## C. EDWARD McVaney ORAL HISTORY

## COMPUTERWORLD HONORS PROGRAM INTERNATIONAL ARCHIVES

Transcript of a Video History Interview with C. Edward McVaney Co-founder, Chairman & CEO (Ret.) J.D. Edwards & Co.

Interviewer: Daniel S. Morrow (DSM) Executive Director, Computerworld Honors

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DSM: Tell us when and where you were born and something about your parents.

EM: I was born in Omaha, Nebraska, December 29, 1940. I have very little memory until my father came home from World War II. He was a dentist. He graduated from Creighton University was in the Army Air Corps in World War II. I can recall the day he showed up; he was the biggest, tallest man in the whole world. I was just a little squirt. We had a family of four brothers. My mother Mary McVaney, was a housewife and we lived in a very frugal, frugal way on 38th Street in Omaha, Nebraska.

DSM: You met your Dad for the first time about 1945/1946?

EM: It had to be late 1945 or early 1946, yes. I know it was in the summertime, so I would guess it was 1946.

DSM: You were five or six years old?

EM: Yes.

DSM: Do you remember about anything before he came home? You had two older brothers.

EM: I can remember spreading out a map on my mother's bed and studying where my father was. "Gee, he's by Paris" or "He's in Belgium." As a dentist, he certainly was not on the front lines. He was on the back lines, but he was close enough to battle. He came home shell-shocked. I can recall as a child when an airplane would fly over the house in the middle of the night, he would he would wake up screaming and yelling out of fear of that airplane.

I had my own personal traumas. I was afraid of telephone trucks. Back then the telephone trucks used to be painted olive-drab and my image of Germans, who I thought were terrible at that time, was that they would all jump out of the telephone trucks, the olive-drab telephone trucks, and come to get our family. So I lived in fear. Interestingly enough, I have friends that are from Germany, and they don't seem to have those same fears. They got through it better than we did.

DSM: And in Omaha, Nebraska of all places, you have two older brothers. How much older are they than you?

EM: Six and three years older. The oldest one has passed away. He had a medical problem and passed away. Another is living here in Colorado. The younger brother is a dentist, a periodontist, living in Omaha, Nebraska.

DSM: Were all the brothers close, or were you far apart?

EM: I would say that we weren't close. We lived in the same house and we were all a bunch of workaholics. Everybody was gone all the time at their various jobs. It was a meager and aggressive childhood.

DSM: Did you know your grandparents?

EM: Yes I did. My grandfather James was a farmer from Kearny, Nebraska. His is a fascinating story. His father emigrated from Ireland. He worked on the railroads and went to McCook, Nebraska where he homesteaded a farm in the 1880s. After he perfected the title to the farm, he sold it for \$100, went back to Illinois and got his mother and father. They all came to Nebraska and he bought his second farm. He went on to own two more farms in Nebraska. When they divvied up his estate, he was worth a half-million dollars. So going from zero to a half-million dollars and having four farms in one lifetime, he put eight children through college. It's incredible. There were two dentists, a Catholic nun, a Packard dealer and four teachers. I look back at my grandfather and I was just incredibly impressed with him.

I have another grandfather, John Daley from Boston, and he was married to Helen O'Brien. So in my childhood, everything was thick as fleas Irish. It was almost as though if you were anything other than Irish, you couldn't be a friend of the family.

DSM: Your Dad was a dentist. I think it was pretty rare in the 1940s to have a high school education in the United States. Whole family...

EM: They lived in Kearny, Nebraska on a farm. There was a teacher's college there in Kearny, the Kearny State Teacher's College. It was probably a land grant college. Somehow they all got through there. And of course, my Dad ended up going to Creighton University for dental school.

DSM: So you grew up in Omaha proper. For the generations to come, Omaha in the late 1940's or early 1950s, can you give us a feel for what it was like growing up in that town?

EM: It was very cold, and very hot. I can remember as a child in the summertime laying in bed and dripping in sweat. We didn't have air conditioning. We would just absolutely drip in sweat. The wintertime was so brutally cold with the wind and the deep snow and so on. Things like air conditioning and heated cars changed everything. My Dad was a dentist so you'd think we were wealthy but it wasn't at all true. I doubted he earned more than seven or eight thousand dollars at any time during his life. So we lived a rather meager existence but didn't know anything was ever different.

DSM: Early technology experiences. We were talking earlier about early radio. Do you remember your first television set?

EM: I can't remember when we got our first television set, but before that we would go over to a neighbor's. They would have twenty kids over from around the neighborhood to watch *The Lone Ranger*. It was the biggest deal in the whole world to see *The Lone Ranger* on TV. Eventually after five years or so, we got our first television set.

When we were kids, we would sit around the radio and listen to *The Green Hornet* and *The Creaking Door*. Seriously, all day Sunday the kids would be laying around the radio listening to it.

DSM: You were a *Lone Ranger* fan on radio as well?

EV: Yes that was a big deal. It's interesting, here at the ranch we have the complete series of *Lone Ranger* videos. When we play them for the grandchildren, they go wild. They just absolutely freak out on the *William Tell Overture*.

DSM: His brother's was named "Dan". I always thought that...

EM: That's a detail a few people have missed!

DSM: Did you start school early, late? Did you learn how to read before you went to school?

EM: This is fascinating. I am a serious dyslexic and I was a very poor student. I was in fourth grade and I took an eye test and I could barely see the chart. They concluded that I had problems. I was a very poor student. I barely got through grade school. I got into a Jesuit Prep School just because my father knew the principal of the school. He first semester of Jesuit Prep School, we had "A", "B", "C", and "D" classes, "D" was the lowest, and I was the "30" in the class; thirty out of thirty-six students. So I was the sixth from the dumbest kid in the whole school! I could barely read. I really struggled with reading because of my dyslexia.

I can recall that in my sophomore year, I took a course in geometry and I was the top student in the whole school. Then I went back to barely getting by. In my senior year I took physics and I was the top student in the whole school in Physics. As it turns out, what I did well at was courses where you didn't have to know how to read and all you had to do was think. I could think very well, but I couldn't read.

Somehow I went on to college. I started out college on a football scholarship, but I graduated in mechanical engineering. I was on the dean's list and an honor student and all kinds of things like that. So I am a real inspiration. When you have a mother that has a child that isn't learning well, they always want me to come and talk to their child, because if "McVaney can do it, anybody can do it!"

DSM: Do you remember any teachers early on that made a difference? I know there's a story about this physics class in high school, but I didn't know about the early math teachers. Do you remember some of the names of the teachers?

EM: Oh boy. Sister Adrian and Sister Camilla. I was raised as an arch-Catholic and am now a simple Christian. Clem Hogan was my Physics teacher in high school and Buck Miller was my Geometry teacher. In the Jesuit school you had very vivid memories of the toughness of priests.

DSM: You went to Creighton Prep School between 1955-1959, and that's another environment, given the changes in the church and changes in society. Can you describe what it was like being in that school?

EM: First of all it was an all-boys school, and that's an interesting environment. I can recall an old rickety building back in Pearson. It was not a wealthy school at all. I can recall the principal Father Sullivan, with his rolled-up newspaper as we could come down to lunch. He would whack a kid with a newspaper and say, "Let these nice boys through." Whack. "Let these nice boys through." Whack. That was a pretty typical experience. We were state champs in football year after year after year.

DSM: How many boys were in the school?

EM: There were 350 of us. It was a very small school but it was all boys, so it would be like 700 in a public school. We had exceptional coaching and we did things in high school that were just razzle-dazzle beyond belief.

DSM: What position did you play?

EM: I was a tackle. I was one of the most creative tackles that high school has ever seen.

DSM: What did you run, a single wing in those days?

EM: Oh no! Not a single wing. We were modern. We were a "split T" in a 5-4 defense. It was a modern time.

DSM: But you were in Nebraska, too.

EM: I was in Nebraska. Back then Nebraska wasn't much of a football team. We were middle of at the Big 8 back then. It really wasn't until the early 1960's with Bob Devaney that Nebraska took off as a football power.

DSM: You finished high school in 1959. It was clearly recognized that you had talents in mathematics and science at that time. This was the era of Sputnik and the beginning of...did you ever have any astronaut ambitions?

