no-- we didn't see any other person after I did that, which they were going to fire us. But they were afraid we were going to contaminate people, take people with us, whatever. You know? They walked us out the door and of course we became folk heroes, right?

Brock: Yeah. <laughs>

Leslie: You know how that works, you know? We were the buzz for the day for sure. And let me go back. So, this first company, Synapse Computer-- in 1975, I said the whole world's going to change. And when we started Synapse Computer, it was part of that. I said we're going to go use microprocessors. We're going to architect them to do bigger jobs. The best possible job we could think of to do with small microprocessors was transaction processing because each transaction was essentially atomic. You start it. You finish it. You're done with it. And you can do ten of them in parallel without interfering with each other. So, we're not trying to go build a supercomputer. We're trying to build transaction processing. It was a perfect application for this architecture. So, we designed-- that was the essence of what we were doing. We were designing and building a system to go do this. We-- I look back in retrospect, we got the computer architecture thing exactly right, hot swappable CPUs and IO boards and shared memory. And the architecture we used for shared memory is used today in all shared memory systems. And what we got wrong was because of where we came from, of building our own operating system, something we should not have done.

Brock: Oh.

Leslie: Because the new generation of microprocessor-based stuff was built on either DOS or UNIX. And we were like one foot in the old world and one foot in the new world. And that was a mistake. On the other hand, we were trying to build a system that was going to be competitive with tandem and IBM. And you had to build something that was highly resilient and kind of all the corner cases covered, and etc., etc.

Brock: Do you think it would have been possible to adapt an existing operating system to the purpose? Or was it just--

Leslie: Not at that time.

Brock: Not at that time.

Leslie: Because what we did at Veritas-- when we get to Veritas, we'll talk about that. So, I started this company. It was a big project. We raised a lot of money. I was a Silicon Valley celebrity. And like some of the young people today, I actually thought that because everyone else though I was a celebrity, I was actually a celebrity. I didn't realize it was transient and fifteen minutes of fame, which I learned through that experience. We raised a lot of money. We raised thirty-five million dollars in the early '80s, which is a lot of money. There were, as I said, forty firms with forty million dollars apiece. Thirty-five million bucks was a lot of money. Everybody in the Valley knew who we were and what we were doing. We were pretty famous. We brought it to market. It sold. It was hard to sell because it was a complex, expensive-- it was a three hundred-thousand-dollar sale. And what we learned was that although we had solved the-- we had built a system that solved the basic problem of doing what it is we wanted to do, that every place you took it they had yet one more requirement. This was a long tail. I want to go talk to this terminal. I want to be a part of this network. I want to use this compiler." Wherever you go, there's this long tail of requirements. And everyplace we went, we had to do something else. So, it prevented us from getting sales momentum. And the sales we did get consumed resources inside the company. So, it went slower. Ultimately, we ran out of money. We had to go raise money. The cost of raising money from the very unhappy investors at that point in time was my job. I got fired as the CEO of the company. I had a job there for a while. And then I eventually left the company. And it's interesting. I teach at Stanford Business School now, and I'm certainly an icon of success in the Valley. And sometimes I say, "So, anybody ever been fired from a job?" And you're sitting in this room with seventy-five people. And my hand goes up. And it's the only hand in the room. It's good to say that. You can be fired and you can live to fight another day. It's an important thing for people to know.

I was at a dinner once, and they said, "Let's have a whole table conversation rather than," you know, at dinners you tend to have twos, twos and threes. "Let's have a whole table conversation. I'll start if off," this person said, which I've done since then because I really liked it. "What is the one thing your mother

