

*Johnson:* Tell me about your personal background. Was there an entrepreneurial tradition in your family, or were you the first?

*Ross:* Well, I was born in New York City. But I grew up in Dallas. I lived six months in New York City, and roughly twelve years in Dallas, and had no entrepreneurial background whatsoever. I moved around a lot. I moved from Dallas to Denver, back to New York, and then to Atlanta.

*Johnson:* This was all when you were a kid?

*Ross:* I was in Dallas up to sixth grade, and a couple years in Denver, and a year in New York, and then I went to high school in Atlanta. I graduated from high school and went to MIT, and then went straight to Stanford Business School.

*Johnson:* So what was your degree from MIT? Was that engineering?

*Ross:* They call it industrial management. It was sort of like operations research. I actually studied computer science there before there was computer science. I was there from '61 to '65. Time-sharing was invented at MIT, on Project MAC. I programmed on a PDP-1. So I studied it right at the beginning.

And then I went to Stanford Business School, with no work experience in between, which was typical then, and which now is not very typical.

*Johnson:* And you got an MBA from Stanford?

*Ross:* Yes.

*Johnson:* Is that what brought you out to California?

*Ross:* Yes, and then I stayed in California. I was always sort of a computer nerd once I got exposed.

*Johnson:* Okay. So, what did you do after you got your MBA? What happened then?

*Ross:* I went to work for Raychem, a big manufacturing company. I worked there for three years in DP. I was a programmer and a systems analyst.

*Johnson:* This was when, the late '60s?

*Ross:* I started in '67 and left in '70. We had an IBM 360, and I did financial systems. Working in Cobol with punched cards.

Then I went to work for a company called Arcata, which is not around any more. It was a division of a company in the telephone business.

I was the DP manager. We were very early, heavy users of time-sharing for business because Arcata had twenty regions around the country, twenty sales offices. We set everything up on time-sharing, and on an IBM System-3, I think it was. I was there for two years, and then I started Ross Systems in August of 1972.

*Johnson:* So what led to that decision?

*Ross:* I don't know. I remember having a burning desire to start my own company, and it was a very anxiety-ridden time back then when there was no infrastructure. Most people didn't do it. And most people thought I was crazy. I remember this burning anxiety.

*Johnson:* Do you remember what some of your feelings were? Was it that you wanted to be your own boss, you saw that there was a great financial opportunity, or you just didn't like working for other people?

*Ross:* It wasn't that I didn't like working for other people. I always got along really well. I was a successful corporate guy. But I had the desire to create something.

*Johnson:* To create something? Interesting.

*Ross:* I also had the desire to do it before I turned 30, don't ask me why, and I was 29.

*Johnson:* And yet, you had no entrepreneurial background in your family. It's just something that you just wanted.

*Ross:* That's all I can remember. I also remember that I didn't have a real business plan. I was just going to go out and hustle business up and let it evolve. Which is, in fact, what happened.

*Johnson:* So, when you say hustle business up, you were selling...

*Ross:* It was going to be programming, or systems analysis or, whatever.

*Johnson:* So the idea that you were going to sell the skills you had developed

over time, and you knew there were people who would pay for you to come in and work on projects for them.

*Ross:* And that's what happened. I started off by myself and hired a couple of people. Karol Hines came on board and a couple of other people and we did programming and systems analysis.

*Johnson:* Were you doing all of the selling at this point?

*Ross:* Oh, yes.

*Johnson:* How did you do that?

*Ross:* I had my bible, which was the AEA [Ed. Note: American Electronics Association] directory, do you remember that?

*Johnson:* Yes.

*Ross:* And it had everything. It had phone numbers, addresses of the CFOs, so you just had to...

*Johnson:* And those were local listings?.

*Ross:* Yes.

*Johnson:* So, because of where you were, here in this area, you were able to contact a lot of people.

*Ross:* Yes, you could go through and see exactly who to call and target the size of the company. And I just did cold calls.

*Johnson:* Okay. Since it was services that you were focusing on, you had a very local focus at that point.

*Ross:* Yes. Really local. We did mostly mainframe projects.

*Johnson:* IBM?

*Ross:* IBM mainframe. Karol actually joined me about a year after we started, and we had one big client that was supporting us, but basically, we were doing IBM systems.

*Johnson:* Financial systems primarily?