EM: Not a bit. I think we always live in an age of paranoia and we have to find something to be paranoid about. Then the Russians were going to take over the world and the communists would take over the world and that sort of thing. I went into mechanical engineering of all things, because I like mechanics as a part of physics. That was pretty dumb reasoning. In my senior year in engineering school when I went out to do interviews, I flew all around the country seeing what mechanical engineers did. I said, "I don't want to be a mechanical engineer. This is dumb!"

In my senior year in engineering school, I took two courses in computers; one in operations research, and another in advanced dynamics, some kind of mathematics class, and I absolutely freaked out on computers. That was the end of my engineering career and the beginning of my computer career. There was no "Computer Sciences" at that time. It was unheard of. We barely even knew what a computer was.

DSM: What was the first one you ever saw?

EM: The first computer I worked on was an IBM 1620 with 20K of memory and a paper tape input device. Over in another part of the college they had punch cards and we just thought punch cards were the most advanced thing you could imagine. It was a big deal.

DSM: Two questions I want to ask before we get you into college and computers. And that is stories about early aptitudes for doing this thing. They seem to fall into two categories. There seem to be a lot of stories of guys, who very early on like to tinker with things. There also seem to be a lot of guys that really like to blow things up with the early chemistry sets. Are there any early family stories about Ed McVaney?

EM: There was nothing to have an aptitude about because seriously, there were no computers. I never saw or heard about a computer until my senior year of engineering school, which would have been 1963.

The IBM 360 was announced in 1963 and that was six months after I got into computing. So all these were magical machines that filled a whole room and had all kinds of vacuum tubes and things. I don't think we even had transistorized computers. All the 1401 and 1410 were the early-transistorized computers. But there was nothing to get excited about, because there was nothing there.

DSM: So looking for early signs of your future path, you would probably have to look at suddenly this dyslexic kid shows a real talent in mathematics.

EM: And interestingly enough, I have a spatial intellect. Several years ago there was a Harvard professor that developed a theory that there were seven different types of intellect. There was a mathematical Einsteinian intellect; a Shakespearean intellect; a political intellect; a diplomatic intellect; and he described something that was me—a spatial intellect.

I am the type a person that the whole world is a puzzle, and I have to understand how the world's economic system works. I can get off an airplane in Singapore in the middle of the night in a rainstorm, and I'll know which direction north is. I have an incredible sense of geography and systems and economic systems. So I was a real natural for the systems and software part of computing. Your mind becomes different and it thinks in different ways. There are a lot of great dyslexics around. Charles Schwab is a dyslexic. I'm not prepared to talk about it, but there's a bunch of really cool dyslexics.

DSM: Well, John Chambers and a few others. It's an extraordinary group of people who have...

EM: And they think differently because they're not allowed to think conventionally. They can't read and they can't study the facts. I can go through a stack of mail that thick in twenty minutes time, and yet I can't read.

DSM: I'm going to take you back to your senior year in high school where a couple of good things were happening. Talk about the physics class and you're doing very well in physics, which must have been a great relief. And going to an all-boys school. One thing about going to an all-boys school is you get to see girls from other schools. There was "blind date night." Can you tell me that story?

EM: The Creighton Prep boys were feeling like all we had were the same old girls and the Vincent Bunny girls felt that all they had were the same old boys. This friend of mine, and my wife Carole Kauffman McVaney, did an interchange of ten of their girls with ten of our boys. I had a blind date with my wife Carole. We went with each other for probably four or five years then got married. We've been married now thirty-nine years. We have three children and six and seven-eighths grandchildren.

DSM: Do you remember where you went?

EM: It was a Peony Park vice-a-versa dance. She asked me out, so it wasn't just a blind date. She asked me out. She was surprised that I said "yes." And I said, "Oh it happens to me all the time."

DSM: I should also point out that Carole was in the room, so I don't know how far...

EM: I have to say nice things. I have to be guarded.

DSM: You finished high school in 1959. You were going to go to the teacher's college.

EM: I went to Iowa State Teacher's College on a football scholarship. Interestingly enough, we got kicked out of school. I had a little wire that you would put in a pay phone. You'd put your quarters through and they'd run right through the pay phone. I'd call Carole in Lincoln, Nebraska and we'd have our chitchats three times a week. One day the FBI knocked on my door and they said, "Are you Ed McVaney?" And the long and the short of it is I lost my football scholarship and left Iowa State Teacher's College. Went back to Creighton for a semester-and-a-half, and then to the University of Nebraska.

DSM: So you have a FBI file from your...

EM: Fortunately I was never convicted of anything. I just lost my football scholarship.

DSM: Did you go to the teacher's college mainly because of football, or did you ever think about being a teacher?

EM: No, I was never thinking about being a teacher. It was just such an honor. I was a dumb kid. I was sixth from the bottom of my class. And to get a scholarship to go play football is like, "Oh why not." It was the way high school kids think. But I majored in physics in my freshman year.

DSM: What year was it that the FBI knocked on your door?

EM: That was the end of the first semester of my freshman year.

DSM: So going to the University of Nebraska after being at Iowa State Teacher's college must have been a huge transition?

EM: It was a pretty easy transition. We lived off campus in an apartment. I had a roommate. We rented the place for \$75 a month. We bought a side of beef. We had dented cans of Campbell's soup that we got for five-cents can. I had a 1949 Desoto. It was a pretty cool existence. During the summer I worked on construction crews and I would bank \$1100-1200. So I could live the whole winter, pay my own tuition, which was \$212 a semester, and live the whole winter on my \$1200 that I saved during the summer. I paid every nickel of my college myself.

DSM: And of course, you knew somebody and lived in Lincoln at the time. Were you still going with Carole?

EM: Yes, but she was a fancy lady. She lived in a sorority house. She was a Gamma Phi Beta.

DSM: Talking about being an undergraduate at Nebraska. Tell me about what stands out in your mind about you time there—teachers, best friends, etc.

EM: I had a lot of great teachers. Their names right now escape me, but really good teachers that taught you how to think. Probably my biggest memories are living off campus and so many cockroaches and the crummy apartments. I mean, actual cockroaches. This is something that's astounding. My roommate, Gene Klausmeir and I, who are still good friends today, lived in a one-room apartment with a Murphy bed that folds down out of the wall. It was sort of an old-fashioned double bed. We had to put books down the middle of the mattress so we wouldn't roll into each other. Now, I didn't even know what a gay was until I was thirty or thirty-five years old and here we were twenty years old sleeping together in a bed, which is just unthinkable today. And having to separate us with books down the middle of the bed so we'd roll in different directions. It was a pretty meager existence. We also walked ten blocks to classes, freezing to death in Lincoln, Nebraska and there were these incredible winds. That was an interesting time.

DSM: I know you're a lover of automobiles. Was it a 1946 Desoto?

EM: A 1948 Desoto.

DSM: Was that your first car?

EM: It was my first car, the "Big D".

DSM: Tell me about this Desoto.

EM: It was a burgundy colored, 4-door Desoto. It was actually a very sweet automobile. It was very quiet, had mohair upholstery and was really quite nice.

DSM: Working your way through college. I knew you were a veterinary assistant for a while. Is this when you did your veterinary work?

EM: I did in the summer times. I had a gazillion jobs. I was always doing something. I caddied when I was nine-years-old and also worked for a dry ice company. Most of the work I did was on a construction crew building the interstate highway going through Nebraska and so on. That was quite an experience. I can recall making \$2.75 an hour. Then we'd get on overtime and you'd make \$4.00 an hour. It was just incredible the amount of money you could make in a construction crew.

But I did work as a veterinary assistant and that is where I got the reputation for being the world's champion pig temperature taker. I can take six pig temperatures simultaneously and I think that's quite a feat. I should be in the Guinness Book of World Records for world's champion pig temperature taker.

DSM: Given this is a family audience; I'd like to ask how you take the temperature of a pig.

EM: Rectally. My clever trick was I would sprinkle food along the outside of the cage, and they would line up their curly cues and I would take them rectally six at a time. It's just fascinating - I went on to being the Forbes 400 list and everything. At one time, I was in the top 100 wealthiest people in America. But to think that you started that low, taking pig temperatures and working on constructions crews. Only in America can something like that happen.