told you that changed your life and that you remember today?" And you go around the room, and everybody tells a little story. It's great. By the way, if you all have a dinner party, it's a great way to have a dinner party. And then you can do-- someone else can come up with an idea and do those things. And when it got to me, I said, "Well, my mother told me whenever you fall down, you've got to brush yourself off. And you've got get up. And you've got to keep going and try again." And I didn't know that she-- I didn't know that until that moment in time, until I was asked the question. I didn't know that that was the most important thing she told me that I remembered to this day. But when I got fired, that's what I did. I said I'm going to go do this again. I'm going to try again. And it was losing that company-- the company was sold shortly thereafter for assets at a song. Everybody went their separate ways. It was a profoundly, deeply, traumatically disappointing moment in my life. It was like the loss of a creation, the loss of a child almost. Not-- it is nothing like the loss of a child, but it was such a personal loss for me. And I was depressed for a while. And it was just horrible. It was just a terrible-- and I remember saying to myself-- and it's I guess part of-- I am a genetically resilient person. I remember saying to myself a lot of people did things that caused-- a lot of people contributed to the failure of this company. A lot of decisions were made in a lot of different places by a lot of different people that contributed to the failure of this company. But I'm only going to worry about what I did wrong. There's an opportunity to be bitter. But the big opportunity is to be better. What did I learn from this, and how can I be better? And the most important is-- the most important thing I learned when I left Data General to start this company-- I grew up at Data General, and that was the only place I could see culture, and values, and executive decision making. And it was a tremendously successful company. So, when I started this new company, it was like, "Well, I'm going to be like them, except I'm not going to do the things I didn't approve of." But other than that, to-- it's the way it's done. And what do I know? I'll just change a few things. So, if their style was A and my style was A prime.

Brock: Okay.

Leslie: And what I learned when I sat down and I thought about that-- I mean, there we technical things to learn and stuff like that. But what I learned was that those guys were just crazy, truly crazy, each in their own way. The guy running the company was autistic, basically. Herb Richman was a guy who took every opportunity to humiliate the people that worked for him. He's the guy that's running this company that was an amazingly successful company. The third founder of the company was an invisible guy who was always doing some stuff in the dark. They hired this HR guy who everybody called Rasputin. I mean the place was terrible. They did not cherish their customers. They treated their customers badly. When HP-- when the HP 3000 first came out, and it didn't work, HP went back to every single customer and gave them their money back, and apologized to them, and said, "We're going to do this over. We'll see you later." I remember going into customers that bought the Data General Novadisc, which was one of the worst products that the company had ever built-- It's kind of an enclosed high-speed disc. It didn't work. I would go in and see racks of these things. And the company refused to ever take them back. You bought them. You own them. And there was all kinds of things that were going on in the company that I looked at. And now, in retrospect, in the quiet of-- while licking my wounds, and I said it was wrong. It was the wrong way to do it. It was a company of distrust. It was a company of secrets. It was a really

dysfunctional company that was successful in spite of all those things because they had a great product at the right time. And I didn't know any of those things.

Brock: Well, you were talking about realizing the deficiencies in Data General culture and way of doing things. And maybe you could describe to us how you took those lessons, and took that thinking, and your whole decision making around taking a job that I-- of what you, I believe at that time, knew was kind of a struggling outfit.

Leslie: Totally.

Brock: At Rugged Digital Systems. So--

Leslie: What were my choices?

Brock: I'm sorry?

Leslie: What were my choices?

Brock: Oh.

Leslie: I was tarnished at that time. I'd raised a lot of money, lost it, and the company blew up. And I'm not the guy you wanted to go hire to run HP at that point in time.

Brock: Okay.

Leslie: So, I always told myself the first time I started a company and became a CEO-- oh, I didn't tell you part of starting the company at Synapse. This is an important-- and I tell this story at school. It's an important story. I went to my wife, and I said, "We have a year of money in the bank. So, if I don't work, we can live for a year." And this is before I-- this is when I had a resignation letter in my pocket. And I said, "I would like to quit my job. And I'd like to start a company I've been working on." And she knows that. "And I don't know how it's going to go. I don't know if we're going to get a company started. But I promise you that before a year is up, if we're not there, I'll go back to work. And we'll replenish the family treasury." We had a mortgage, and car payments, and two kids, and essentially what they call the whole catastrophe.

