RAYMOND J. LANE ORAL HISTORY

COMPUTERWORLD HONORS PROGRAM INTERNATIONAL ARCHIVES

Transcript of a Video History Interview with Raymond J. Lane General Partner, Kleiner Perkins Caulfield & Byers

Recipient of the 2001 JD Edwards Leadership Award for Collaborative Innovation

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Interviewer: Daniel S. Morrow (DSM)

Executive Director, Computerworld Honors Program

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Battling Destiny in Moon Township

DSM: We're interviewing Raymond Lane who will be recognized by the Computerworld Honors Program in June of this year as the recipient of the 2001 JD Edwards Leadership Award for his role in the effective application of information technology in the service of Collaborative Innovation. He joins Max Hopper of Max Hopper Associates as a recipient of this award.

This interview is taking place at the headquarters of Kleiner Perkins Caufield & Byers in Menlo Park, California. This Oral History is made possible by a generous grant from Morgan Stanley and will become part of a collection of such video biographies of the leaders of the information technology revolution, begun in 1988-89 by the Smithsonian Institution's National Museum of American History, and now distributed annually to research collections in more than 140 museums, libraries, universities and research institutions in 46 countries on 6 continents around the world, and will of course be made available in excerpt form on the World Wide Web. Without objection, this interview will become part of the public record and available for scholarly and non-commercial use without special permission throughout the world. But that condition only applies after review and approval of the interview transcript by Mr. Lane himself. Until that time this conversation is private, and all or part of it may be embargoed for up to 25 years at the request of Mr. Lane. All persons in this room by their presence assume the professional and legal responsibilities and are honor bound to respect these terms. If all are in agreement, there not having been a mass exodus from the room, we shall assume that we are.

DSM: Let's start at the beginning, if you would state your name and when and where you were born.

RJL: My name is Ray Lane. I was born in Pittsburgh, Pennsylvania in December of 1946, the day after Christmas.

DSM: I understand you grew up in a place just outside of Pittsburgh called Moon Township. Can you tell me about the town and your parents?

RJL: Moon Township was a very rural community but it was starting to become suburban when we moved there. I was five years old when we moved there from the east side of Pittsburgh. My father, as most people in Pittsburgh, had grown up during the Depression as part of the steel business. Most of his family worked in the mills and not in managerial positions. So my father always desired to be the first one to go to college. He wanted to be the first one to be an engineer in his family and really rise above this, and to do that he couldn't continue to raise a family and exist in eastern Pittsburgh where all of the mills were pumping out the soot.

I don't know if you've ever seen Pittsburgh in the 1930's and 40's but you could literally see the soot it in the air. Living in that environment it's very difficult to do anything but graduate from High School and go right into the mills. So ten years later he decided to move us to the west side of Pittsburgh, which was again, not affected by the steel industry as much.

DSM: It was upwind?

RJL: It was upwind yes, but more important there were no steel mills. As I said, Moon Township was a rural area that was growing to be suburban. That's eventually where the community of Pittsburgh decided to put the Greater Pittsburgh Airport in 1955, and for the last 40, 50 years it has been the source of growth in Pittsburgh. Today it's a huge, huge community.

DSM: So you were actually born in Pittsburgh, and when you were about 5 years old your family moved west.

RJL: To be specific I was born in McKeesport, Pennsylvania, which is east of Pittsburgh and was ground central for the steel business.

DSM: How about your Mom?

RJL: My mother is pretty much the same story. My father grew up in Ducayne, Pennsylvania, my Mother in Braddock, Pennsylvania. My father is not alive but my mother is still living in Pittsburgh today. My Mother was really responsible for raising my sister and me. She did not pursue a career after high school.

DSM: Did you have an older sister or younger sister?

RJL: I have a younger sister by 2 years.

DSM: So you were the older brother in this relationship, and you moved to Moon Township about the time you were ready to start school?

RJL: Exactly. I started first grade and went through the Moon School system. I know it sounds like a funny name but Moon Township got its name because it was shaped a lot like the crescent of a moon. There actually is a part of Moon called "Crescent" and several communities and buildings named after different lunar terms. So yes, I started school in an elementary school called Carnot which was part of the Moon schools. Carnot Elementary School was right next to the High School, which I also graduated from. So I spent all 12 years in the same school system and within a half-mile square radius.

Crisis and Control: Grade School Lessons

DSM: I was taught to read when I was in school. I was nearly 7 years old. Did you learn to read when you were in school or did you start before you got there?

RJL: Well it's hard to remember, it wasn't like today. My own kids started reading so early, at two to three years of age, but I did not go to kindergarten. Back in the early 1950's some kids did go to kindergarten one year prior to going to first grade, and got a little head start. I started right into first grade, and I do remember that I was the youngest in the class. Being born the day after Christmas, I was the youngest in the class and fought that all the way through my school years.

In fact I had a crisis in 6th grade. I had always done real well in school but in 6th grade I did not. My homeroom teacher in the 6th grade was also the Principal of the school, and he recommended to my parents that I be held back. That was a real watershed in my life. I never forgot that.

DSM: Oh that must have been devastating!

RJL: Absolutely devastating for a kid but I'm already the youngest in the class, and I would then go to being the oldest in the class if I had been held back. Of course, I couldn't stand to see all my buddies move ahead so I convinced my parents to let me go on to 7th grade. That was the second time second time in elementary school that I convinced my parents of something I probably should not have convinced them of doing, but it worked out well. I went on to the 7th grade, 8th grade, 9th grade and I never got a B. I got straight A's through Junior High school and was in the Junior Honors society. I don't know, maybe in my own way I was starting to work harder to avoid any question of ever again being threatened to being held back.

DSM: You said this was the second thing you convinced your parents of. What was the first?

RJL: The first thing was in 4th grade. You remember back in 4th grade when you get tested for music skills? You get these sound tests to see if you want to pursue anything in music at all; to be in the band and sing or whatever. I took this test like every 4th grader does and I flunked it miserably. I was basically tone deaf. I think I can keep a pretty good beat, but I'm pretty much tone deaf. So it was recommended that I just drop any idea of pursuing music.

Now of course I had friends that were picking up an instrument and were going to be in a band, and I wanted to do that too. I'll never forget coming home and everybody saying it wasn't a big deal, "If music's not for you then do something else." And I said, "I really have to do this. I really want to do this." So my parents said if I wanted it so badly they would let me do it. Everybody felt it was a waste of time and money, but I was allowed to pick from the instruments on the board in the front. I noticed some friends had picked trumpets and drums and things like that and I literally didn't know what some of these things were. I thought I would be unique and pick something that none of my buddies had picked, so I picked a clarinet. I walked in the first day when everybody was assembled and I remember sitting in a group of 25 girls. I was the only guy that had picked the clarinet.

So I was kind of learning in life, by doing. I played clarinet for probably 3 or 4 years, moved to saxophone because I wanted to sit with the guys and became All State Sax. Later went on to college band, played in a dance band and we made money. We played every Saturday night. The band was called the "Rhythm Airs." I had to read the music, but that's okay.

But back to elementary school and being the youngest in class and feeling that even with music I had to prove myself to keep up. Today I think it's helped me because I always feel comfortable going into a situation where I feel behind. If I feel like I haven't learned as fast, or if I'm behind, I don't give up. I don't feel like it's going to be insurmountable. I still love music today, but my wife who has great music ability, teaches our kids. I am not going to teach our kids anything I know about music. (Laughs)

DSM: Do you still play?

RJL: No I don't play the sax anymore.

DSM: That's a shame. Were there teachers or friends that you could remember from this grammar school or high school period that really made a difference?

RJL: I don't remember any one of them standing out, other than that 6th grade teacher who tried to hold me back. So he became the enemy. He became the target for me to gird up against. So he was influential in his actions but it wasn't bad.

DSM: Can you tell us about best friends, sports you played, famous school rivalries?

RJL: In elementary school I was playing baseball. I was learning baseball. I love baseball to this day. Whenever I am truly bored and want something to do to get away from things I watch the Ken Burns series on Baseball. I love the 1950's and 60's in baseball. I grew up in Pittsburgh you know, and was sad to see day before yesterday that Willie Stargell passed away.

But back to elementary school, back then I kind of looked like Howdy Doody. When you get your class picture taken, every one of mine was worse then the next. I just couldn't get rid of the ears, couldn't get rid of the freckles, couldn't get rid of the red hair, I looked like Howdy Doody. I could have been a perfect double for Howdy Doody.

So I suffered with that, and as I said before, once I got through the 6th grade incident I became a good student in 7th, 8th and 9th grade, but when I was 12 there was another big event in my life. I got rheumatic fever. Although to this day I don't believe I really had it. For one or two days I was down pretty hard with stiff joints, sore throat, the typical signs of rheumatic fever. It was a terror in those days because of the long lasting effects on your heart if you don't take care of it. They fought it with penicillin in those days, so you had to also stop absolutely all activities. So my baseball went, as did playing with my friends. They immediately checked me into a hospital. I was in the hospital for 2 weeks and confined to bed for 6 months. I spent a whole summer and fall in bed without any activity and for the next 3 years had very restricted activities with shots of penicillin every month. So what that accomplished is that if I had rheumatic fever, is that I am fully healthy today. I fully defeated it and am in great shape, no heart problems. But if I didn't have it, then I wasted some pretty developmental years, sports years. Now of course my Mother didn't want me to be sick but she sees a silver lining in this cloud, in that it probably was the single event that kept me from playing football. She did not want me to play football. So anything that I am recognized for today, whatever I have achieved in life, she points back to this time, saying this was a good thing, it kept me out of football.

"Routine" High School Achievements

DSM: So High School for you was from 1961 to?

RJL: I graduated in 1964.

DSM: So personally it's a difficult time for you and it's right at the beginning at the Kennedy era, which was also an interesting time to live through. What was it like? Where did you go to High School?

RJL: Moon High School.

DSM: Tell us what it was like in high school.