DSM: Tell me about the decision to go to Rutgers; an Omaha kid from Nebraska. What led you east?

EM: Everything that you saw everyday was New York City, New York City. All the news came from the newsmakers in New York City and the *Today* Show and Dave Garroway. So there's this draw to go to the east and see what it was like.

I applied to several universities, but Rutgers had one fantastic attraction, and that was the tuition was only \$100 a semester. And there was no distinction between out-of-state and in-state tuition. So I think I chose Rutgers, never having been there. At that time and still today, the business school is in beautiful downtown Newark. We moved back east and lived in Cedar Grove, New Jersey. We were eighteen miles west of the Lincoln Tunnel. I would ride the bush in, thirty-five cents a day, into Newark, New Jersey and go to Rutgers. I did it because it was \$100 a semester and I could afford that.

DSM: And when you say "we", you were married at the time.

EM: I was married. My wife taught at Cedar Grove High School. She had an incredible job where she made \$4,900 a year. She was a physical education instructor in Nebraska. In her senior year she only made \$4,200, so it was incredible raise. We thought we were living high on the hog.

DSM: You got married your senior year?

EM: In 1963, my senior year in engineering school.

DSM: Having been a married graduate student at about the same time, that's another whole life environment. For the sake of the children in the future, what was it like (a) being in graduate school, and (b) being a married graduate student?

EM: I was an undergraduate student at Nebraska.

DSM: There's a special kind of pressure being married and being a student. Did you find that?

EM: We were dirt poor again. Seriously, it's hard to believe that I would go out in the morning and hunt rabbits and bring them home so we would have dinner at night. Carole would actually cook up rabbits, and we would save up about \$1.50 towards the end of the month so we would have enough gas to get to Omaha. Carole's mother would always give us a couple sacks of groceries and that would get us through to the end of the month when her paycheck came in. It was a hand-to-mouth existence and an absolutely wonderful time in our life.

Carole realized then that I was a computer geek, because I absolutely freaked out on computers. She'd see me at the dinner table staring off into the distance and she couldn't talk to me. I would just stare off into the distance thinking about computers.

DSM: Mrs. Kauffman, Carole's mother, has meant a great deal to you. Where did you meet Carole's Mom for the first time?

EM: It had to be December 1958 at our first date. I'm sure I went to her home. Her father rejected me because they were Methodist and I was a Catholic. I was a papist pig and he couldn't imagine that his daughter would go out with a papist. He really struggled walking Carole down the aisle at our wedding because of our religious differences. It's unfortunate that he passed away and I became a Presbyterian. I wish he had been alive for that; it would have made him feel so good.

DSM: If I could digress, that's another thing that has changed so much. Could you describe that religious transition?

EM: I was raised as an arch-Catholic. I went to St. Cecilius Grade School with the Dominican nuns, the old fashioned nuns and everything. Then I went to a Jesuit school and I still respect the heck out of Jesuits today. They're incredible people. I would have been an absolute arch-Catholic and Carole would have been from a very strong Methodist family. Back then Catholics didn't believe Protestants were going to heaven and vice versa, I'm sure. We thought it was a big important deal and it's kind of beautiful how the whole world has opened up since then. We've gotten rid of most of those kinds of silly prejudices.

DSM: The period while you were an undergraduate, it coincides with John Kennedy's presidency and the change in the Catholic...

EM: And the fear that he couldn't be a President of the United States because he was a Catholic. That was a very legitimate fear.

DSM: Did his death affect you and your family, his assassination?

EM: Yes. I'm sure any of us who lived through that, you remember exactly where you were the moment you heard that news. I was walking down the stairs in Richards Hall in the Mechanical Engineering building. I can almost remember the step I was on when I heard the President was shot. That next Monday I had an interview at Pratt &Whitney in Hartford, Connecticut. I flew to New York City for the first time and landed at what is today called Kennedy airport. I saw New York City for the first time. There was nobody on the streets of Manhattan because of the death of President Kennedy. It was so incredible, that memory is just drilled into your head.

DSM: If you don't mind my asking, can you tell me about the transition?

EM: Religious? I put in a computer system for an organization in Colorado Springs called Young Life, which is a non-denominational Christian organization. It was the first time I had ever worked with a non-Catholic people. We'd go out to lunch every day and discuss religion and stuff like that. I just became real admirers of these people because they were so simple, so down-to-earth.

At that time the Catholic Church was going through a big transition. I found out missing Mass on Sunday was not a mortal sin and eating meat on Friday was not a mortal sin. I lost faith in the infallibility of the Pope and decided that I was just a simple Christian and I didn't need any more than simple Christianity. To this day I have very few religious beliefs. All the important ones I can iterate on one hand. I have a very simple faith. We happen to go to a Presbyterian Church, so I guess that makes me a Presbyterian, but I wouldn't know what a Presbyterian is theologically.

DSM: Having grown up in that same era, I know exactly what you're talking about in terms of the rigid divisions. Did Carole have to become Catholic?

EM: Carole became a Catholic for me and we got married in a Catholic Church with a Catholic ceremony. That's what was so difficult on her father. Then after he passed away, we both became Presbyterians.

DSM: For a guy in the bottom "30's", you seem to have done okay at Rutgers. Had a great first job. You were hired at—in those days guess it was Peat Marwick & Mitchell.

EM: You've missed a few chapters. I worked my way through Rutgers as an office girl in an insurance office filing claims at night. I think I got \$3.00 an hour for that. Then I went to work for Western Electric in beautiful downtown Kearny, New Jersey. My solution to the Vietnam War was we should take Vietnam and we give Kearny, New Jersey to the Vietnamese, and it would have been a fair trade.

That was a great experience at Western Electric. I had the title of "operations research engineer." Operations research is applied mathematics schemes theory and that sort of thing. That's how I got started in computers and operations research. And all of this stuff that has been in vogue the last few years with I2 and all that mathematical modeling, we tried to do back in the mid-1960s. We failed at it because the computer systems were so bad and the data was so bad that you couldn't possibly make anything fancy work because the numbers weren't credible. We went through a whole twenty-five year period of time building strong powerful computer systems with integrity so that then twenty-five years later, when you did the fancy mathematics and the operations research and so on, it worked fine.

DSM: At Western Electric in those days was truly an extraordinary place.

EM: Oh yes, it was very leading edge. It's become Lucent. I didn't think it could ever succeed when it got apart from the Bell System, but back then we were doing things that were very much on the leading edge.

DSM: Missile systems and...

EM: Oh I didn't get involved in that, but I was involved with the early 1970-1980 computers and the 1401's and the 1410's. We wrote in machine language. We actually wrote below assembly language in the raw code that the machine used. I can recall one time in an interview somebody asking me, "What's the command to print a line in machine language?" It was a "2". And he said, "What's 'punch a card?" And I believe it was a "4". And "What's print a line and punch a card?" And it was the sum of the two together; it was a "5", or something like that. So we would actually write at the machine code level on those machines. There were no compilers. You would simply take your deck of cards and put them through and run without being compiled.

DSM: No temptation to stay with Western Electric? Tell me about the move to Peat Marwick.

EM: There was incredible hot search, a lot of jobs in the industry at that time. It's humorous to think about these numbers. I was making \$9,200 a year at Western Electric, which I thought was an incredible salary. I was offered \$14,000 a year to go to work for Peat Marwick Mitchell. This was 1966 in New York City. I was wealthy overnight making \$14,000 a year. Then I got an expense account. I would get \$9.00 a day. So I was making a killing because I could live on \$3.00 a day. It was incredible!

DSM: Where did you live when you went to work for Peat Marwick Mitchell?

EM: That was in Cedar Grove, New Jersey, which was just over the hill from Upper Montclair. It was an exciting time in my life because Peat Marwick at that time was at 70 Pine Street, right down the Wall Street area. I had a 1929 Model A Ford Sedan that I would drive to the train station. I would take the Erie Lackawanna train to Hoboken, get on the ferry boat and take a ferry boat across New York Harbor to the Barkley Street Station, which at that time would be about three blocks east of the World Trade Center. Three blocks east of the World Trade Center was where New York Harbor ended. Then I would walk a mile to the Peat Marwick headquarters at 70 Pine Street. For a little kid from Nebraska, this was an "ooo-wow" experience. Going to work and coming home every day - every day was an "ooo-wow" experience. It's pretty cool.