<laughter>

Leslie: And we didn't have help in the house. And my wife-- we had a-- I think we had gardener at that time. And my wife agreed to that. I talk to students, and they say, "Well, I can do it now, but I can't do it later because I'll have responsibilities." But I was in the middle of my life of responsibility. I was thirty-four years old when I started this first company. And I didn't know if we were going to start the company. I didn't know if we were going to get funded. I didn't know anything. I kind of jumped off this precipice. It was pretty scary. But I wanted to do it. That's how-- I was so driven that I was willing to do-- it's an unnatural act. That is not something a rational person is going to do at that point in your life with that many responsibilities and stuff like that.

Brock: Yeah.

Leslie: I was making a lot of money. When I left Data General in 1980, I was making ninety grand a year. That was a lot of money in those days. And I went from ninety to zero. It's not an easy thing to do. That's part of that start up story. We got funded, money in the bank, within about three months. So, it worked out okay. But you don't know. You don't know when you jump off the cliff how far down is down and whether you're going to land on a bale of hay, or you're going to land on rocks. You don't know.

Brock: How long did it-- how long was it after you left Synapse that you joined Rugged?

Leslie: Oh, I don't know exactly. It was more than a month and less than six months, I'd have to say. So, relatively quickly, yeah relatively quickly. It was a struggling company. It was a turnaround. I was the fourth CEO in two years. And when I got there, the company was finishing its year of a fifteen-million-dollar plan at two million dollars. That's when I got there. It was a great idea. It was a little idea, but it was a great idea. The idea was-- the idea was as follows. The state of the art of building military computers at that time was to license from DEC or Data General. In the case of DEC, it was a company that was called Norden. In the case of Data General, it was a company called ROLM. They licensed the instruction set. They implemented the instruction set with mil spec chips in a mil spec package. And then they used the operating system. And then from there they build it into the military systems.

Brock: Okay.

Leslie: By the time you went through that process-- excuse me, that process you got a product to market that was between five and ten years obsolete in terms of performance at ten times the price of a current computer. But you know, it was the military. It was gold-plated. Nobody cares because it's better than not having a computer. And you can't take a regular computer and do anything with it.

Brock: Right.

Leslie: So, that was the state of the art. So, there was Norden and ROLM. And the insight this company had was that computers, a standard commercial computer system, have reached a level of compactness that you could actually repackage them into a ruggedized package. And you could pass all of the same tests that you passed with a military computer system. And you could bring that to market for three times the price instead of ten times the price. And you could bring it to market with a one-year old technology instead of a ten-year old technology. It's a great idea. It's a great idea.

Brock: Absolutely.

Leslie: You've got to go get all the skeptical guys in the military to look at it. You've got to go through all the testing, all the shake and bake and tempest. And there're a million different things that they test these things for. We took a [VAX] 750, which had these-- a 750 had a collection of large boards, but not a lot of other stuff floating around in it. We build a brand-new package for it. And it had to fit down the door of a submarine. It had a lot of requirements.

Brock: Yeah.

Leslie: Weight, and size, and shape, and everything. So, we knew all that stuff. And we built these products, and we sold them. And it's kind of like the OEM business, except it's in the military because once you get on a program, you keep on selling them.

Brock: Right.

Leslie: So, over the four years that I was there, we took the company to about a thirty-two million dollar run rate, which is pretty good. However, I was not happy there. I was very unhappy there. I was unhappy for two reasons. The first reason I was unhappy is that the business was commoditizing. The government was in our knickers in pricing. They were coming in and-- you used to be able to say it's a commercial product that we sell to the oil field that we're selling to you so we get commercial pricing. But over time, it became more and more defense. And then you got into the-- you know what DARs, Defense Acquisition Rules and--?

Brock: Right.