RJL: It was pretty routine, pretty normal. I was in the band, ran track and I played a couple of years of baseball, but because I hadn't developed baseball in the 7th, 8th and 9th grade, it was really tough to break in. It's really hard to be a walk-on if you didn't play in junior high school.

But I always liked to do things outside the classroom so I ended up walking onto track and lettering in track for 3 years. I was a long distance runner and a hurdler and enjoyed that a lot. I enjoyed being in band and had good friends.

DSM: Did you have great band trips?

RJL: We had great band trips and I was also a good student, an A-minus, B-plus student in the Honor Society other Honoraries.

DSM: When you were in the band did you have challenge systems that let you move up?

RJL: Yes absolutely. I was First Chair then I went to what was called 'Area Three Band' which included western Pennsylvania, and I challenged there. What I got out of it was a girlfriend but I ended up Number Two Chair.

DSM: I was going to ask when you got into band. Was it your freshman year of high school?

RJL: I started band no earlier than that, I started playing an instrument in 7th grade. So we had a junior band and then there was a senior high school band.

DSM: Did anyone ever beat you in a challenge?

RJL: Yes in Area Three Band a girl beat me in a challenge. Serves me right for getting out of the clarinet section, but she sat Number One Chair and I sat Number Two.

DSM: For those who were alive during the Kennedy era one of the things I like to ask is, where were you when he was shot?

RJL: That is *the* question asked for the last 50 years, "Where were you?" I was in Chemistry class. I was coming out of the class and remember being called back in by the chemistry teacher. It was right around noon, 12:30 or one o'clock, something like that. She sat us down and informed us of what had happened, and even though we were pretty young and most of us had not faced death of an important person we understood the import. So you do remember something like that.

DSM: I don't think I've asked anyone who hasn't been able to remember exactly when they heard about Kennedy's shooting. One of the other questions I want to ask is, are there any stories that your Mom tells, or that you remember that gives some hint in your youth that you were going to develop your mathematical skills or analytical skills? Were there precursors of things to come?

RJL: I always had a propensity for math. It may have come from my Father. Again, my Father was very important in my life. He, along with my neighbor who became a surrogate father, and I'll explain that in a bit. But my Father was very important to me even though I didn't get to spend a lot of time with him. He was successful in getting out of working in the steel mills and all that. He became an engineer. Went to night school at Carnegie Tech, which is now Carnegie Mellon, a really good school for engineering obviously. He was able to go one semester then unfortunately his father spent his tuition in a card game and he could not stay in school full time. So he entered night school, and 17 years later he graduated from Carnegie Mellon.

He stuck to it. Every night he would come home after work, would have dinner with us then would go upstairs and study until midnight. So there wasn't a lot of opportunity to play with my father or see him a whole lot but today I understand that I got a real life lesson from somebody who was able to pull himself and his family up to a new level. He worked hard to do it, and he never gave up.

DSM: Did you know all four of your grandparents?

RJL: I knew three of them. My first grandparent to die was my father's father. He died in 1948 when I was 2 years old. I remember him once giving me a Lionel train, which I still have today. I also remember that he always called me, "Buckaroo." My grandfather on my mother's side died in 1956. I had gotten to know him a little bit better but I was 12 when he passed and that was just about the time I was coming down with rheumatic fever.

DSM: Did your family always live in western Pennsylvania?

RJL: Yes. My two grandmothers didn't pass until the 1960's so and I got to know them much better. My father's mother remarried after her first husband died so I essentially had new grandparents. I forget exactly what year they died, but I got to know them pretty well.

Being Not Just Like Dad

DSM: Why did you decide to go to West Virginia University?

RJL: In high school I had pursued what was called a scientific curriculum. There was a scientific and an academic curriculum. The scientific just put more science and math in the curriculum, the academic was more of the arts but both were designed to put you into a university. So because I liked math, I took advanced math in high school, calculus and advanced geometry.

So that's what the scientific curriculum did for me, but I actually did not enter West Virginia as a math major. I wanted to be an engineer like my Dad. Which was is the same way of saying I didn't know what I wanted to be. Dad was a mechanical engineer. So I thought I would be what Dad is, but not exactly what Dad is because I can't do that. So I chose aeronautical engineering. I really didn't have a burning passion for it. I think that most people that go into aeronautical engineering have had a love for flight for some time. I just thought it was pretty cool. I thought if I was going to be an engineer then designing airplanes or doing something in flight was pretty cool, so that's what I wanted to do.

In western Pennsylvania, the kind of prototypical profile of engineering universities to apply to would be Penn State, Carnegie Mellon, University of Pittsburgh, Ohio State and West Virginia University, because they were all surrounding Pittsburgh. West Virginia is only one hour from Pittsburgh, 9 nines into West Virginia, but I had actually decided to go to Purdue. I had gone through most of my senior year having been accepted by Purdue and telling people I would be going to Purdue. My mother was not very happy with that decision because it took me too far from home. She didn't know where Indiana was. She wanted me to go to Penn State but Penn State wanted me to start in a remote campus as they did with anyone who lived close. I didn't want to do that. I wanted to be on a main campus.

So my senior year advisor told me to take a look at West Virginia University, and I said, "Huh?" Growing up in Pittsburgh you actually see West Virginia in sports as the enemy, so I wouldn't have ever thought of going to West Virginia. But my advisor actually convinced me to take a look because they had a new engineering campus. The engineering school was actually 100 years old, but because the main engineering building had burned down, they had a new campus and pretty good program. So he told me to just think about applying and go look at the university.

So I did, not thinking it would turn into anything, but they replied back within a week and said, "We are very interested in talking to you. We would like you to come down here." I did, and the feeling of warmth, the reception was so strong that it overwhelmed me. They stayed in contact with me every week until late in my senior year I decided, I'm going to West Virginia.

My parents thought I was nuts. They said, "Why would you do that?" I think my father was okay with Purdue. He had really wanted me to go to Carnegie Tech but I did not get into Carnegie Tech. Ironically I am on the Board of Trustees at Carnegie Tech, which is Carnegie Mellon now. But back to my college decision, I chose to go to West Virginia and it was really the warmth of the people, the feeling of the campus that won me over. I just immediately felt that I fit in and it was a true feeling because it worked. I fit in very well at that University.

"Push Buttons at Cape Canaveral"

DSM: This was also a time, I guess you were 11 years old when Sputnik was launched and this was a time when there was just a lot of emphasis on space.

RJL: Yes, and let me go back to your previous question about any early abilities my mother ever saw in me. Just this past weekend my mother was with us in Morgantown, at West Virginia University for an honor that was bestowed on me. And she said as she has said many times before, that what she always wanted me to do was to push buttons at Cape Canaveral. That was her way of saying she wanted me to be something in Science. And she explained it exactly the way you just explained it; she didn't want me literally pushing buttons in Cape Canaveral but she wanted me to do something in science because we were all watching rockets going up and we were all watching space unfold.

DSM: And Kennedy is a great place for that. They were going to be going to the moon within a decade.

RJL: Yes, exactly.

DSM: It was a very exciting time to grow up.

RJL: So I graduate from high school a good student. I was an honors student in the top 10% of my class but pretty ordinary in terms of predicting anything was going to happen in my life.

DSM: Sure, always being young, always having to work hard for things.

RJL: Yes but college changed me, big time.

DSM: So tell me about it. This has got to be a big change moving from this high school to a major engineering school in Morgantown.

RJL: Yes although it wasn't extraordinary. As I said I finished high school in the top 10% of my class and I was very happy. I worked the summer in a quote, "engineering job," working on a road crew citing topological, just getting a start in the field. Then I was enrolled as a "green bean" in West Virginia University. I remember sitting in an engineering hall where it was explained to us that if you looked left and you looked right that two of the three would not be here within a year. And so it was, the ground rules were set. You got it for real.

So I entered as an aeronautical engineer and started taking all the engineering classes, the freshman stuff. I went through a freshman year that was my transition, you know, first time away from home, and just surviving was the key. But I got through with good grades and ended my first year still in engineering and I had joined a fraternity. In the second year everything changed, everything. I really grew disenchanted with engineering. I was starting to get Noastatics and thermodynamics thrown at me and I thought this is not what I thought engineering was. Seemed pretty formulaic to me, pretty rote.

DSM: And in this era of four courses a semester being the norm, how many courses were you taking?

RJL: Four to five and each was worth three hours so I was carrying 15 to 18 hours. I had 5 to 6 courses within a week and there was also another one-hour course in there once a week so it ended up closer to 18 or 19 hours. I wanted to finish in 4 years and you had to carry that kind of load to do that. By my sophomore year I had made up my mind that I didn't want to pursue engineering, but I didn't know how to break it to my parents.

At the same time my father got lung cancer. He found out about it accidentally with a pain in his back in July, and he passed away in December. It was that fast, and it was during the first semester of my sophomore year. And I remember talking to him several times about my desire to change from engineering which he thought was okay, but his question was, "What are you going to change to?" Now I had made up my mind that business and economics was where I wanted to go, I wanted to do something in business, but my mother fought it tooth and nail, "Push buttons at Cape Canaveral." And as my father was getting weaker he had less input to the decision, so my mother became very strong into the decision. It got to the point where she said, "If you expect any financial help from me and your father your major must be scientific. It's something I know your father wants." So I thought, "Well I'm good at math, so I'll stay in math."

Some of the final words my father said to me were, "Any fool can be a good engineer if you work hard enough. But you real have to be good and smart, innately smart to be a mathematician. You aren't." (Laughs) But I did it anyway. The resolve just came out and nothing could push me over the line faster than something like that. I couldn't play clarinet either so okay, I was going to go and be a mathematician.

He was right this time because it was tough, very tough, but I got through it. And also that year, the fraternity I had just joined elected me president. It's a very secret way that these fraternities do this, you don't run for office, and it's just happened so suddenly. I wondered what happened because I had never really been elected or chosen to lead anything up until that time. This was a life-changing event in my opinion, and looking back on it now it was one of the things, if not the thing, that changed my life forever. My father, from whom I would seek counsel from about leadership and things like that, was gone. I did have a neighbor, going back to that neighbor that I spoke of before, that became a surrogate father. He's a wonderful man named Jim Alonzo. He led by example and I valued his wisdom.