DSM: And I guess Carole thought she had died and gone to heaven with you making that kind of money. Was she still working?

EM: Carole taught at Cedar Grove High School. Then she went on to teach at West Essex High School. So when we hear *The Sopranos* talked about today, they live in West Essex. She taught at Hasbrook Heights and so on. We're watching *The Sopranos* and it all comes back. "We've been there! We've done that!" Great experience.

DSM: How long did you work for Peat Marwick because I know you went on to Alexander Grant?

EM: I started with Western Electric in mid-1964. I went with Peat Marwick in mid-1966. I was transferred by Peat Marwick from New York City to Denver, Colorado in 1968. I was with them for two more years here, and I went with Alexander Grant/Grant Thornton in 1970. Was there seven years before we started J.D. Edwards.

DSM: That's when people were making a big difference in your life, while you're at Grant?

EM: As I look back, and I'm sure in your career you've experienced the same thing; every once in a while comes along a person who genuinely has an impact in your life. At Western Electric it was a guy named Fred Wilser, who was just a really smart computer guy. He really taught me how to think about computers.

At Peat Marwick there are few different ones. Also some of the clients I met along the way. Harold Whitcon was the owner of a California company called Haviland Whitcon. He just made an indelible impression on my life about integrity. One of my best friends to this day, Art Schingler, was with me at Peat Marwick Mitchell. When you go back over your own personal career, you can probably find four or five, six people that really altered the way you think in your career. I certainly had those too.

DSM: Given all the things that is going on in the business world today, and I think that's it particularly relevant, and that's your own sense of honor. Where do you think it comes from? There are people who way that integrity and honor are based on your religious upbringing, or you get it from people you meet and admire. Where does your own sense of integrity come from?

EM: I will be brutally honest here. I would say that I didn't have integrity as a young person and I won't go into all the reasons, but I hung around people that would cheat on their insurance claims and things like that. In my business career I ran into a couple people - interestingly enough both of them Jewish - that taught me about integrity and the power of a handshake and honoring your word. Another fellow, Art Schingler whom I mentioned, who's a Christian, had impeccably high integrity. And I was probably thirty, thirty-two years old before I really had a clue what integrity was all about. Up until then I would have had a high school concept of integrity that you don't talk behind your friends' back and things like that. But in my early thirties it became profound to a point where I can't lie about anything. If I were to try to lie, I would fail at it. It's just not in my chemistry.

That's been an incredible godsend in my business career. I think highly of J.D. Edwards for a lot of different reasons, but one of them was integrity. Our customers knew they could trust us, and they knew if we said we'd do something, we'd do it. Even if it wasn't in the contract, if we would say we would do it, we would do it. Interestingly enough, the integrity came through examples from other people. It wasn't any religious education. It wasn't any moral commitment. It was just the examples of a few great men.

DSM: I was going to ask you if there was a particular story that is sort of a "ah ha" point about this.

EM: Oh, there's probably three or four of those, but Art Schingler my great friend, and Harold Whitcon from Haviland Whitcon. Also someone who is still a good friend today, Sam Gary. He has an oil company in Denver, Colorado. Gary Williams is just one of these pinnacles in my life of great people of integrity.

DSM: When did you first meet Jack Thompson and Dan Gregory?

EM: That was at Grant Thornton. Jack Thompson was a great computer whiz kid working on an IBM 1130 in Billings, Montana, and he was making \$630 a month. We gave him a big raise to \$750 a month and brought him from Billings to Denver. Jack and I worked closely together at Great Western Life Insurance Company for three or four years until we started J.D. Edwards.

Dan Gregory was a college MBA student from Denver University. I hired him out of the MBA program at Denver University. He is an absolutely brilliant young man. He is the best guy in the world in a firefight.

DSM: So you hired Dan.

EM: At Alexander Grant/Grant Thornton.

DSM: Were there some projects at Alexander Grant Thornton that the three of you that were formative?

EM: It's interesting because that's where the concept of culture, which became so important to me, came into play. I realized the culture of a public accounting firm is the antithesis of developing software. The idea of spending time on something that you're not getting paid for - software development - they just could not stomach that. We had this one failure at Haviland Whitcon Company in San Jose, California that kind of brought everything to a head. I left and started J.D. Edwards and brought Dan and Jack Thompson with me.

DSM: That was going to be my next question. When do you start thinking about starting your own company? How would you describe that experience?

EM: First of all I never thought of myself as an entrepreneur. And to this day I do not think of myself as an entrepreneur. I never thought of myself as the "number one guy" anywhere. I always thought I'd make a good "number two guy."

About a year before I left Grant Thornton, I started discussing this with my wife. "I think it's time for me to start my own company. Look, I don't really fit in here. The culture isn't right. I want to get done some things that can't be done as context. I'd like to start my own company." My wife and I talked about it for over a year. Then things fell into place and I came home one day and said, "It's time to start."

DSM: Did you have kids then?

EM: It was incredible. We had just built what we thought was the biggest home in the world. It was 3900 square feet. We paid \$143,000 for it.

DSM: And a mortgage for thirty years?

EM: Oh, a mortgage for \$100,000. It was the most money in the whole world. We lived in that for nine months and had three children. I came home and said that we were going to start a company called J.D. Edwards. Carole came up with the name - Jack, Dan and Ed.

We were considering naming it Jack Daniels & Co., but we thought J.D. Edwards sounded better than Jack Daniels. Interestingly enough, my salary at that time was \$44,000, which we thought was a lot of money. But in order to get the \$8,000 loan from the bank to start the company, the bank required me to cut my salary back to \$36,000 a year. So I went for a whole year living on \$36,000 in 1977. We got rid of all the lessons for the children. There were no piano lessons, no skiing lessons, no swimming lessons, nothing, and we started the company.

DSM: There were just the three of you when you started out? Who was your first big client? Tell that story. There's always a first client story.

EM: We had a couple start-up clients. One was McCoy Sales in Denver, Colorado. It was probably a \$4-million wholesale distribution company. We got a contract from Cincinnati Milacron Company, the makers of machine tools. But at that time they were making computers, the same computers that they were using to run their machine tools. We told them, "We can write software to solve the commercial problem," and "We Cincinnati Milacron, are going to be big in the software business. So we got a contract for \$75,000 to develop a wholesale distribution system for a \$4 million distribution company. At the same time, we got a contract with the Colorado Highway Department to develop a governmental accounting, construction cost accounting system. That was a \$50,000 contract, a really big deal.

DSM: So those were multi-thousand dollar contracts and there were just the three of you?

EM: I was just the three of us. I think I was making \$50,000 a year after that first year, so life was really good. My billing rate was \$50 an hour. I thought, "Wow, this is really cool here." In the beginning the computer was in use during the day running businesses. So we'd have to come in at 5:00 when the business shut down to use the computer until midnight to develop the software. Then we would come back at 8:00 in the morning to see if it was working.

DSM: We're going to talk about eh world of high tech in 1977, the year you started J.D. Edwards. Describe the competitive environment and the kinds of things you were doing—just the day-to-day work to keep the business going.

EM: That was in the early days. It was 1977 when we started the business. We had the big IBM mainframes that were huge monsters. You had to surround them with bureaucracy. We had just begun to get into the era of small computers, the IBM System 3, the System 3 Model 6 and the Model 15 and that sort of thing. Hewlett Packard was pretty much a failure up until that point in time with the HP 1000. Then they came out with the HP 3000.

We were doing our highway department job in Cobol on an HP 3000, and our McCoy on a Cincinnati Milacron computer, a \$40,000 computer. We had a third job at Franklin Supply on an IBM System 3 Model 15D, which was a big clunky machine. We were still five to seven years away from the age of personal computers. Nobody had ever heard of a personal computer. There were such things like the Osborn, stuff like that but they were just contraptions; they weren't real computers.

DSM: Among the three of you, were there divisions of responsibilities?

EM: I was the guy who went to the office supply company and bought pencils, paper and supplies. I was also the guy involved in selling to businesses and managing projects. Jack Thompson was the master key. He could figure anything out. Dan Gregory was a gad fly genius who was the best fellow in the world in a firefight. Anytime you're in trouble, you grab Dan Gregory and he'd get you out of trouble.