Leslie: And you get paid cost plus overhead plus profit. And so, that was a big problem, protecting our pricing. And the second problem was is that what we were doing was extremely cool. But there wasn't a lot of IP in it. It was a packaging thing, which you look at it, and you say, "I could do that." We didn't have anything-- we didn't have any-- and I'm not a believer-- IP is not about patents. IP is about what's in your head that makes it unique. And there really wasn't a lot of that. So, as the business started to come under

these pressures, we didn't have enough running room. We didn't have enough cash. We didn't have enough profit, enough to do the next thing. We couldn't-- there wasn't enough opportunity if you-- the arc of life, there wasn't enough opportunity to create another arc. We just had to play our hand. And the hand got worse over time. So, I really said I'm-- so, that was one reason I was unhappy in the business. And you can't do anything about it. It's structural. You can't get out of the business because you haven't got enough money to do anything to get out of the business. I'm not sure we have any ideas, but we could have had ideas. And the business is getting worse over time. And there's nothing you can do about it. So, all you can do is kind of run a lower margin business with more efficiency. And for me, that's not like a fun thing to do. The other thing I didn't like about that business, every day when I went to work I was the smartest guy in the building. And I hated that. I hated that. I wasn't-- I mean there were guys that were smarter about doing packaging design. But in terms of kind of intellectual capability, there's no question that they were just not the same level of people at Data General, at Synapse, at Scientific Data-- whatever, just not the same level of people. So, I talked to the board, and I said, "I want to go hire my replacement." And we did. And a few months later, we sold the company to another defense contractor and kind of ended okay. People got their money back. Nobody celebrated, but nobody was mad either. So, it was okay.

Brock: Well, I think what I didn't catch in your story is it was troubled. There's a lot of pe-- it wasn't making its sales targets, you know, that this--

Leslie: When I got there.

Brock: When you got there this churn of CEOs. But it seems like very soon after you arrived, it did turn around. Was there just one hinge to that? Or was it a couple things you had to do?

Leslie: No, no. So, look there were some good things about my experience there. I learned how to manage cash daily. We used to run the cash flow. We used to open the mail, find out how many bills and invoices we had, update the cash flow, and look at it. We used to do that every day. It was the first time we used Excel. It was in early '80's, or I guess the second half of the '80s. We got organized in sales. We hired good people. We turned up the-- I was a very, very experienced sales manager. So, we got the cadence to that going. And we got to forecasting, and what's called deep inspection where we looked at all the deals. We were very active at selling the stuff, continued to make progress on the product side, and kind of managed our expenses carefully. And we did all the things for good hygiene. I mean the guys running-- the three predecessors didn't know what to do. So, this is not a hard company to run. There were twenty-five, thirty people there. And we had a product. And we had a market. And we just had to go make it work. So, we did. There was no magic.

Brock: Okay. It was like really attending to the fundamental principles.

Leslie: Yeah.

Brock: Okay.

Leslie: So, one of the little side stories from that experience, when I was at Data General, we used to do our forecasting on a typewriter. Remember, I told you about that?

Brock: Yeah.

Leslie: Pencil, paper, typewriter. And when I got to this company, we were doing the same thing. We were doing-- we were using-- I'm not sure if we were using spreadsheets yet, but you can't-- it's really hard to use a spreadsheet because it's never sorted and structured in exactly what the way you want to see it. So, I wrote a sales forecasting system. I took out a manual from a database. And I sat down. And I designed input field-- input screens. And I designed reports. And I designed the structure of the database. And we forecasted-- we used that for all of our forecasting. And the first time I saw an actual company building a product to do something that everybody in the industry wanted to do so badly that I had to roll my own, and when it broke, people would come into my office and say, "It's broken. Can you fix it?" And I was the CEO of the company. I looked at that, and I said, "Get rid of this old stuff and use the professional stuff." It was a great lesson in why new products-- the lesson for me was the reason that sales force automation, which became CRM, was successful was people were so desperate for the functionality, they were actually rolling their own. And there's no better market to go into-- when you go find fifty customers, each one had their own product. It's great because there's a real need for that.

Brock: Right.

Leslie: Because of the pain and suffering they go through to get it.