I, as a second semester sophomore became the president of a fraternity and with all the duties it's like running a business. There were about 30 brothers in our fraternity and I built it to 130, and the reason I did that is because we couldn't afford to pay our bills. We needed more people; we needed critical mass to call ourselves a fraternity.

Discovering Leadership at Kappa Sigma

DSM: What fraternity was it?

RJL: Kappa Sigma, and it really gave me the experience of a lifetime. I felt that they gave me the job so I had to take it seriously and so I would essentially lead, or manage the fraternity. And I think it certainly cost me. I wasn't as pulled into the brotherhood because I became the guy that would collect the money at the end of the month. Also we had a new housemother and turns out that she was an alcoholic. We found out a year after we hired her. Several brothers actually fought my idea to fire her saying, "We shouldn't do this. We can help her." And I said, "You know it won't work out. We have parties every weekend with alcohol in the house. A fraternity environment is not going to be good for her." So at age 20 I'm making this decision pretty much alone that she had to go. I sat down with her and said, "We're letting you go." So this was a good career experience that was not fun at the time.

DSM: One of the hardest parts about management is letting people go.

RJL: 1965 was a big year of change for me. I lost my father, I took off on this mission to be the president of the fraternity, and I changed my major in mathematics.

DSM: Given the way house presidents are chosen in fraternities, did you ever find out what the brothers saw in you? Did anyone ever tell you why they picked you?

RJL: No. I really never found out, although I have really close brothers today. There are 25 of us that get together once a year. We're very, very close, and today they claim that this was something they saw in me, leadership. They take credit for it today.

DSM: So while you were in college did you still play in your band?

RJL: I stopped playing in the band sophomore year.

DSM: I take it because you had the new responsibilities. Do you feel comfortable talking about some of the brothers by name?

RJL: Sure! My roommate was Sudsy Mackledownie. We called him 'Suds.' George Mackledownie Junior was his name. He was my roommate until my senior year. Then my roommate was Ray O'Neill, who today lives in Lake Tahoe. My nickname was 'Sliver' and I think it was because I was kind of skinny. Not everybody called me sliver. It wasn't a name that stuck, but Ray O'Neill was the guy who started it.

Some of the close brothers today are, Phil Gaujut who lives in Morgantown. He's a trial lawyer and as a matter of fact I just played golf with him this weekend. Another one is Marshall Miller, we called him 'Scoop.' Still call him Scoop and he lives in Bluefield, West Virginia. He runs his geology company. A third one would be Danny Smith; we called him 'Boone.' Danny Smith today lives in Houston and works for General Electric.

DSM: You must have great affection for this university and your mom must be just thrilled. Tell me about the award.

RJL: This past weekend it was great. I've been getting more and more involved with the university. I have been involved with Carnegie Mellon for the last 7 or 8 years and getting back to Pittsburgh was great. I had actually funded a full scholarship chair at Carnegie Mellon. I did it in my father's name and felt that I was giving something back. I had served on the Board of Trustees and I'm now a Life Trustee at Carnegie Mellon but I wasn't doing anything for my own university.

So I started to get involved about three or four years ago. Two years ago I joined what is now the Board of Trustees, which basically provides capital to the university. I was also close with the university president David Hardesty, who I went to school with in the 1960's. He was a Rhodes Scholar, a little bit more academic than me but we had really formed a friendship, and my wife and his wife as well. So I asked him, "What else could I do for the university?" I remember that dinner, you never ask a university president that question because you're going to get a long answer, and he said, "Yes there is. There are a couple of things I would like you to think about. We're going to start a capital campaign." That is quite unusual for a state university, but the state budgets don't really give the universities the budgets they need to compete with students, so you need to supplement. I'm sure Ohio State and Penn State and University of Pittsburgh do the same thing.

So we were going to embark upon a capital campaign and he wanted me to be the national Chairman of that campaign. And I said, "Well I would be happy to do that if I get the support. It's just that time is my enemy and I don't know how I would actually run a campaign. I've never done that before, but you can use my name and build a committee." We did that. We formed a committee which includes great names like Jerry West and about 17 others. We have kicked off the campaign and are well along in our goal. We've raised over 100 million dollars and feel pretty good about the whole thing. And as a statement and a catalyst from the Chairman to the community, my wife Stephanie and I have given 5 million dollars to the Department of Computer Science and Electrical Engineering at West Virginia University. The department will now be called the 'Lane Department of Computer Science and Electrical Engineering.'

It's obviously something that I look at with great pride. Even though I graduated from the Arts and Sciences School with a math degree, my life's work has been in the computer field. With that money the Computer Science Department will be able to fund an additional Chair and additional labs. I think they'll be able to compete for really good talent to come to the school.

Casting the Die at IBM

DSM: That's a wonderful credit to you and your wife, but also a credit to the university to build that kind of talent and devotion. You graduated from there in 1967, 68?

RJL: 1968

DSM: That was the height of the Vietnam War.

RJL: Yes but other things had happened to me outside the classroom. I took every math course the university had because that's where I could get my A's. If I had to take a History or Economics course I would make up those grades with the A's I got in math, but outside the classroom I really enjoyed life as much. I became the president of the senior class. I was in most of the men's honoraries, 'Mountain' and 'Sphinx,' and that became quite important for what I did immediately after graduating.

I had never really asked myself that question, "What I'm going to do?" other than what you just mentioned, fear of being drafted and going off to Viet Nam. That was every young man's fear in 1968. So you thought more about what you didn't want to do than what you were going to do, because it was very hard to avoid this. You get your diploma and then they hand you your changed draft card. You become 1A. So I had certainly thought a lot about that, but I hadn't thought about what I wanted to do. So I went to the placement office where you sign up for interviews. I wanted to see who is interested in math majors. I remember interviewing with a number of companies, insurance companies primarily that wanted actuaries, then I asked, "Can I interview with the CIA?" The CIA was looking for problem solvers. This guy whose name I remember today, changed my life just with a suggestion. He said, "You know, I'm looking for real math, nerdy kind of problem solvers. Guys who want to sit in the corner and solve problems, and that's all they want to do all day."

DSM: And you had no pocket protector.

RJL: I had no pocket protector. And he said, "You seem pretty balanced. You have a scientific desire and you have great math grades, but you have all this other stuff. How did a math major become president of a fraternity, president of the senior class, and that kind of stuff? That seems kind of unusual. A political science major maybe, but seems to me you would be a perfect candidate for IBM, because IBM looks for technical people but with good communication skills, people that have the desire to work with other people. You should talk to IBM."

So I signed up for an IBM interview and was hired by a gentleman by the name of Herb Jones, who has become a lifelong friend and probably the biggest influence in my life other than my father. He was with the Charleston branch of IBM and I was exactly what he was looking for. He said," I look for somebody that has good grades, not A's but B-plus; somebody who participated in team sports, somebody who is a leader on campus. All of those constitute our perfect profile." The guy at the CIA was right.

If I didn't get the job with IBM, I was going to go with GE. I had interviewed with GE for technical sales, so it would be one of those two. I decided to take the IBM offer despite the fact that I knew up front, he told me that they could probably not get a draft deferment for me. GE had said maybe they could get a deferment. So I might have avoided the draft by going with GE but I just felt that IBM was the place.

I had also gotten married that year after graduation and my wife was very influential on it too. She said she liked Herb Jones, "I like this guy, I think you should go to IBM." The die was cast. I was in the computer business.

DSM: What did Herb Jones hire you for? Was it a marketing position?

RJL: He hired me for sales, sales training for the data processing division; selling computer equipment.

DSM: Again for younger people and future generations, IBM of all companies in the United States was one of *the* places to go for sales training.

RJL: It was everything actually. IBM, from the 1940's into the late 60's, had become one of the most important companies in the world. In 1964 it had basically consolidated its applications platforms around a single operating system and it just won the business against the competition in the day. Tom Watson Junior was still in charge but he was getting ready to turn over the mantle to Frank Kerry. So it was a great, great time. When you went to work for IBM you were immediately respected. Not to say that GE wouldn't have been the same thing, but IBM really was a good, good decision and I never looked back.

DSM: IBM is still a legend today, but at this time the training was really respected.

RJL: IBM was respected for its training and service, and not just sales training but people and management training. At that time everybody that joined IBM, within 6 months truly believed they could be CEO of IBM. They made you feel that way. There was something, a magic about the company that everyone outside wanted to hire IBM'ers because of the training.

Computing with the "Big Red One"

DSM: How long were you in training before they gave you an account?

RJL: My first training entailed several months with a team of senior people, but I had only been working for IBM for about 6 to 7 months when I got drafted.

DSM: This I didn't know. You were drafted in 1969 then?

RJL: 1969 right.

DSM: So this is immediately after the huge Tet offensive in 1968 and there was a big build up in Vietnam.

RJL: Yes, I got drafted and went for basic training at Fort Riley. I looked for any way to get out of it short of cutting off body parts, as many men did. The short story is, I went and served for two years. I went to Fort Gordon for basic training. I had achieved a lot thus far. I graduated from college in mathematics had been working for IBM. I'm feeling pretty good but basic training is designed to make you feel pretty common, pretty ordinary.

Not only that, at the end of 8 weeks of basic training you are given your orders for where you're going to go from there. And even though I was a squad leader and a platoon leader, I had even shown leadership there, at the end of it there was actually a relatively small percentage, less than 50% that were given an Infantry MOS, Military Occupational Specialty and I got Infantry. What is going on! I took all the written tests when I went in and they told me they wanted me to fly helicopters and all that. They said I scored really high on the flying tests and all that. I knew they were lying because I didn't even know whether the horizon was going up or down. But how they could have done this?