DSM: Is there a particularly illustrative example—you guys in trouble and Dan Gregory is there?

EM: We were in trouble so many times it's hard to single out any particular story. I remember our first international job that we were so proud of was Cameroon, Africa. It was Shell Oil and Dan Gregory flew all the way to Cameroon, Africa to put in our first international, multi-national, multi-transcurrency system. It was a brilliant piece of work.

DSM: The story of the evolution of your software enterprise resource planning is sort of history of resource planning in software. You were in and amongst some pretty tough competition. Can you describe the guys you were competing against and some of the transition from OneWorld.

EM: It is interesting how our competitors evolved over the years. The competitors were all segmented based upon computer hardware. SAP we wouldn't hear of for another twelve years yet, and they were in Germany on IBM mid-frame computers. Oracle probably didn't exist. It would be another five years before we'd ever heard the word Microsoft. We were in a niche, which was in the IBM low end and the Hewlett Packard low end. After awhile IBM came out with a System 34, which was really a sweetheart of a computer. We built a whole business around the IBM System 34. That led on to the System 36 and the System 38.

So we were in that whole niche, protected from Oracle and SAP and PeopleSoft because they didn't work on those particular computers. We built up our whole business competing with a whole different set of competitors which one-by-one died along the way for a lack of vision, or lack of foresight, or lack of knowledge or ability or capital, whatever.

Probably our most profound decision was selecting the IBM System 38 as our lead computer. It had to be in the year 1980 or 1981. We put our whole business behind the IBM System 38, which went on to become the IBM AS400. You can imagine that everything blossomed from then.

What was our greatest strength? It turned out that later to be our greatest weakness - isn't that always true - that your greatest strength becomes your greatest weakness.

DSM: Four years into the company, there's this huge, huge risk in 1981, making this decision. Tell me about the rise of Oracle, SAP, etc.

EM: It's interesting. As I look back on that time in the early 1980s, the big guys were McCormick and Dodge, Dunn Bradstreet, or MSA - Management of Sciences of America. They were all dealing with Fortune 500 companies, putting in really very specific general ledger system in an accounts payable system, a fixed assets system, and a payroll system. They were really non-integrated systems. And as I look back on it, the reason SAP was successful is because they have the same blessing that J.D. Edwards had, and that is we were working in small companies.

In small companies you cannot think in a compartmentalized manner. You can't just think about the payroll. You have to think how the payroll fits into the job cost accounting. You can't just think about the general ledger; you have to think about how the accounts payable feeds into the general ledger. Whereas in a Fortune 500 global 1000 company, everything is compartmentalized and the people that are working on the general ledger don't understand accounts payable, and they don't understand fixed assets. There are these walls built around them.

So MSA, McCormick-Dodge, Dunn Bradstreet had really huge company concepts that were very specialized and non-integrated. In Europe, a typical company is one-third the size of an American company. There are really very few large companies in Europe, and that was especially true at that time, in the pre-1990 era before we had the Pan-European community. So everything SAP was working on was moderate-sized companies. They developed integrated systems because you can't go into a moderate-sized company and just put in a payroll. You have to put in a payroll and job cost, general ledger, inventory, fixed assets and the whole thing. SAP had the same advantage that J.D. Edwards had because we working on smaller companies, we were forced to see the whole broad picture.

Interestingly enough, J.D. Edwards had chosen its computer well, the AS400. SAP had chosen its computer poorly—the IBM 4300 series of computers. They ran out of gas on the IBM 4300 series and they had to make the next move to Unix way before J.D. Edwards. We were late getting to Unix and open systems because we had such a sweet computer, the AS400.

It is interesting to look at the circumstance of timing. Here's SAP who had the advantage of working with small and intermediate-sized companies and they were forced - because of the failure of the IBM 4300 series of computers - to leap to the next step, Unix, when J.D. Edwards didn't have to leap. So we had several hot years there while they were making a transition. And we, J.D. Edwards, ended up out-of-step with the world because we're still on the AS400 and we had to make that brutal transition. So it's interesting to go back and study now. You can see why MSA failed and why McCormick Dodge failed, and that sort of thing.

DSM: As you were talking there's also the guise from the sales point of view in that when you're working with moderate sized companies down, the decision making process necessary to make changes in all those departments is making...

EM: That was kind of a wash because the big companies when they did finally make a decision, would make a huge decision. But we at J.D. Edwards went into a hundreds of Fortune 500 companies at a departmental level. And we would do all the manufacturing systems for Smith Kline Beecham throughout the world, or all the financial systems Johnson & Johnson throughout the world. We were operating on a department level where as MSA and McCormick Dodge, they were selling in the glass house divisions of the headquarters.

DSM: Talk about the decision in terms of platform-end software in 1981. My research showed—I have disputed dates about your codification of your work on corporate culture. Did that coincide with 1981 or was it later? I have two dates—1981 and 1983 when you decided to...

EM: I can't remember the specific dates, but that was a profound thing. We decided early on - and I tell people that I was going through an episode of mid-life crisis. I was thinking about what was important to me. The thing that was important was number one, peace and tranquility. I felt that in my business career the most important thing was to be peaceful and enjoy life. If you're going to go to work and spend ten or twelve hours for the rest of your life, and if it's not peaceful and tranquil and enjoyable, it's going to be a miserable difficult thing. So I made that real important. Second, I wanted to accomplish something. Accomplishment was important. And last was financial reward. Many people would reverse those priorities and financial reward would be so important to them, that they'd be miserable and put up with a lack of peace and tranquility in order to achieve the financial reward.

But I wanted to take a long-term view of this, so we developed—as a result of my going through mid-life crisis, this view of peace and tranquility and accomplishment and financial reward. We started jotting down the things that constituted our culture. What was a good culture, and what was a bad culture?

We developed thirty or forty little principles or rules that became this corporate culture document. It was profoundly effective.

In 1980 you never heard anybody talk about corporate culture. That word didn't come into vogue until the 1990s or so on. I came to the conclusion that corporate cultures are profoundly important - that ninety-five percent of the time managers don't run businesses - cultures run business. Ninety-five percent of the time the managers are off doing something else and nobody knows what they're doing. During the time that they're gone the corporate cultures runs the business.

We developed this profoundly beautifully simple corporate culture, one part of which was integrity - be honest. You walk into a meeting, and if you screw something up, you simply tell everybody you screwed up. You be honest and aboveboard about it. There were many other aspects to that culture, but we developed a culture that was very ingratiating. People really loved it. They came to work because of J.D. Edwards, or they thought we were a bunch of kooks and they didn't come to work, because they thought we were crazy people. It was a two-edged sword. I think we had an incredible work environment.

DSM: Now were you literally—this is my historian's lust for artifacts—did you actually just jot these things down in notebooks?

EM: Yes on a yellow sheet of paper. One piece is about the integrity and another is about the office politics; and another was about hidden agendas. We couldn't have hidden agendas, and I rewrote it.

DSM: Did you stick them in a file and take them out every once in a while?

EM: Yes then we started drafting it. I'm going through the same thing right now. For the last four or five years, I've been writing a letter to my grandchildren all about all the things I want my grandchildren to know about life. I've had it substantially completed for a couple of years now, but when they get to be twelve years old, I'm going to give them a letter from their grandfather that says, "Here's some lessons in life."

The Corporate Culture Document evolved the same way and it's never really done because you live through some experience and you say for example, "What was the "page 12 violation?" Sarcasm. We had a fellow come along in the mid-1990s that outlawed sarcasm at J.D. Edwards. I never thought of sarcasm as a cultural problem, but his point was that sarcasm is really kind of funny. It always has a bit of truth to it and that kind of hurts. People that use sarcasm are being defensive and standoffish in penetrating and hurting you, and let's just disallow sarcasm.

Well we first introduced that in our New York office and people cold not carry on a conversation. They did not know how to not to be sarcastic. The beauty was the culture kept evolving and evolving in little ways like that, but it became codified as a "page 12 violation." If you would make a sarcastic statement, someone would say, "Beep. Page 12," and you'd know not to be sarcastic. What's interesting when I look back on my career, creating that corporate culture was one of the most profound things I ever did. Normally when you do profound things, you do it out of boldness and vision and foresight. This thing just kind of happened as a sideshow and it turned out to be profound. It isn't very often that something profound happens without a great deal of intent behind it.