Hancock: In your sort of self-tutelage for becoming a founder and CEO, you talked about this role of making your board happy. That was something new as you assumed that role with-- CEO role. It's not easy to have a company that's being sold, or to keep those people happy, or the investors happy. Can you talk working with the board?

Leslie: At Rugged or at Veritas?

Hancock: At Rugged.

Leslie: I didn't actually love my board over there. They were-- it wasn't a great company. I don't even know why they invested in it. And then they had expectations that were-- they had-- I mean we had a peaceful relationship. It was fine. I had one guy on the board that I didn't like as a person. Not a-- I considered him unreasonable, a little nasty. But it was fine. I mean I never worried about that stuff. I always worried about running the company. And the board takes care of itself in a sense. I'm not sure I'm answering your question.

Hancock: I was just curious if that was influential in your kind of development, ability to work with a board and subsequently be a board member. Sounds like the answer is--

Leslie: No, I was pretty sophisticated about venture capitalists, and boards, and governance. By the time I got there, I'd already had four years of experience. I remember at Synapse, the first time I ever went to a board meeting as a CEO of the company was the first time I ever went to a board meeting. It was like, "What do you do?"

<laughter>

Leslie: No, really. And I had a CFO that said, "Oh, this is what we're going to do." I said, "Great. Okay." It was like, "What do you do?" So, it was a mystery. I'd never been to a board meeting before. But by the time I got there, I was-- that was not an area. I was not on a learning curve there. I knew what a board expected. And I knew how to report. I knew how to-- kind of the care and feeding of the personalities. That was all fine.

Brock: Well, maybe this is our natural breaking point before really starting to how you got into Veritas? Or, maybe--

Leslie: Let's do one more small section.

Brock: Please.

Leslie: And then I'll leave it at a point where-- before Veritas-- before I got to Veritas. So, I left there. And I said I'm going to go be a CEO of another company. I didn't think I was going to start natively. So, I went sh-- I decided I wanted to go shopping. And I spent a little time-- so, first of all, I set myself up as a consultant.

Brock: Okay.

Leslie: Go in to talk to-- I rotated through the venture capital community regularly to see if they had any companies that had trouble that I could help them with in sales, go to market, CEO, whatever. And I did that so I could see all the merchandise in the market. And I did that so if I found an opportunity, that I might be able to try before I buy.

Brock: Right.

Leslie: Which is a really good thing for me. And I also did that to earn a living and not have pressure to find something. So, I could-- I was doing fine. Actually, I was making a lot of money as a consultant. And I actually liked the work a lot. It was very interesting. It was a sole proprietorship. So, it was just me. I had nobody else. I had no support systems. I had to do-- I had to get business. So, I had to circulate and try to do as much as I could in daylight hours, business hours of going to meet people and whatever. I had to have time to do the work I was doing because I had tasks that I was responsible to deliver to people. And I always got kudos for doing that. And then I had to run the operations of the business. I had to do my own forecasting, which I used to do, where am I going to get the business in the future. I had to do my own bookkeeping. I had to do my own taxes and all this other stuff. So, I was actually working more hours than I had actually worked on a job. It was very, very consuming. And I was working by myself. And part of the preparation of being the good leader is to be comfortable inside yourself and not to need social support from the community around you. And I was totally happy working by myself. I could have done it for-- I mean I wanted to go run a company, but I had no kind of anxiety about doing this for as long as-- until I had found what I wanted to do. And then here's the important part before I get to Veritas. And we'll leave it right after this. I had now been through Synapse and Rugged. And I was going to go do something else. And I said, "Well, what is it that's important to know?" And I realized that, unlike a venture capitalist, I had no portfolio. It's only serial. So, whatever I commit to, I'm going to do for a long period of time before I have an outcome. And I always looked at these things as having-- a very large part of my decision was what kind of outcome can we hope for here, to find what the future value of this might be. And I sat down, and I said you know the smartest guys who do this full time, the venture capitalists, have great deal flow. They have great perspective. They see everything. By the time they make a decision, they all think the next one's going to be the Google of the world. And they're wrong, dead wrong, three out of ten times, mostly wrong five out of ten times, mildly wrong one out of ten times. And they're right one out of ten times. And Google is one out of a thousand. I said so you don't know-- you can't actually-- no matter how smart you are-- arguably, these are the guys that do it full time. And they're the smartest guys in the world who have the best deal flow. No matter how smart you are, you can't know until you've got an answer. You can't. You just don't know. So, I said I'm going to take that criterion, the ecomic value of the outcome, and I'm taking it off the table. I don't-- I'm not going to think about that at all. And I said if I don't think about that, what do I want to think about. And this is another epiphany. And I said I want to work in software. It was the first time I had kind of come to that conclusion. Every company I had worked for had been a systems hardware company. And I wanted to work in software because the intrinsic character of the business was better. There's no inventory account. There's no product lifecycles. It's high margin. It's a great business. So, I wanted to work in software. I want to work in the data path. With a lot of software-- I think of software in three categories. This is technical, - the software that "does stuff", the software that "watches the stuff that does stuff", and the software that you "use to build the first two".