Turns out it was a mistake. Thanks goodness. It lasted for one day; I did not sleep for 24 hours. It was a mistake, and rather than sending me to an advanced school, which everybody goes to, they said we're going to give you what's called a CAS assignment; Civilian Applied Skill. Because you know, you said on the test you know how to not only sell computers, you know how to program them and fix them. We need people like you. Well, of course I had overstated the case a little bit. So I was sent to Fort Riley, Kansas and was made a systems analyst for a Univac Ten-05 system. Of course I didn't know what I was doing but it gave me a great opportunity.

The warrant officer that led the computer center said to me, "You're the person who going to keep me from coming in here at three in the morning, the person who going to keep me out of all sorts of trouble. I never want to get a call from the Base Commander telling me that the computer is down. And for that you will not have to pull KP." I lived off base with my wife, and it actually was a pretty good life. I liked it!

DSM: You spent the rest of your tour at Fort Reilly?

RJL: That's right. Fort Reilly was the home of the 'Big Red One,' the First Infantry Division. They were in Vietnam, so I thought I was going to be sent over. Turns out that a few months later the U.S. started to pull back and the First Infantry Division had been over there so long they were coming back. So they kept me at Fort Reilly, told me I was becoming part of the First Infantry Division. So I stayed the two years in Manhattan, Kansas and then went back to IBM.

DSM: But you were assigned to the First Infantry Division?

RJL: Yes, to the 'Big Red One,' I got that on my patch.

DSM: That was one of the proudest units in the United States Army.

RJL: That's right.

DSM: So after your service you went back to IBM?

RJL: I look back at my time in the service as a maturing time, two years to grow up a little bit. I think I was 21 when I graduated college, so a couple of years to mature wasn't all that bad. I learned about computers the slow way, in the Army. That was pretty cool because when I came back to finish training it was easy for me to be top of the class. It was pretty simple for me.

So when I went back to IBM in Charleston, West Virginia I discovered that the account team that I was going to join had done such a poor job for the state of West Virginia that they had decided to throw IBM out totally. The government decided it would buy nothing new from IBM, and take everything our company had in there, out. RCA was their new vendor of choice. So IBM gives this account to the rookie, me and gave me a minimum account of 2,000 points. To make a long story short, by the end of the year I had made friends with everybody at IBM and had turned it around. I had 150,000-point year, which was off the charts, and RCA helped me a little bit by announcing they were getting out of the computer business.

DSM: That's great. Welcome back to civilian life in West Virginia.

RJL: It worked out so well I had three more years in Charleston and I was number one salesman every year.

The "Second Smartest Person" Moves to EDS

DSM: You make a change from IBM, I mean; your career path is through legendary infantry divisions and legendary companies in the computer industry and you go next to EDS. How did you make that choice to leave IBM where you were obviously a major success?

RJL: I was pretty committed to IBM. I was one of those who believed I could be CEO, really believed it but back to the guy who hired me at IBM. I started there in 1969. I worked there for 6 months, went off to the Army and the man who hired me was moved to Pittsburgh.

DSM: This was Herb Jones.

RJL: This was Herb Jones, who was moved to Pittsburgh and later to Los Angeles. When I came back from the service I worked for a totally new crew, the whole 8 years I was at IBM I never worked for him. So he called me one day and said, "You heard I left and went to EDS and became head of one-third of EDS. EDS' president had resigned and Ross Perot (EDS Co-Founder) decided he didn't want to replace him. He wanted to have two of his co-founders take two-thirds of the business and then hire an outsider to do the commercial, domestic business and Herb was it. Herb was ready to leave IBM after 22 years. He wanted to stay in Los Angeles and IBM wouldn't leave him there. They wanted him to move back to New York, so he left IBM. He called me and said, "I want you to come and run one of the major divisions at EDS." I was 30 years old then and said to him, "I haven't heard from you since you hired me. Why me?" And he said, "You're the second smartest person I have ever hired." So I said, "Did you call the smartest?" And he said, "Yeah he turned me down."

So I debated this decision for weeks. My wife and I would play a little game, put little pieces of paper with IBM or EDS on them into a hat and pull them out and when it said EDS we would say, "Oops, no, that's got to be wrong. Two out of three!" But it kept coming up EDS, and I think for my wife EDS represented being able to stay in one place. IBM has moved us around quite a bit.

DSM: Where was she from?

RJL: She was actually born in a little town called Waynesburg that was right in between Pittsburgh and Morgantown, Pennsylvania.

DSM: Did you have children by this time?

RJL: We did, she was pregnant when I left the Army. We had our first child when we were both 25 years old.

DSM: While you're talking about the Army again, let me ask if there was a drill instructor or anybody in the Army that was memorable?

RJL: Yes actually, Sergeant Alvin Potta. He was an American Indian and very tough. For the first four or five weeks of boot camp I just thought this guy just was not human. Then I had a chance to talk to him and found out he had a personality. I remember him once approaching me and saying, "I have a little mission for you." And I said, "Okay, what is it?" He said, "See the C barracks over there?" They were just putting a new roof on the C barracks and he said, "I want you to take a couple of guys and grab some of the packages of shingles and put them on a truck and take them to this address. And I want you to do it at about 3AM." And of course he was stealing them for his house. So I became his friend and later when they brought the next class in, I stayed 3 or 4 weeks helping him and I became very close to him.

DSM: So you played some drill instructor role yourself early in your career.

RJL: That's right.

DSM: Let's go back to your big decision to leave IBM and an environment in West Virginia that you loved, and move to Texas.

RJL: I had never been to Texas and neither had my wife. So even though all the papers we pulled out of the hat said EDS, I decided not to do it. I called Herb Jones and said, "We're not going to do this." And I went to bed that night and could not sleep at all. It was very hard to leave the camaraderie and greatness at IBM, but I still couldn't sleep and in the morning I told my wife, "We've got to do this EDS thing. I can't sleep." And Donna said, "I think it's the right decision." And again, what she saw out of this was a place for the family. Dallas was the headquarters for EDS and we wouldn't be moved around. In fact Donna is still in Dallas today. It worked for her. But I didn't call Herb. I got on a plane, flew to Dallas and surprised him with, "I'm here. You still have a job?" And he said, "I'm glad you made the decision."

I spent almost four years there and it was a great learning experience because I worked for Herb who worked for Ross. So I saw a lot of Ross. I was the first guy who took outside money, money that was injected into the company that didn't come from revenues, and built a business plan and started two new industries, manufacturing and distribution, to see if our services could be sold. EDS' service was basically facilities management, running the computer centers for a long-term.

So we sold major contracts to Arrow Electronics, Intel, and other big accounts. It was very successful and I enjoyed it. I think if I had stayed with IBM my life would have been much, much different. I saw all the people that stayed 25 years at IBM go through the rough times of the late 1970's and early 80's as IBM changed, the business changed. It turned out to be a good decision because I grew. The EDS experience took the IBM out of me, left the good parts in and at an early age started getting me to run a business, learn how to deal with a CEO, learn how to deal with an entrepreneur, and all of that was helpful for later in life.

DSM: Also, at that time EDS was really hot.

RJL: Yes it was. At first I thought it was going to be like a mini-IBM because Ross came from IBM and had all the regimen and the white shirts, but it was not like IBM at all. It was much tougher business, less proven. So at a younger age you had to sell more, you had to prove more of yourself.

They built the company by taking recruits from the military. As Vietnam was down ramping, people would come to EDS knowing that they could get a job. They were officers and had a discipline and had some technical specialty. So it really worked well for them and that's a way they could build up the company. So it was a much different culture from IBM

Success Without an MBA

DSM: You were at EDS for almost four years and then moved on to another legendary consultancy. Tell me about the transition to Booz Allen.

RJL: I had had some headhunters call because I was starting to run a successful business at EDS. I remember one was the IBM satellite venture, COMSAT. IBM and COMSAT had gone together on a satellite venture and they needed someone to manage it. I looked at that and decided I would stay at EDS. When Booz Allen called they said they wanted a principle to run the Chicago practice. And I said, "Boy, I don't see myself as a consultant, I'm not sure about this." I almost threw it away.

I called Herb and said, "Look I got this opportunity." And even though I knew he would say, "I want you to stay here," I said, "I have this opportunity, and I don't know what to do about it because I'm not sure about it". To his credit he said, "You know I have an MBA from Ohio State and there's no way I could be hired by Booz Allen or McKenzie. You have a Bachelors degree from Western Virginia University. There is no way you can be hired by Booz Allen. If Booz Allen is making you an offer based on your experience, it may be the only time in your life. I would want you to stay here but I don't know if I would hold you back from this thing. This is a wonderful opportunity." To his credit he opened my eyes to the offer. It took months to decide but I did it and I went to Chicago for a year.

I would have been there for a long time but my wife wanted to live in Dallas. So we kept our home in Dallas while we saw how this Chicago thing worked out. After a year, the partners in Booz Allen Dallas found out I had a house in Dallas, and they said, "This is nuts. Come back here and you can run the whole west coast for us, San Francisco, L.A., and Dallas, and you can do it out of Dallas." And my wife said, "Done, let's go back home." We kicked out the people that were renting our house, and we stayed in Dallas.

DSM: My understanding is that among the things you were doing with Booz Allen, was helping senior managers in companies determine whether or not they would really get a return on investments in IT. But what return on investment on IT? Back then it hadn't even been defined what IT was.

RJL: Most CEOs top management didn't understand what computers could do, what systems investments to make, how to select software and all of that stuff. So we built a practice based on the fact that Booz Allen was both a management and a technology-consulting firm. They did a lot of technology consulting for the government and had success in technology consulting to commercial businesses. Not a large success but it was different from MC Kenzie and BCG and Banes who stuck to management strategy only. So we put a technology angle to it. OS I became part of that practice and we would help very, very large companies put together plans for building new computer systems, software, and deploying systems to support the business strategy.

DSM: One of the many compliments that been paid to you is that you've been known as the master of alliances strategy, helping companies grow by building strategic alliances. Did this come out of your experiences at Booz Allen?