DSM: Who was the "employee number 4?"

EM: "Employee number 4" was a fellow named Mike Keever and Idela was "5". She sometimes claims to be "4", but she was really "number 5" and Mike Keever was the fourth.

DSM: Hiring new people, that's a big step because you're not only responsible for yourself, but for the new folks you're hiring. What was it that led you to say, "OK, we're ready to begin growing as a business?" Was it the closing of those three contracts?

EM: It was at the Franklin Supply thing. Mike Keever was working there as a contract programmer with another software company that went out of business many years ago. We thought he was really good and we hired him away.

The next fellow we hired was Bo Beauvard probably employee number six. We paid him a whopping \$12,300 a year! Isn't it funny how I can remember these numbers now? What it cost to build this house now is a mystery!

DSM: Those were big, conscious responsibilities. It's like having children.

EM: Here's a tidbit. I can recall the decision to get a copy machine. It was a \$112 a month and I thought, "I don't know if we can afford \$112 a month yet." I had a secretary at that time that we were paying \$750 a month, too - and we went to one of our clients, the Douglas County Government. The County Clerk there was making \$750 a month, and I thought that's a really low. How could anyone work for that? And I got back to the office and my secretary had quit because she had an offer for \$810 a month. The copy machine, the secretary's salary – these were big decisions at that time. I couldn't meet that offer.

DSM: The impression I get is that you always been, even as you've risen and as the company's grown and become departmentalized, you've really always been "handson." And there's a story that I came across in 1996, you actually flying down to Texas and spending an all-nighter, fixing a problem for a client. Do you remember what that story was all about? And if you would tell it, I would love to get it on tape.

EM: There were two of those all-nighters. One was in Charlotte, North Carolina, spending an all-nighter there at a construction company. The one in Texas was Blockbuster Video. We had something that wasn't working there and the client called and was madder than hell. I flew down there and lo and behold, we had one of these all-nighters deals going and spent several nights working on the computer to get it up and running. It turned out to be an incredible success. It was a brand new automated warehouse system and it was the sexiest thing in the whole world. It would take goods off of a truck and it would put them away in blind storage locations where you only knew by the coordinates of the location where it was. Then it would go back the next day and retrieve things and get them arranged in the right order. Human beings had no idea where things were in the warehouse. It was just incredibly sexy and powerful. The whole business was ready to fall apart and they were running three days behind, or whatever, which was a catastrophe to be running three days behind, much less three hours behind. And I did an all-nighter.

DSM: Talk about some of the big successes. What were the things that were the biggest crises that you've overcome? We're talking about crisis and things that were really testing for you as the company grew.

EM: We were very fortunate. It was mostly up and to the right and aggregate. Then it was very much up and to the right. I believe we went twenty-three years without ever losing money in a fiscal year and we were ever growing. Our compound growth rate was fifty-one, fifty-two percent a year.

But there were little vignettes along the way of severe crisis. I can recall one Friday in 1980 where we simply didn't have enough money to make the Friday afternoon payroll. I was sitting at my desk, my legs were quivering - actually quivering - and later on that day, in came a check for \$70,000 and we could meet the payroll. I recall that around 1983 I went all the way around the world and visited several clients in South Africa and Australia and South America, and I got home and found out that we had lost \$630,000. I was just unbelievable that we could lose \$630,000 in still be in business. It was a real trauma.

During the period of time when IBM had announced the AS400, we were a big System 38 software company, but everyone stopped buying System 38s. There was a six or nine month period of time where we had no sales because everybody was waiting for the AS400. It was a very difficult time to get through and we almost lost faith. Sure enough out comes the AS400 and for the next five or seven years it was the most successful computer the world had ever seen. It was incredibly successful and we boomed right along with that. So there were a lot of real highs. Interestingly enough, as a privately held company, when there were lows nobody ever knew about it except us. Now as a publicly held company, you hit any kind of bump in the road at all, everybody knows about it. We definitely had to become a public company.

DSM: Tell me about that decision to go public.

EM: We came to the conclusion that if we didn't become a public company, if we didn't have a publicly traded stock, nobody could ever retire or die. That wouldn't be so bad, but after in business for twenty-five years, we had to create some liquidity. So we were forced into being a publicly held company. Our competitors were forcing us into that because they had stronger, more powerful images, and they get all of the secondary marketing effects of being a publicly held company. It was the right thing to do and we probably should have done it five years earlier. I don't have any real regrets about that. We've had a rough time on Wall Street, but for the most part it's been self-inflicted. We did our own dumb things and that's caused us to pay some prices.

DSM: We talked about a couple of external things that have big impact on your life; World War II and your Dad. We've talked about Vietnam, Kennedy. During the era of the great dot-com bubble, a lot of people have described the mania during that period, how it effected the companies in terms of keeping people, getting people. What was it like at J.D. Edwards during the height of that dot-com bubble?

EM: It was contemplative panic. I knew early on that the dot-com mania was a delusion. We would openly discuss in the board meetings how long is this delusion going to last. The whole telecom industry thing was a delusion. It had to run out gas. I had members of the board say, "Ed, you're nuts. You don't get it. We have an infinite need for telecommunications capacity and these dot-com guys are going to run the world."

One of the most profound books I've read in my life was written in 1825 by a Brit named Charles McKay. The title is *Extraordinary Popular Delusions and the Madness of Crowds*. Charles McKay goes back over the history of the world and describes big financial delusions like "tulip mania" in Holland, or alchemy in the Middle Ages, turning lead into gold - or relics of the true cross, or the South Sea scandals, or whatever. That was a big lesson for me, because I had built my whole business career, thinking common sense was all-powerful. What I learned from *Extraordinary Popular Delusions* is that there are limits to common sense. When a delusion takes over, common sense is temporarily abandoned.

Now we have just been through - and this is important when you think about this - a seven- year delusion about client server. Client server was a terribly flawed concept from the very beginning. But we all convinced ourselves that if you didn't have client server, you were obsolete and you didn't know what you were talking about. Yet intellectually, it was a flawed concept from the very beginning. That delusion lasted for seven years.

Then we had a little bit of a pause, followed by eighteen months to twenty-four months of the dot-com mania delusion. Both of those things are delusions that occurred within our industry in the last ten years and when you're in a delusion, you're in a temporary period where you abandon common sense. If you want to feed your family, you have to learn how to sell around that. So I was very confident that this thing would come to an end. I thought it would come to an end rather quickly. But believe me, I was a voice in the wilderness on dot-com mania.

I knew before we went public that it was time for me to retire and that we needed another CEO. At the time I didn't fully understand what was going on, but I had medical problems. I have a condition called sleep apnea. Through a series of circumstances I went to a hospital one night and slept the night in a hospital with a bunch of monitors on me. The doctor got to me and said, "Ed, I've seen worse." He said, "You will fall asleep and wake up fifty-five times an hour. So you fall asleep and wake up with a snort fifty-five times an hour." The result was I was going to work everyday and come two o'clock in the afternoon I was sagging and beat and tired and all that kind of stuff. I knew more the symptoms of the problem, what I felt like during the day, and that's when I said, "It's time for a new CEO here. This guy's run out of gas." And it's only in the last year, last nine months that I've really whipped this problem. I now have a machine. I wear a mask over my nose when I sleep at night and I sleep like a baby. I will have many nights where I'll sleep nine or ten hours. And it's like, "Wow! This is the coolest thing in the whole world!"

DSM: Given your work ethic, you really must have been kicking yourself.

EM: I was really burning the candle at both ends. So my point is, before we went public, my first instructions to the board of directors that we formed were, "Let's find a replacement for me." And I retired.

DSM: And you hired Doug Massingill. Could you tell me about coming back?

EM: Dot-com mania hadn't really kicked in before I left. It was really in full force when I came back. There was a whole psyche that we're out to lunch, that we don't understand dot-com mania. The whole world's been taken over by dot-com whatever and we didn't understand what our whole strengths were and what we could really do for clients.