Okay, the technical part is over. So, there's the data path, the stuff that does stuff. There's all the management and reporting software, the stuff that watches the stuff that does stuff. And there're development tools, for building the first two.. If you look at those markets, the market for data path, being applications, databases, infrastructure, operating systems, is vast and profitable. The next market is less-- much, much smaller, orders of magnitude smaller. And the next one is orders of magnitude yet smaller in which nobody makes any money because every developer says, "I can do that myself." So, I wanted to be in the data path. I actually wanted to be in systems because it was my first love. I wanted to do something in, I don't know, operating systems, or databases, or infrastructure, really technical, deep technical stuff. I wanted to work in a company where I could say, "I'm a real smart guy, but around here, I'm a little below average, and I wouldn't have it any other way". And if I can't find a company like that, I don't want to work there. That was my reaction to my prior one. And finally, I said I want to find a company where the risk of traction is behind it rather than in front of it.

Brock: I'm not sure what you mean by that.

Leslie: The risk of product market fit, the risk of this company, do they have a product that people-- that they build, that works, that they can sell, that people want to buy, and that there's evidence of that.

Brock: Oh, that that is--

Leslie: Behind it instead of in front of it.

Brock: Got it.

Leslie: And with that list of five things, I went off on my search for a company. And we can leave it there.

Brock: Perfect.

Hancock: Dot dot dot, that's a perfect way--

Leslie: I thought that would be--

Brock: Very--

Hancock: The search.

Brock: Very good.

Leslie: And then it's like, "Well, what happened next?"

Hancock: Then the commercial comes on. I have to wait for another episode?