RJL: Yes. Booz Allen was an incredible experience from a networking standpoint and from a collaborative business strategy focus. I don't know if I would focus specifically on alliances but certainly I knew I had an ability because I had gotten the IBM sales training. Most of Booz Allen's consultants that were my peers were really very technical or analytical, and didn't really have the social experience. They didn't have the people communications skills, didn't have the understanding of the client. So I used that to combine with analytics and doing consulting work and could translate what we had come up with, which could be very technical, not easily understood by top management and I could translate this into a vision. They loved that because they probably couldn't understand what their CIO was saying but they understood what I told them. So I became very close to a number of clients and I would keep them for the long term. In the case of one Dallas client I was literally an insider. I would go to all the management meetings and became very close to the company.

DSM: Can you tell us about the headhunter calls while you were at Booz Allen?

RJL: Let me tell you about the context for that because I joined Booz Allen in 1980, I think it was, 1981', as a principle. I became a partner of the firm in 1983 and senior partner in 1986.

DSM: This is the guy who couldn't get hired because he didn't have an MBA...

Enter, Oracle

RJL: Exactly, I didn't have an MBA. So after six years I started fixing my goals on becoming CEO of Booz Allen, that's what I wanted to do. I had become a senior partner. I had moved from client business to managing the Dallas office, to managing a practice on the west coast, to managing now all of Booz Allen's technology business worldwide. I was on the technology committee of the board and running about 25% of Booz Allen's business. We had just elected a CEO who would be around for a terms of about 6 years so my target was by 1994, or 1995, to try to become Booz Allen's CEO. It's very tough to become elected as CEO of a partnership but I felt like I could do it, much like I was chosen president of the fraternity back in 1965. It felt like I think I had the respect of the partners and they saw me growing.

So when I got this letter my defenses were up and I had no interest. It was a letter about running a new, kind of nascent consulting business that Oracle had started. Larry Ellison had had the idea that Oracle should also consult with its clients, provide them with solutions as well as just the database, and he had about 100 people in this new business.

DSM: This was less than a billion dollar business?

RJL: It was a little less than a billion. So I looked at this letter and threw it away. I had no interest in doing this, and that's when I got the call from John Thompson at Heidrick and Struggles. John called and said, "I'd like to meet you. I've heard of you. I know you've been at Booz Allen a long time and I would like to talk to you about this opportunity." And I said, "John, you can come see me and talk to me if you want but I have no interest in this. I am working for one of the best consulting firms in the world. I don't want to run consulting for a quote, 'vendor for a supplier of databases'. That was pretty low on the food chain from what I was doing at Booz Allen. So he came to see me and in the first 10 minutes he said, "Well you're right, you don't want to do this, but the board has authorized another search which I think you would be perfect for, and that is president of Oracle USA." I said, "Really?"

First of all I didn't know a whole lot about Oracle. I may have been the only person on the planet who didn't know that Oracle had been a rocket to the moon and had fallen from grace.

DSM: So John Thompson is your only source of information?

RJL: He was my only source of information because I really didn't know much about Oracle. I knew they were a database company, but again it was so low on the hierarchy that it wasn't even an element of consulting for us. We wouldn't consult on database technology, that's just a like a computer. We would be a much higher level than that. So John convinced me, he said, "Even if you don't want to do this, you could meet Larry Ellison." I had never heard the name before. John said, "You could meet Larry Ellison and maybe you could sell him a consulting assignment." Bingo! The light went on and I agreed to meet Larry because I knew I could sell this guy something.

DSM: So this was a qualifying call?

RJL: Yes, he had never bought any consulting. He didn't believe in consultants, didn't buy consulting for strategy or anything like that.

So I went out and met Larry. It was a three-hour meeting and I probably didn't decide to do it in that meeting, but I did get enamored with him and with the idea of being president of a business at my age. I told him that I really felt like I was on my way to being CEO at Booz Allen, there had only been six CEOs in 100 years and that was something I would like to do.

Secondly, my family had been in Texas for a long time and I just couldn't imagine uprooting them and bringing them to California. So he immediately changed the number of options the board had authorized. He tripled them and said, "Maybe this would make it a little easier to give up being CEO of Booz Allen. Do it from Texas. It's president of Oracle USA, you don't have to do it from California. You can be here for management meetings but you can run it out of Dallas." So on the plane on the way back to Dallas, I'm doing the calculation on the options, and I'm seriously thinking about doing this.

DSM: Well this is public record, so this was like 100,000 options to start with. Then he tripled it, and Oracle in those days was selling for about \$15.00 a share.

RJL: Exactly, so I'm thinking if it goes up 10 points this is pretty good money. It was better than I could do at Booz Allen. It still took me six weeks to two months to decide after that because the real issue had become the people at Booz Allen. I had recruited most of the people in the ISG practice, the information systems group; I had made most of the partners in that business.

DSM: So this had to be a blow for them.

RJL: Oh a real blow, a senior partner leaving was a huge blow to the firm, also to the head of technology practice and the people who had been recruited personally by me. I decided to take one of the partners into my confidence, told him I was looking at this. He immediately said, "Take me with you. This could be a real turnaround, a real success." I think I may not have done if not for him because he knew a lot more about Oracle than I did. He lived in San Francisco, knew more about Oracle and through his practice at Booz Allen, had worked with Oracle. His name was Robert Shaw. He had come from a big 5 firm so he was very influential. I told him about this because I didn't want him to be surprised by it, and he said, "Let's go. If you put me in charge of the consulting business and you run Oracle USA, if we can turn this thing around, this could be huge."

He was very influential. He was the only person who was a positive influence on the decision. Everyone else, including my wife, including 15 of my clients, everybody said it made no sense. They said, "This is a den of wolves that has no integrity whatsoever. It is a company who has basically sold its clients down the river and has crashed in the market because of it. They would be bankrupt if not for a guy named Jeff Henley who came in a year ago, they would be out of business." Jeff is the CFO and he basically had gotten them a 30 million dollar loan from Nippon Steel to survive the year. Then the customers that we talked to said they had a policy of not buying Oracle products, but I still did it.

DSM: Tell me a little bit more about your relationship with Robert Shaw because obviously he influenced a major decision.

RJL: Robert was one of the partners who worked for me in the practice.

DSM: You found him, or was he there when you came?

RJL: I found him. I recruited him into Booz Allen and he had worked for me for about four years. I thought he was very smart and had a good gut. So when I was thinking of leaving I didn't want him to be blindsided. He was the practice leader in San Francisco, lived in Silicon Valley and I figured he would be the first one to pick up on any rumors. So I just opened up to him and he's the one who said, "Look, this has potential." Then I started reading articles About Oracle and they were horrible. Wired and Red Herring had written all these articles saying Oracle had sold software that vaporware.

DSM: This is what is known as the period of the long introduction to Oracle 7.

RJL: Right, exactly. Sybase was killing them with better products. Despite all that I went to Oracle a combination of reasons, the first being the potential for turnaround. I didn't hear about anything I couldn't change if Larry would let me change it.

Secondly, the prospects of wealth creation were far and above what I had at Booz Allen. Now I didn't know for sure what would grow out of it because I didn't know whether Larry would stay or go, but we went to work on turning everything around. I terminated a bunch of people that were bad players. There was clear evidence that they could not be saved. They were taking advantage of clients or making bad decisions or politically backstabbing or whatever. I changed a bunch of business practices in the company and said here's the way were going to do business in this company, and I hired McKinsey.

It's interesting, I asked both Booz Allen and McKinsey to bid on the job and McKinsey had a better proposal. So I asked Mc Kinsey to go out and interview Oracle's customers. I wanted to get real data because all I had was stories. For example, when I was at EDS everyone would quote Ross Perot. Nobody had met Ross but they would all quote Ross as if he was their best fried. Same thing was going at Oracle, "We're going to grow 50% this year. We don't see Sybase as a competitor. We never see them in the accounts." And I just didn't believe it. Were people just that mesmerized by what Larry is telling them? He was like the Pied Piper. He had just missed bankruptcy by a hair, he had total turnover of the company, the stock had hit a bottom of two and people are still saying that we were still the best in this business. So I said, "I need data on my side." As a consultant I didn't have two years to do this so I told McKinsey to go out and find out what the customers are saying about us and it was ugly.

DSM: And just for the record you joined them in June, the day that Oracle 7 was introduced.

RJL: Right I joined Oracle in June 15th, 1992. That was the day that Larry threw me on the stage and we introduced Oracle 7. I had a financial analysts' meeting that day, and they wanted immediate answers. And I said, "Give me 6 months. I can't answer your questions. Just give me 6 months." It did take just 6 months and I was surprised, I thought it would take two years to turn it around. I came in Q1, and by Q3 we beat the analysts' estimates and the stock doubled in price.

DSM: Who are the good guys who help you in this turnaround?

RJL: Robert Shaw came with me to run consulting. I also had some internal guys; one is still there, George Roberts. Before I even walked in the door, George called me and said, "I want you to understand what you're walking into. I'm not doing it for my own benefit."

I was very guarded about this, but George was right. I was about to walk into some real infighting. George told me that Larry hasn't told anybody that he had hired me. George said, "You got one guy who is already trying to displace you, saying maybe you won't come if he can talk Larry into dividing the organization." He also told me that Larry had yet to hire the guy who was supposed to help me to run the software business. So Larry was basically telling stories to get everybody into the fold and I decided I couldn't rely on Larry's information any longer and would have to find our real quick if Larry is going to let me do what needs to be done.

So I changed things that he didn't want to be changed, and I said to him, "Tell me now if you want me to stop." And he said, "No, I told you you could. Go ahead and do that." I fired people he didn't want fired, close friends of his, and he let me do it all. I told him it was the only way we were going to turn this thing around. So it took us 6 months and it wasn't totally turned around but we were starting to grow again. Oracle 7 was starting to get traction, and we were on our way.

DSM: By 1995, 1996 you had grown a company from less than a billion to a little over 4 billion dollars.