Doug Massingill had come in at a very peculiar time under some very peculiar circumstances. It didn't work out. I came back and I think we rather quickly got a sense of direction and what it was we had to do technically. But we had built up some garbage within our company, some internal anti-cultures that had to be taken care of. We were in a period of repair and retrofit probably a year before the market collapsed. And our problems were all self-inflicted. We didn't need to blame the stock market, or dot-com mania. We had a bunch of self-inflicted internal problems that had to be taken care of. We dealt with those very decisively.

One of the things you've seen with J.D. Edwards is that it had several quarters of improving profit performance in really bad circumstances. We were so screwed-up that all we had to do was fix our own screw-ups and we'd start looking good. That's what you have seen over the last five to ten quarters at J.D. Edwards is us cleaning up our own housework and getting back to running like a good disciplined company. I think they're doing very good at it.

DSM: Also in the middle of that period, not only did we have the collapse of dot-com mania of the 21<sup>st</sup> century, but also the events of September 11 which some are saying truly changed the world around. Were you personally or corporately touched by those events on September 11<sup>th</sup>?

EM: Yes, I was at the company when that happened. I was the CEO another three or four months after that until we brought in Bob Dukowsky. We certainly knew that it was going to be profound and it did shut things down for a while.

DSM: Did you have colleagues in New York or Washington?

EM: No, we were very fortunate, no one was lost.

DSM: Now you are in your second retirement. I'd love to talk about your family if we could—your own family. If you could, would you tell us about your kids and your grandkids?

EM: I'm exceedingly fortunate in that regard. One of the tragic things that happens to families is that the kids go off to college and they never come back. Carole and I came to the conclusion that we needed to bribe our own children. We needed to create an environment that was so good that they had to come back. So we have bought this ranch and each of our three children have homes here on the ranch. My son Kevin is next door. My daughter is two miles down at the bottom of the ranch. My son Keith is in the old house that was built in 1900 and it is a beautiful house. It's been remodeled, upgraded and so on. We're all here in Colorado; we live within a third of a mile of each other and Denver.

Interestingly enough, we're two miles apart up here at the ranch. I have six grandchildren. My daughter is a homemaker, a mother. My son Kevin is in emergency medicine of all things, and he's runs Denver General Hospital. He's a top doctor there and just loves emergency medicine. My son Keith is between jobs. He's thirty years old and changing his career. We're probably both going to go study to be finish carpenters. I've always wanted to be a finish carpenter and I think that's my next career.

DSM: Do they all gather here at Christmas?

EM: We were all here last week at Thanksgiving, and we'll all be here a lot over the Christmas holidays. We take off on snowmobiles and race around the hills, shoot coyotes, go skiing, ride horses and sleighs, and live the good life.

DSM: You're also very active in education. You've done some wonderful tings over time. You've also been very supportive of this program. Would you talk about what you've done at the University of Nebraska, the things you've done to honor Carole and her mother?

EM: The University of Nebraska; it's a tear-jerk thing for us, a heartthrob. But they came to me and asked me to give money to Tom and Nancy Osborn Library. I absolutely love Tom Osborn. He's a good friend and a great fly fisherman. I said, "But I wouldn't give you a plug nickel for a library! That's obsolete. It's a technically arcane thing. Why would a computer guy waste a nickel on a library? If you'll come to me with a program to have the greatest computer sciences program in America, that's something I would be interested in."

The Chairman of the University at that time, James Moeser who's since gone on to the University of North Carolina, didn't understand what I was talking about. I said, "Dr. Moeser, what was your major?" And he said, "Music." And I said, "If I were to ask you to build the Julliard School of Music at Nebraska, would you know what to do?" He said, "Absolutely, I'd know what to do." And I said, "There's someone around that knows how to do that for computer sciences."

We put together the J.D. Edwards program at the University of Nebraska that's really got a bunch of innovative concepts in it. It's partially an English College environment with integrated living and teaching facilities. It was named after my mother-in-law, Esther Kauffman. We've created this myth that Esther Kauffman was a great computer jock of the nineteenth century. It's off and running and they're just doing incredibly well. They've got admission requirements that match Harvard or Stanford in terms of the quality of the students coming in. This will be the first year that some of the students will graduate and it's been a boom to the psyche of the state of Nebraska to have such a powerful computer sciences program right there in Lincoln.

DSM: You became a teacher in spite of yourself. Some questions that I've asked nearly everyone I've interviewed that I'd like to ask you. And one is about innovation. Over the course of your career you've worked with some of the brightest, most innovative people in the world. From your own experience, where do you think really great innovation comes from? What's the source?

EM: To me it's from feeling a business need and a business opportunity. One of the things we at J.D. Edwards did well was to get into Europe when Europe was going through the transition to the Pan-European economy. Until 1990 or so, Europe was thirteen or fifteen different independent countries with their own currencies, and their own economies, and their own borders, and their own rules and regulations. Belgium had to have their own accounting department. Spain had to have a personnel department. They had this massive bureaucracy and overhead and an inability to communicate between countries and use each other's software. We at J.D. Edwards were real leaders in becoming Pan-Europeans.

I can recall one year we put our computer center in Brussels, Belgium. At one time we would be entering transactions from Italy and Germany and France and Spain and England into one computer in Belgium. That was just absolutely unheard of back then.

And I recall the accountants complaining one time that the email was running so slowly. We had one small computer in Brussels, Belgium, and the accountant said, "Mr. McVaney, why is it that the email runs fast, but the general ledger runs slow?" And I said, "That's because the email is run on a big computer in Denver and it's in the middle of the night there and nobody is using that computer. Whereas the general ledger is on a small computer." And he says, "Couldn't we do our general ledger on the Denver machine?" And we threw away that computer in Belgium and went right to the U.S. So now in Denver, Colorado we've got people entering Japanese yen and Singapore dollars and Australia and all over South America coming into a single computer. That was seven or eight years ahead of its time. What do they say? "Necessity is the mother of invention."

I can recall going to one of our clients, Lexmark, the printer company in Europe, and they had thirteen independent computers in thirteen countries in Europe. We were just then getting into Pan-European manufacturing and distribution. We were real leaders in that sort of thing and along came Johnson & Johnson who said, "We want to enter and Germany and have it print out a packing slip in Scotland." We could do that kind of thing. So I think the innovation comes from great minds meeting great problems and necessity being the mother of invention. We were just gifted in being in the right time in the right place on so many different things. Unfortunately, if we had never had the AS400, if we had been forced to go to Unix five or seven years earlier, we would have ended up being SAP. But that's all circumstance.

DSM: The story you told about European integration reminds me of a twist on another theme. It may be that you life and mine at this point are being book-ended by wars. When you and I were born, Europeans who today trust their economic data to computers were literally at war. When we started this program in 1989, the Berlin Wall had come down; the Soviet Union had collapsed. I think the opportunity at least in my own prejudiced view; it's like at the end of the First World War when you really had an opportunity to look for a brave new world in the best sense of the term. And now we stand on the edge of possibly another great and maybe world war—religious-based. And I think students three hundred years from now would not forgive me if I didn't ask you: given both your religious background, your sense of history and the work you've done integrating a society that was actually at war when you were born, what do you think of the state of the world and the future of this technology? Is this technology really going to save the world in the end, or we on the edge of...?

EM: The technology is allowing us to have much more sterile wars, where our guys don't get hurt. That's phenomenal when you think of it - that we can have a profoundly important war where our guys don't get killed. It's so different than World War I and World War II or Vietnam, and things like that.

This whole Islam fanatic terrorist thing has caught us all by surprise. We're all so naïve about it. I've been reading a great deal about this recently and I've come to the conclusion that we're into a fifty or seventy, or even a hundred years war.

This Iraq thing, I think is a terribly important first step because we're going to go out and get the biggest, baddest guy on the block right off the bat. That's going to change the playing field very dramatically. However I do think we'll be hearing stories for the next twenty-five or thirty years about individual bombs blowing up Mercedes racing across the desert. It's almost like a huge version of fighting the Mafia. I can now see that there's an element of Islam that's extremely disgusting and we can't walk away from it. We can't not get involved in the fight. It's too easy to be intrusive; stinger missiles and hijacking airplanes. So there's no way to back away from this thing and be a peaceful person. Boy, how did we get into this subject? This is pretty heavy!