Leslie: I do this class. I teach a class in ethics. And I teach this case. You know, we've got a couple minutes. I'll tell you the case. I'll tell you it's a-- so here's this case. There's this young CEO. He's raising money. People are calling him back. Things are going okay. And one day Don Valentine shows up in his office and says, "Love the technology. Heard great things about you. Heard great things about the company. We'd love to do our due diligence over here. We're behind the pack. In order for us to do this, would you be willing to commit to not closing a deal for three weeks?" So, that's the first piece of this ethical vignette. And the question is, "Well, what do you want to do?" So, I have this lengthy discussion, which I'm not going to go into. Sixty percent of the class decides they want to-- you can't turn down Don Valentine and the value of Sequoia and all the sparkle that goes with that. So, the sixty percent of the class decides they want to do that. And you turn the page. And we give them another page to read in class. And the page says, "So, the CEO decided to make the commitment to wait three weeks. Three days later, they get a term sheet from Bancorp Venture for three million dollars on a ten million dollar ask. The other people, who've been looking at the company, circling the camp, kind of pile on. And you total it up to $14M, which is a lot of money. A there's a three-day time bomb." And the question is, "Do you want to wait for-- do you want to fulfill your personal commitment that you made to Don Valentine, or do you want to take this deal off the table?" And so, this is kind of the heart of the case. This is very passionate. I made a commitment. I'm a person of my word. I would never go back on it. Do you have any other obligations? Did you give your word to anybody else in here in terms of your employees, or your investors, or anything else? Oh well, I guess there's a problem here. And then it's like, "Well, let's close the gap." So, they try to go to Don Valentine. They go to Bancorp. And they role play both of those. And I say, "You made a commitment," on one side. On the other side I say, "The reason we had a three-day time bomb, we don't want you to shop our deal. And we don't want you to shop our deal." So, we can take that off the table. And now, there's a real problem. I've got to decide what I want to do. So, we go through this vignette. We do a decision tree. We talk about what could happen, good things, bad things, and these different paths on the decision tree. We talk about if you conclude that making this commitment was a mistake, who pays for that mistake. And then we end at that point in time. And then, "Who in the room wants to go take the money. And who in the room wants to keep the commitment." So, there's now about ten people in the class that want to keep the commitment to Don Valentine. I said, "Okay, so I need a volunteer." Get someone to the front of the room. And I say, "Okay. So, here's the scenario. We went through a decision tree. The worst outcome of the decision tree is you wait for Don. He doesn't invest. Bancorp goes away. You're out of money, and your investors lose faith in you. And you've got to shut down a company. Today's the day, and these are your employees. The stage is yours." So, they stand up there, and they go through this-- and of course, the students in the classroom are just merciless in terms of beating this person up. And then we end the class. And I say to them-- and you can keep this in, by the way. I say, "This is a real story. And the person who is the CEO in the company is me. This happened to

me at Synapse. And do you want to know what I did? Do you want to know what happened?" And they're all sitting at the edge of their seat. And I said, "Well, I'll tell you next time."

Brock: Well, can you tell us now and not then?

Leslie: I can. Yes, I can. But, "I'll tell you next time," and then, "No, no, no. I'll tell you next time. I promise." It is very interesting. So, I took the money-- took the money off the table. I did that because my sense of responsibility as a CEO trumped the fact that I had messed up. And I said, "I've just got to go do this because it's the right thing to do for the company, for my-" I sat in front of every single person we recruited in that company and told them to trust me, we're going to make a company. And I could not not do that. I called up Don Valentine, and I said, "I need to come and see you." And I went to his office. And I sat down in front of him, and I said, "Three days ago, four days ago, I made a commitment to you. We got an offer. I took the offer. I broke our commitment. I have no excuse." And there's this long silence in the room. And he says, "Okay." And then he didn't say anything. And then I didn't say anything. And we just sat there. And I picked up my stuff. And I turned around, and I left the room, empty. I mean it was like the worst-- worst thing. So, I went to Rugged Digital. Sequoia Capital invested in that company. And years later, right after I left Veritas, he nominated me to join the board of NetApp, which I did. And I tell the class-- I say-- so, this is a little ethical class. I say, "I never talked to him about it. But I don't think he remembers this. It just passed by in the night, you know, just one of those things." I said, "But it's thirty-five years later, and I'm still thinking about it because it was so painful for me to live with that." It never left my mind. And I'm here talking to you about it today.

Brock: It's a great example because there-- I mean of ethics because there's no--

Leslie: There's no place to go.

Brock: It's just muddy. And so, that's a great example.

Leslie: Well, we have-- we have a great class. We have ten of those things. And I love teaching because these students leave the room. And they don't leave the class. They leave the room, and then they have class right in front of the room. They have three here and four there. And they're kind of talking about the case of the day. And it's just-- and this is one that nobody wants to let go of. They're like a dog with a bone. They're chewing on this thing. It's great. It's really great. But it's a story that goes with Synapse. It's a Synapse story. And it truly never left me. Otherwise, I would have never come-- written that vignette.

Brock: Fascinating.

END OF THE INTERVIEW