RJL: We had introduced two new businesses. But the database business had to be turned around, Larry made that very clear. He said, "Your job is to defeat Sybase. I don't want you to do anything else." I said, "But I want to grow the new applications and consulting businesses." He said, "Fine, but Sybase is the target. Sybase is our nemesis because if they continue to grow at 60% and we grow at our paltry 5 to 10%; in three or four years they will be the biggest data base company." So we targeted everything at Sybase and the rest of my time I spent building the applications business because I thought here was a business that was three or four times the database business. Applications, database and consulting belong together, that was a huge business and I was right. No one I know of, including Larry really bought into the strategy. Larry wanted Sybase. That's all he could see, defeat Sybase, "I want to look Mark Hoffman in the eyes when they put him in the grave." He was super-focused on that competition. You know how Larry gets, very competitive.

No one gave us credit in the applications business. They were still asking us in 1996, 1997, are you really an applications company? Then consulting, nobody thought it was a real business, but we grew the applications business to about 4 billion dollars. We grew the consulting business to 3 billion dollars.

So these became huge businesses in Oracle with 18-thousand consultants. Booz Allen in those days only had three thousand, so we went way past our goals. It was the right thing at the right time. Relational databases were key to building applications. ERP applications, packaged applications, became a big thing in the 90's as we were approaching Y2K. SAP led the way but others like Peoplesoft Oracle, I2, came along and we participated in that growth. And the consulting business was brand new. Nobody had ever done that. In fact SAP was doing the opposite. They were giving all the business to Andersen and KPMG and Price Waterhouse. We decided we would take a piece of this market ourselves and try to work with them as well but we took 30 to 40% of the available market for Oracle products.

DSM: When you were at Oracle was there a time, a place, a decision, a sale closer that you knew that this thing had really been turned around and that you felt good about it?

RJL: I think I felt that probably two years into it. There were moments during my first year such as our Q3 surprise in the third quarter of fiscal 1993 when we surprised the analysts and the stock jumped up. There was an acknowledgement that we were doing something right and it was confirmation of the potential that I thought was there, but that probably wasn't it. I think two years into it, getting confirmation from some of the same clients that told me before I went to Oracle that they had a policy of not buying Oracle products – that they had changed their policy back. They were now telling me that Oracle was too important, that some of the policies I put in place, the business changes and the support people had changed the company.

Two years before, the sales person was there for one year only and then they would be moved. For that year their goal was to sell everything in the price book at whatever they could get for it. They would ship all the products and move on. That's not the way Oracle products should be sold. I knew that, but when it really hit me it was after the fact. I had an Advisory Board that I had put together right in the beginning, probably in the first three months. I called a number of Booz Allen clients and asked them, "Do you buy Oracle products? What do you think of them?" And I got some old customers that had bad experiences with Oracle and asked if they would join me on an advisory committee and give me reactions to things we were changing.

In fact, the current CEO of Computerworld was one of those people. Al Guibord was on that advisory board when he was at RR Donnelly. He and John Reese and probably 10 others whose input was critical before I would change something. I would get their assessment of what the impact of that change would be and how Oracle would fare implementing that change. Or I would get advice from them on what else to change, or how to change it. So it gave me peace of mind that I was doing the right thing.

Internally at Oracle I couldn't find many people that were thinking like me in those days. So this advisory board became critical to success. I think when we had a meeting where the advisory board acknowledged that some of these changes had made a real difference, it was a real indicator that it was turned around; that we were there. I also knew it when I was sleeping in my bed in London and in the middle of the night I get a call from Larry Ellison. On the other end of the line I get, "It's over! It's over! It's over! It's over!" Sybase had missed their number. I was thinking what is he talking about in the middle of the night? But he said, "Congratulations, " and wrote me this unbelievable letter than I have today on all the accomplishments. So he was recognizing that I did exactly what he asked me to do, "You killed Sybase."

DSM: He wasn't competitive at all.

RJL: All the other things; the consulting, the applications business, all that didn't count. Sybase was dead, they missed their number, they'll never come back and I did it. So it was over for Larry then.

Divorce, Oracle Style

DSM: In 1996 you become President and Chief Operating Officer of Oracle, and four years later you make the decision to resign. Do you want to talk about that?

RJL: Yes. When I became President and Chief Operating Officer it was something that was actually a response to a lot of calls to leave Oracle. I was getting calls from other companies to be CEO and I'm pretty loyal to the company I'm with. So my first answer to most, like it was to Oracle, and Booz Allen and to EDS, was," I don't know why I would leave what I'm doing now."

Yet some of them get through, because you want to be CEO of a brilliant start-up put together by John Doerr or Jim Clark. You talk to them and HP or Novell or Compaq, you really have to take the meeting and listen. You listen to what they want you to do and the financial propositions, and one got to me.

I talked to Larry about it. It was far enough along that I thought, "Well, I don't know why I wouldn't do this." So I talked to Larry and he said, "There is no way you're leaving here." And he made me President. He did the same thing he did when I was hired, "How about this many shares?" It was a lot of shares, more than I thought that he needed to do, but he said, "I'll go to the board with these shares, make you President and Chief Operating Officer and I'll be CEO and Chairman." He said, "In fact you can be CEO if you want but you can't tell me what to do."

I think the thing that kept me there was that I actually didn't feel like I was working for Larry everyday. In fact I would have to draw him into a lot of discussions because I wanted his help. I didn't know how to run a software business. I was operating on my gut. I was relying on other's experience but most of all Larry's, because he knew how to run a software business, at least knew how to build software. So I would try to draw him in but he had no interest in doing anything that was outside of engineering. He had no interest in working with customers or working with consulting or applications.

So the way we ran the company was he built the products and ran it personally. There was no head of engineering, he was the head of engineering. I was the head of the customer stuff, the sales, consulting, support, and Jeff Henley was the Chief Financial Officer. The three of us ran it as kind of a cooperative. Sure, Larry could tell us what to do but he wouldn't. We would come together every Monday and would run it as a committee. So I kind of felt like a CEO. I was doing the kind of things that I knew how to do. I really don't know how to build software products. I would hire an engineer, someone really good at building those products and I could guide them, but I wouldn't be the right engineer to run it, not like Larry. So for seven years it ran this way and when I became President and Chief Operating Officer I think I was very effective at running 90% of the company that was outside of engineering.

DSM: I don't know what you think of Stuart Reed's book but he describes that you brought discipline and process to the company and Jeff brought sound financial management. How would you describe Larry's contribution to this triad?

RJL: The three of us working together was a real multiplier because of our combined individual skills. I brought the process. I would add the customer communications and interface, and the customers really felt they had a champion inside. They really weren't too sure what direction Larry would take the company every time he got out of bed but on balance you couldn't find a better combination. Larry's brashness, boldness, innovative attitude, engineering skills and competitiveness...

DSM: And you both love competition.

RJL: Oh yeah, I'm the only one that goes further than him in competition. I'll never forget this one incident. Larry and I were in New York one day and he wanted to sell his, well it's not an important story but basically he was selling a car to me and we became very competitive.

DSM: This is the story about the Ferrari. This is a great story you have to tell it.

RJL: It was early 1993 and we were in New York. We were in a limo and he pointed to an Acura NSX and said, "I got to have one of those things. They are so cool!" And I said, "Larry, go buy one. You can afford to buy an NSX." And he said, "No, I've got too many cars and I wouldn't buy it until I get rid of the Ferrari." I said, "You're selling your Ferrari?" He said, "Yes." "Hmm," I said, "How much would you sell your Ferrari for, the same thing you would buy and NSX for?" He said, "Probably around that." And I said, "So I can buy your Ferrari for 60-thousand dollars?" He said, "Sure. Write me a check." I said, "You're sure?" He said, "Yes. It's got 2-thousand miles on it."

DSM: Oh, a barely used car....

RJL: On Monday he comes into work, throws me the keys and I go down and look at the car. It had 25-hundred miles on it, 5-hundred more miles than he said it had. So I wrote him a check for 57-thousand five hundred dollars - and he went ballistic. He went absolutely ballistic! I should probably have never done that (laughs.) But anyway I bought the Ferrari.

I don't know. I always had the feeling that Oracle was a profession to me and I never wanted to get close to Larry in terms of lifestyle and persona. Personality-wise we were two totally different people. The Larry you see in public is pretty much the real Larry. There are certainly some wild and crazy things he's done that the press doesn't know, but he is a much, much different person in terms of the way he wants to run his personal life than I am. So we pretty much stuck to our relationship in the office. I felt like I was CEO of 90% of Oracle rather than President of all of Oracle. That's the way I felt. So when I had calls to go elsewhere I said, "You know it feels pretty good to me here. I think our stock is undervalued and I think this is going to be a better play."

I never wanted to be CEO. It would have been nice but I wasn't really thinking of it because Larry was my age. He's 56 and I'm 54, so I thought he would stay around as long as me. And Jeff would as well; he's 58 I think, 57 or 58. So I figured all three of us would probably exit in the same time frame. I really didn't think, "Let's work for Larry for five more years and become CEO," because I didn't see it happening.

So for seven years it worked fine because I was given the charge of turning the company around, building those businesses of applications and consulting. I was growing the business, becoming President of the business and basically coming to work each day where I was responsible for the leadership. Whatever I wanted to do, I could do. I would define the terms of leadership. I would have leadership training for all of my management around the world. So we put two thousand people through management training and taught them a philosophy and culture that I wanted them to believe in. We changed all the business practices, the only thing I didn't have was the engineers who built the product.

But that changed in the year before I left Oracle. I probably should have been more aware of it or since Larry sat me down and said, "The internet has changed our business. The Internet has allowed us to reach out to customers electronically. It will allow us to use our own software as a proofpoint to changing business process. It's totally changed the game and we're going to run the business a totally different way. And because of that, for the first time in a long time, I'm interested in being CEO." He said, "Read this press announcement." He had a press announcement ready to go out to tell the world that Larry Ellison was going to be CEO of Oracle. I said, "Larry, people aren't going to understand this. They think you *are* the CEO of Oracle. This is really strange."

He said, "People don't really think I'm the CEO of Oracle. They think you run the place and I build the products."