DSM: You're the first person I've asked that question to. You reminded me of it when you were talking about Europeans integrating. The other thing that's true of these smaller countries is that, being how their populations are incredibly young.

EM: And impressionable. And they are certainly the worst led people in history of civilization. They have incredible poor leadership. Preaching bitterness and hatred.

DSM: Do you the think the tools in telecommunication over time, are going to be helpful in that regard, in bringing people together?

EM: I don't think there's any question about it. When you think of it we have a massively superior economy. We have a massively superior culture. Our culture breeds freedom and creativity and reaches out all over the world. We have, I believe, an unquestionably superior religion and set of ethical values. The outcome of this thing is clear as can be, and it's temporarily horrifying. But we will see after this Iraq thing, a prolonged period of one bomb at a time, and pretty soon there won't be a whole lot of Klu Klux Klansman in Islam. And I should say pretty soon - it might be twenty-five or fifty years. But I would not want to be an Islamic terrorist

DSM: It took fifty years to end World War II, really.

EM: We're running off into our history tangent now.

DSM: Another question is about definitions. We've been talking about the definitions of innovation. Another is the definition of success. How would Ed McVaney define success?

EM: Who was it, Ralph Waldo Emerson said, "To laugh often and much." There's a whole poem about that, but I have a very low-key definition of success. Being happy, peaceful, content with life. What's interesting is, I told you those three things—peace and tranquility, accomplishment and financial reward—I'm somewhat astounded that I achieved the third, because it wasn't terribly important to me.

DSM: Next to the last question is the dinner question. One of the things we've proposed to do in the past is to gather some of the leaders of this technology revolution around Thomas Jefferson's table at Monticello, to meet at that old revolutionary's house and talk about the implications of this revolution. If you could put together a group of either your peers in this industry or other individuals that you think have some profound insight on technology or this society, who would you invite?

EM: Certainly Bill Gates. Hasso Plattner. Interestingly, it wouldn't be Charles Wang. I think he has a perfectly legitimate business model, but it's not particularly impressive as a software model. I'm not a fan of Larry Ellison, so I probably wouldn't want to be in the room with him. Ted Turner - you know I was invited to have dinner with Ted Turner last night, and I wouldn't go! I love Mike Maples. He was on our board and is one of the smartest men I know in this industry.

DSM: How about in the political world? Are there folks that you would ask?

EM: The most profound person in my political life has been Milton Freedman. Milton Freedman is just an awesome dude and he's shaped virtually almost all of my political thinking. George Bush, I love.

DSM: The younger President?

EM: More the younger than the elder - much more the younger. I'm a real fan of his.

Have you had the chance to meet him? He comes across so dorky on television. He does not across well. And when you meet him in person, it's like "Wow." He just brings you in and captivates you. He's just pretty neat in person.

DSM: Would it be a polite question to ask you when you met him the first time?

EM: I met him in the Governor's Mansion in Austin. A group of us from Denver, ten guys, flew down to meet him and have lunch with him and as a matter of fact, he used our software in 1978 or 1979 when it was in his oil company. That was J.D. Edwards software. Hopefully we weren't the thing that put him down the tubes!

DSM: Ever talked to him about that?

EM: No, I never talked to him about that, though I'm sure he would remember it because that was early in his career. Interestingly enough, at the Texas Governor's Mansion, Condoleezza Rice was there, also Karl Rove and same old crew.

DSM: That's a group that will have a profound impact on the world.

EM: I hope so. You know, most people that have had successes like he's had in this last election follow it by big failures. I'm hoping he can rearrange history and I think he will.

DSM: I have one more really serious question to ask, but I would be remiss. I gather that in 1992, you discovered fly-fishing?

EM: Yes, this is interesting, because if you've ever met an alcoholic, you know they remember the day that they sobered up. I remember the day that I took up fly-fishing. It was that kind of profound experience. It was August 5 of 1992. The movie, *A River Runs Through it* had come out six months before, and a high school friend of mine from Great Falls, Montana said, "Ed, come on up and go fishing." I went up there with my wife. They had a little mountain cabin. My wife fell in love with the mountain cabin. I fell in love with fly-fishing and in a sense it ruined my business career because I used to work seven days a week and I cut back to five days a week. I was just overpowered with the beauty of fly-fishing. I absolutely love it.

Carole came up here and bought a home down at the bottom of the hill, which is a beautiful mountain home. In our first spring we went out for a walk and walked up to the top of the hill and looked down on this ranch. I said to Carole, "Carole, that's the most beautiful thing I've seen in the world. I'm going to own that ranch someday." One thing has led to another and fly-fishing changed my life. I hate to say this, but I think J.D. Edwards would be a better company if I had would never have discovered fly-fishing, because I would be working seven days and I'd of done better.

Peter Drucker said, "A man needs to change his lifetime passions once every five years." I've had several passions in life. I had antique cars, and I went through the fly-fishing one. I would say that I'm on the latter phases of that passion.

I still fly fish a lot. I've fly-fished once this week and caught twenty or thirty fish. My passion now is probably ranching, architecture and western art and things like that. But I thought that was a pretty profound statement that "a man needs to change his lifetime passion once every five years."

DSM: My last question is the hardest and we've done our best over the past fifteen years to try to interview who really tried to make a difference in this revolution. This is the "how would like to be remembered" question. We are all convinced that in three hundred years people are going to look back on the period and be proud of the work that was done here because it's changed the world—medicine, science, the arts. It may be minor; it may be nothing. If your grandchildren's grandchildren look back on this time, this place, this industry and Ed McVaney—you were in a company in the early days of that technology. How would you like to be remembered?

EM: I think probably, "He did it with integrity. He was the fulfillment of the American Dream. He was able to really enrich the lives of thousands of people." That's just a wonderful feeling, to know that is just a wonderful feeling. To know that so many people have such good jobs because of what you're able to do. It's so opposite from what the world thinks of businesses, as though we're some cutthroat ruthless place. Just the opposite is true. We make deals on a handshake. We honor our word. Money was important but it was truly secondary. Making a client happy was number one, and that's why you fly to Dallas and do overnighters trying to get the software to run. Money follows that. It's not a primary objective. The thing I probably feel best about is the culture we built and the incredible amount of great jobs that we created and happy customers around the world.

DSM: That's the end of my questions. If there are any questions I should of asked, I'm sure I'll remember them later. Are there any that you can think of right now that I should ask you?

EM: A few went in and out my mind but I think we've covered it. There are a couple gems in here. I think we really ought to come back to that whole idea of popular delusions - extraordinary popular delusions - and client server and that whole dot-com mania being a delusion. I doubt that many people in our industry would look at that that way. It was an incredible distraction.

DSM: Talk a little bit about that—what was going on in the dot-com world.

EM: Well, what was going on in the dot-com world is - I'm convinced that the Wall Street people are among the smartest people in the world, but they're also the most emotional people in the world. Yesterday I looked at the top trading activity New York Stock Exchange, the NASDA, and nine out of ten in the New York Stock Exchange yesterday had negative results.

Ford Motor Company was the only one that had positive results. Ten out of ten companies most actively on NASDAQ had negative results. I said, "This is crazy." Ten companies didn't go bad at once.

I can understand five being up and five being down, or three being up and seven being down, but not ten for ten. My point is that Wall Street is a very emotional place. It fostered this craziness of dot-com mania. It wasn't until reality began to set in that you had to earn money, that the whole thing collapsed. Client server was an idiotic concept. It was way too complicated, way too fragile. You should have been able to see that ahead of time going in.

But there are people who make their fortunes by perpetuating extraordinary popular delusions. Matter of fact, if you can think one up right now, we could make a killing at it. But it's a temporary abandonment of common sense. It's kind of the ultimate hustle. I don't think it's an ethical issue because I think the people who perpetuate the delusion, sort of believe it either because they're ignorant or stupid or they're huckster-salesmen, or whatever, but they think it's real. Do you think the guys selling tulips in Holland, didn't think it was real? Towards the end they might have wised up.

DM: Thank you for being so generous with your time. It's been wonderful talking with you.

EM: A pleasure, thank you!