DSM: This is combination of shock and a strange backhanded compliment at the same time?

RJL: Exactly. I said, "Well, it's good to have you back. It's good to have you aboard and let's go." I thought he was my boss anyway. I just didn't know - well I did know, I did know. When I watched him run development, I watched the pain and frustration that all those managers went through. The only people that can work directly in that environment are very smart, they bring Larry the data and Larry makes the decisions. He has to be the one making decisions. He has to be in charge. That's the way he ran development. That's why there was never a head of engineering at Oracle.

Never did I think he would take that philosophy and apply it to the whole company because now he's getting out of an area he knows. He says, "I get it, Oracle on the internet. The company Oracle can run like a computer. It doesn't really need people any longer. It can run like a computer. Customers can place orders on the computer. We can ship software and authorize contracts, give them a standard contract."

So he launched a much bigger re-engineering exercise than I ever did in 1992, changing everything. He would sit down with sales managers, my direct reports, and ask if it was necessary to pay sales people a commission, variable commissions, why did we do that? Maybe we should not have commissions. Why do we have sales people? He was basically looking at how to change this whole model. It was sheer hell for a year and at the same time as he's going through these re-engineering decisions, more and more he's making these decisions alone. He's not even sharing them with me or others. It finally got to the point where he was starting to make major organizational decisions. He was taking the alliances organization; I think you just said I was pretty good at alliances?

DSM: Yes.

RJL: He took the alliances organization and moved it to engineering. But the crowning blow was when he took customer support, the 6-thousand people who answer the phones and help our customers, and he moved them to engineering. I could no longer make a commitment to a customer and fulfill that commitment because I need that operation to do it.

DSM: And that was the focus of your turn around in the first place, changing the relationship and the perception at the customer level.

RJL: Right, right. So I was very frustrated. I was pretty much ready to leave saying, "I don't know if I can work much longer in this environment." But I had a lot of financial wealth at stake. I had my own integrity and commitments I made to people, all of that. So I was just going day to day. Then one day he called me and said, "I've decided to take the President title back." I said, "Why? What does that mean?" And he said, "It's very clear that there are two bosses at Oracle; there's 'Mom' and there's 'Dad.' And every time 'Dad' tries to change something they all go running to 'Mom' and ask if 'Dad' is really serious about this because they don't like it." And I said, "Good luck 'Dad,' now you're Dad and Mom."

DSM: So there's a divorce in a sense.

RJL: It was a divorce, and I think in the last year Larry has been home alone at Oracle. There's nobody challenging him. He's surrounded by people that just say, "Tell me what you want me to do and I'll do it." He's getting his way, running it his way and history will tell whether it's right or not.

"You Might As Well Join the Yankees"

DSM: You could have gone anywhere you wanted to go and you went to Kleiner Perkins, which is a legendary firm. Tell me about that decision.

RJL: Certainly I had been thinking for six months that I should be doing something else because Larry was making every single decision in the company. Certainly if he had done that three years prior I would have been gone to Hewlett Packard as CEO or something. But because he gave me so much independence and I was running such a large portion of the company and feeling like I was CEO of 90% of the company, it's what kept me there. It's what kept me there more than anything else but he took that away. In fact I'm on record with a number of the press in 1995, 1996 and 1997 as I was asked those questions so many times, "Why are you here when you could be a CEO of just about anything? We know you've been approached to be a CEO, so why do you stay?" I said, "Because Larry gives me this independence, but certainly if that changes and Larry starts micro-managing me like he does with engineering then, I would be hard pressed to stay. I would probably then have a better reason to go."

So I think I've told people that over the years and I had been thinking, I was prepared. It just came down to him making some key decisions around the turn of our fiscal year and I thought it just doesn't make any sense to go another year of doing this. Especially if he's going to, as a show of authority, to take the title away and say, now there's *one* authority. He said this to me, "I want one office that everyone goes to for decisions. Even on approvals of deals."

Now you can imagine Oracle, a 10 billion dollar company having thousands of deals per month, they all go to Larry's office if they exceed an approval level. They don't go through the management hierarchy. If they go over a certain discount, they go immediately to Larry's office. That's no way to run a railroad. I said I think it's now time to go, but even though you've prepared yourself for it, you do it and you're not that prepared.

So I decided I was going to spend some time with family, take some time off and not think about this all that much because it just was so much pressure. Calls would come in and say, I'd like you to consider this, I would like you do this." And so I went off with Doug McKinsey here in the Kleiner Perkins office who asked me to go to Pebble Beach to play golf for a weekend. We had 8 people, played two days of golf and he also suggested to come into the office and spend some time. Now I knew about half of the partners here, I didn't really know all that much about the business. I knew what venture capital was, and several of the calls that came in were from venture firms, even though I'm not a venture capitalist. I don't really know the mechanics of the business. It takes a long time to be as good as these guys are. But I was getting calls to go into the venture business, because our business was so hard, our business gets so hot. When it gets that white-hot anybody could jump into the business and be successful, they just don't know until it turns down that it can't be. So I said, "Okay I'll come by." And I liked those conversations, they made a lot of sense to me and it is a quality firm.

Let me go again on record saying this is, if you're going to jump into the venture capital business, you might as well join the Yankees. I'm a big baseball fan and no one has had the success as the Yankees, and Kleiner Perkins is the same way. They've hit more winners than anybody else has, they have a worldwide reputation. As you can see, I'm a believer in joining the best. IBM and EDS and Booz Allen and Oracle, they were all at the top of the game when I joined those companies, or became at the top of their game. I just believe that quality begets quality.

So after several conversations over a month's period of time with my second wife Stephanie, and I said, "You know, this makes a lot of sense. Kleiner Perkins is five minutes from the house and there wouldn't be any travel." For 20 years I had spent 70% of my time on airplanes. So at Booz Allen and Oracle I was on the road, gone most of the time, but this was no travel.

We are firm believers that you must be with the companies, be with the entrepreneurs that you fund and 95% of our portfolio is within 50 miles of this office. So it takes away all the travel and it's very enjoyable. So I decided this makes sense for two reasons, first, it gives me balance back in my life. I had just totally thrown myself into business for 20 years and had ignored my family. So this brought family much more back into balance. And I thought, at 54 years of age, this would be a great time to do it. Who knows what you will do at 60? Who knows where you'll be at 60? So why not do it when you have your health. I have young children so made a lot of sense to me from a personal point of view.

Second, I can be relevant to the technology business. If you just retire and go play golf, in about a year you're irrelevant to this industry. You are totally gone if you can't keep up with it. Well there's no better place to stay relevant to where technology's going than right here at Kleiner Perkins because we're seeing entrepreneurs bring us new technology ideas that the public won't even know about for three or four years from now. So were seeing a deal flow, like what's going to change life? What's going to change business? What's going to change government three or four years from now? We're seeing it today as it comes through here. We may not choose to invest in it, but we're sure seeing it.

So I thought, Kleiner Perkins fulfills the two things I need most; technology relevancy - staying involved as a leader in the business, and secondly, to get balance in my life, to be home at night. I could be home 27, 28 nights a month. I only travel 1 or 2 days a month, there's no need for it unless I want to. My wife and I like to travel and we do some personal traveling to homes that we have in other locations. So it has worked out very, very well for those reasons.

Quality Time

DSM: That is a natural lead-in to ask you about your children.

RJL: I have three daughters who are grown. Kristie is 29 and lives here in the Bay area. Kelly is 26 and lives in Dallas, and Kerry is 22 and is in graduate school at the University of Texas at Austin. Those are my first family with my wife Donna, who I was married to for almost 26 years. My family now is RJ, Raymond Jay Lane the Third who is a little over 2 years old and Catherine Victoria, we call her Tory; Catherine Victoria is 4 months old now.

It's been great. I've certainly seen the difference that staying home makes. I used to tell my daughters when they said, "Dad, you're never around," I used to say, "It's the quality of time. Saturday I'll be here. I've blocked off the time. It's the quality of time I give you. All those other fathers that are there every night, its not quality time. I'm going to give you quality time." What bullshit! I mean it was just absolutely crock. To kids it's quantity of time because the more time you spend with them, the more they respond. My son won't let me out of the house without kissing him goodbye. When I come in he runs to me, wants to play basketball. He can't dribble a basketball but he wants to play basketball.

So it makes a heck of a difference. When they become teenagers, if they're sitting around the dinner table and they say, I don't know what the current drugs are, but if they say, "What's angel dust? Or, what's crack?" You miss that discussion. You've missed it! Yes you get quality time, you get it when you are pursuing a career and you impose time on them. So it is important, and it's a lesson you learn later in life. I would probably do it the same way again if I was 30, but I don't have to do it when I'm 54. It's not something I should have to do twice, and I won't.

I have not talked a lot about Stephanie but certainly more than anything in my life she changed it. I met her at Oracle. When I came to California my first wife, Donna stayed in Dallas. She didn't want to come to California, and we then thought our marriage was ending. It worked out just fine and we're friends today but Stephanie became my soul mate. It was obvious, she is a friend that I can take counsel from. When you fall in love when you're 21 you don't think about what friendship means and counseling and then you grow apart. I was in business all my life, she's raising the kids all of her life. So you end up pursuing different interests and all that.

Stephanie is in the business. That gives you a head start but it really was her personality that was forceful, which I need. She is someone who can reach out and slap me and say, "No, you're not going to do that." Or, you shouldn't do that, or whatever. She has become my soul mate and so life has become very good. Sometimes I just want to pinch myself, to have a wonderful wife like Stephanie and two great kids and then my grown kids who I spend a lot of time with. It's just really super.

IT's "Grooved Swing"

DSM: And I'm sure they can appreciate all you have done in the field and how the work you have done with information technology will change the way they live in the future.

RJL: It's already doing it. Kids that are growing up today are growing up in a much different environment than I grew up in. When they start off with Game Boys, with interactive DVDs, chat rooms, things like that, those are the precursors for managing collaborative supply chains and for telephony, buying online, and all the things that we do in business today. They're kind of growing up like Tiger Woods did. He got a grooved swing before he was 5 years old. Well these kids are getting a grooved swing on the Internet. They're challenging the ones that are now exiting. This generation that has become the leading edge of IT (information technology) has become 25 years old now.

Those 25 year olds are starting to challenge why businesses, why society does things the way they do. There's an easier way. When I buy a car, even though I'm in the business, I go to the car lot to buy a car. They don't. The first thing they do is they go to the Internet. It's amazing, my 22 year-old goes to the Internet first for everything. She would never think of going to the library. If she needs to she would, but she goes to the Internet for information. She goes to the Internet to buy things. So they have skills that they've developed over the years. If you and I think we can go out and have just two years to focus on nothing but golf that we could be as good as Tiger Woods, it can't happen. He grew up with this grooved swing and the kids are doing that today with IT.

So 20 years from now it will be routine to have devices, all sorts of devices that are of convenience on the Internet to exchange information. It will make life much more convenient, much more efficient. All the process costs that are built into our businesses today, most businesses have disaggregated their supply chains; they have a lot of process costs to pick best-of-breed vendors to dialogue with their supply chain. If a customer wants to get a commitment for a product delivery, they can't get it today.

In the future, they'll be able to go online and configure a car. Say I want a Ford SUV, I want to configure it, my color, my options all that, and get a commitment directly from the Ford supply chain that they can ship the product at a certain price and at a certain time to a certain location. So all of this is going to be made possible with this technology.

It's just actually starting. We think we've been in this Internet world for a long time. Certainly Tim Berners-Lee would say we've been in this for a very long time, but I think we're just starting to see the potential. Because most of the software that actually brings value out of the Internet has been written with what I call a static point of view, a planning point of view. We're still taking the old client-server methodology, building an application with a Microsoft operating system, accessing data on an Oracle server, and we're just starting to see in the last year, applications being built with a collaborative design point.

So in the past a programmer basically looked at the logic of the motherboard as his confining space for developing a program. Even if you got many computers together in a cluster, you're still addressing one logical view of the application and that's the way they're thinking about programming it. In the future they'll be programming that same system, only it will be a network of computers that mimic the components on a motherboard. So instead of programming the logic of one computer, they'll program a network, and all those servers that are on the network will function just like the components on a motherboard today. Now, they can think about collaboration. They can build an application so that if it is trying to make a decision based on information it reaches out there on the network and gets it automatically from another server and operates without any human intervention. That's what we're going to see and it's just beginning, this whole collaborative, distributed resources, distributed databases, distributed operating systems, and distributed applications. It's just beginning, and we won't probably see the effects of this for three to five years.

For the next 10 years after that we will basically see the business world of computing operating like the air traffic controlling system does. The air traffic control system is the best example I can think of today where you have collaborative computing working, where everybody gives up information for the common good. Even if it's information you don't want to give up, you give it up because it's not good to withhold information from the air traffic control system, unless you're a terrorist I guess. The same thing is true in the supply chain. The same thing is true with customers that will see a much more collaborative world of computers working with each other, making decisions and making it much easier to go about life and go about business.

DSM: How far in the future in the world of computing do you think we're looking, in terms of the general public experiencing these changes?

RJL: In terms of business we can look at the automotive industry which is led by four to five global players and then linked to those four to five global players are 30–thousand suppliers or 50-thousand suppliers, it's a huge industry and it's very much global. Steel, the same way, chemicals, the same way. Businesses that are already global will bring this together. Now if you're talking about e-mail reaching into Central Africa, that's a different question. But I do believe the Internet will have that kind of effect. The Internet will be made available free to areas of the world that today don't have it. I'm surprised today at all the areas of the world that can communicate by email globally. Email has become commonplace, we take it for granted. Email will be the backbone for business and society because it's something that is already understood. It's part of our daily lives and we'll see English becoming more important.

DSM: It's the air traffic control analogy.

RJL: English is already spoken as a second language by more people than speak it as a first language. So it becomes the language of law and commerce, just like Latin did 2-thousand years ago. So you have all sorts of dialects that are out there that are still important for local economies and cultures, but to transcend the global economy English will become the standard.

DSM: So English becomes the common, global language?

Right, for business, for law, for things that you have to communicate globally with. So we're seeing the structure of business being changed to becoming much more virtual. Over the next 10 years businesses should be thinking, keep only what you do well. If you engineer products well, that's what you do. Everything else goes outside, you can do it on the Internet, you can outsource and communicate. Processes are getting much more selfserved. If I'm going to hire somebody, why do I turn it over to the HR department to do that? Why can't I hire somebody, do it on the Internet, do it directly? I don't need all this process stuff in between. Same thing is true for taking orders. Economics, the cost of running a business will come down over 50%. All of the taking orders, cutting purchase orders, hiring people, payment processing, all of that if done on the Internet today is an order of magnitude difference in cost if we use an Internet application. Why put invoices in an envelope, send it to a client and have them write a check back? That's a dollar to do that round trip. If you present it on a computer to your client, on a television set, and they authorize direct payment from their bank it's less than five cents.

DSM: Do you still write checks?

RJL: My wife does. I've never written checks. I won't.

Whence Cometh Innovation

DSM: You have been an innovator throughout your career. Where do you think innovation comes from?

RJL: There are different types of innovation, but true invention does come from geniuses. I do believe that. You look at most successful software companies today and there are very few people that can take credit for the product or the ideas that make that product successful. We had 4-thousand engineers at Oracle, but when it came down to who made Oracle7 successful, who brought out some of the really cool features, a parallel server, the processor in Oracle8, it gets down to a team of a few people.

I really think these people are very off the charts bright. They cannot be contained in a process. You give them the resources and you let them go. Now those inventions will fail if you don't put innovation around it, a process-oriented innovation that can bring this to the market and make it useful. So I would say that most of these inventions will fail, they cannot see the light of day unless you have good capital, good financials around them, good people that can communicate what they do. We have a lot of those companies here today, I think half our portfolio were started by companies with two or three people that invented something and that would be the end of the story had we not given them capital, had we not hired a new CEO, had we not hired a new management team, had we not made connections for them. Putting all that around them so that sees the light of day.

So true invention I think does belong to geniuses, belongs to people that are not constrained to a process and are looking for a better idea, but those inventions need to see the light of day. And there's a lot of innovation that goes on in the business process, in financial engineering, in people, and that's just as important as making the company successful.

DSM: Right now we're seeing a downturn in the Internet markets. Many dot-coms are vanishing, others are in trouble, but many are surviving and we assume, will continue to grow; do you see any dangers or danger information technology may pose in the future?

RJL: I'm sure there is, but off the top of my mind I can't think of any. I'm obviously a bigot for technology and I think technology has to fight. It's like a seed that has to fight to grow and flower. It's a very natural adjudication process and we're going through one right now. It was too easy to get capital in the last three years. We created too many companies. There's an overcapacity, the world can't consume as much as it is being tried to be sold. The world can't consume as much technology as exists today in all of these companies.

So it's going through a natural contraction and I think all of that is very good. Certainly you can make the case that all of this technology gets in the wrong hands so you get hackers that get inside and create damage. It's easier to create damage to people if all the information is in one place and is stored electronically but I think technology has always had a way of preventing that, of taking care of itself. If we can innovate the idea, we can innovate the security idea.

So there are a lot of naysayers, especially outside the U.S. We're a country that naturally tries things, but in Europe they worry more about security than we do. We give a credit card to a waiter and let them disappear for 10 minutes. So I think we'll look back 10, 20 years from now and say, the decade of the 1990's, and what happened in the first 10 years of this century; that those 20 years changed the world and it changed it for the good. It's not a bad thing. It's a good thing.

Never Give Up

DSM: Were there men or women in your life or in history that you would consider your heroes, people that have inspired you?

RJL: There are probably several heroes that I respect certainly in politics, government and sports. I could name a number of them but I think no one who comes as close as my father did. My father was really the role model because I have repeated his life. Now my mother would look back and say, "You've gone much further, " but I think I really have repeated his life. I have succeeded through hard work. I have succeeded through tenacity. I have succeeded through competitiveness. And I think he accomplished a lot by fighting early in life, by fighting to get out of the steel mills, by completing college and by giving his family a great head start. I guess the statute of limitations is up on this now so I can say it, when he found out he had cancer he didn't come home. He went to the insurance company and took out an insurance policy on my college education and then he came home. And the insurance company paid it. He thought that way.

Now I don't want to skirt your question. I do have a hero. It's somebody I read quite a bit, Winston Churchill. Very early in his career he was asked to deliver the commencement speech to a Boy's School. I thought he was a brilliant summing up his advice. After someone had introduced him for 20 minutes, long, long introduction, he figured he was out of time, that he couldn't keep going for another 20 minutes, so he just stood up and said something like, "Never give up. Never give up. Never give up," and sat down. He said it was the best advice he could give young people, "Never give up. Just keep going." The book, *The Last Lion* is a tremendous profile of him and what he accomplished. So I would pick Winston Churchill probably as my biggest hero.

DSM: You talk about your family and children, how would you like them to remember your life and your accomplishments?

RJL: The question is very timely because I had the opportunity this weekend to be honored by my university, but the greatest honor came Saturday night before I stood up to speak. My daughters called me out of the room and they each gave me a card. They were the kind of cards where you read them and you cry. Then they gave me a pair of cufflinks and said to me, "Dad we want you to know that we are so proud of you. We're so happy that we had the chance to participate in this and we're so proud of you." That is something I never had a chance to tell my father. So when I made that speech, I almost cried through that speech.

You know most people don't tell their children they're proud of them enough. I hope I won't make that mistake again with my young children, but I've got such a good relationship with my daughters today. Maybe my wife did a lot right and I did some things right, but to be able to in your 50's hear your daughters say they are proud of you, is like the end of the story, it's great. A bit of that moment was captured on film, and I would love to have that moment with my daughters saying, "Dad we're proud of you," to be shown to my grandchildren's, children's children. That would be the way I would want to be remembered.