*Ross:* Yes, the only focus we had was financial and budgeting systems. But I never wanted to stay as a services company because from the

very beginning I thought the future was going to be in time-sharing and products. I always figured that some idea or opportunity would come along, and In fact it did. In 1974, we were hired by a company called Itel, a big financial services company in San Francisco, to develop a budgeting system on GE time-sharing. They had a lot of money and they spent a lot of money. A couple of people and I worked on this big project, and GE time-sharing at that time had developed what I would call a spreadsheet predecessor. Remember, there were no personal computers, this is all using ASCII terminals, and this was a financial modeling language...

*Johnson:* Was this a proprietary product of GE time-sharing?

*Ross:* Yes, and there were a couple other companies that had similar products where you define the rows and the columns. We did this project, and I remember thinking that we were getting paid something like \$5,000 a month in fees, and General Electric was getting \$50,000 a month in time-sharing services. And that seemed to me to be inequitable. So, in working with this project, I learned this language and decided I could write one myself.

*Johnson:* Write one?

*Ross:* Write a language, write a spreadsheet predecessor, similar to the one on GE time-sharing. And I decided to do it on a time-sharing mini-computer, a DEC computer, because it was a lot cheaper. The whole concept was that DEC supplied all of the standard operating systems so you didn't have to do systems programming, you would just do applications. I wrote this language in five months—back then you could do things like that. It was all ASCII terminals though. We got a PDP-1170 computer, and we were in the time-sharing business, devoted to financial planning, and budgeting, with a product.

*Johnson:* How did you go about selling that? Did you go back to the existing customer base?

*Ross:* Yes, exactly. We went back to the existing customer base, and we developed a reputation because we had a really good product, and we could sell it for a lot less money than the big time-sharing companies could. In fact, we could even sell it as a product because a company could buy a DEC computer and set up a departmental time-sharing system, rather than spending a fortune on outside time-sharing.

*Johnson:* So, that kind of led you into software products?

*Ross:* That's exactly right. We started time-sharing in the spring of '75 when we released this product. And we sold the first product to Crown Zellerbach in '76, a year later. We had a quite a big business going in the Bay Area. We had big semiconductor companies, and we had big banks, like Crocker & Wells Fargo.

*Johnson:* Were these people who were already committed to the DEC platform, or was that part of the process? The fact that you had this really robust package that would run on a mini computer, which was relatively inexpensive, was this a software-driven sale?

*Ross:* Yes. They weren't committed to DEC. Well, that obviously made it a lot harder. They had to buy a couple hundred thousand dollar mini-computer from DEC.

*Johnson:* Well, if they were going to be paying \$50,000 a month for time-sharing services it probably looked like a pretty good deal.

*Ross:* Right.

*Johnson:* But there aren't very many cases in the '70s where people bought particular hardware in order to be able to run a software product.

*Ross:* Yes, but we had Crocker Bank, Wells Fargo Bank, Intel, National Semiconductor...we had a lot of big companies. We had quite a nice business going. In fact, then we developed a relational database system, probably in '77 or '78, because these same people wanted good financial modeling, but they also wanted a database system. So, we did that. I went to see Larry Ellison in the late '70s, because he was just starting to do it, with SQL, and what they were doing seemed very technical. So, I said that what they were doing would never fly.

That business was a nice business that sort of grew up until the early '80s, and then we opened an office in LA and in New York City in the time-sharing business. It was a decent size business.

*Johnson:* What were your revenues at that point?

*Ross:* I can't remember. I think it was about \$6,000,000, and it was very profitable.

*Johnson:* Was that time-sharing revenue, or...

*Ross:* And services. And some product, but not much revenue from products. Time-sharing was a great business. You can log on every day and see how much money you made.

*Johnson:* When you made this decision to expand, were New York and LA, the only other offices?

*Ross:* We had a Dallas office for a while, but that was really it.

*Johnson:* Was it because the big companies that you were working with here had branches there?

*Ross:* No.

*Johnson:* So, you started cold and you had to develop a whole new customer base in each of those areas?

*Ross:* Yes. The New York office was very successful, and we started having an impact on the big national time-sharing companies because we were selling the same quality of service at a lot less price and giving people the option to buy the software.

*Johnson:* Was that because you were on the mini-computer and everybody else was on the mainframe?

*Ross:* Yes, exactly. And, we were willing to sell the software. We were pioneers in that market. Of course in the early '80s, the PC came along with VisiCalc and Lotus, and that started to have an impact. So, what happened was that the growth started slowing down and, fortunately, we knew what was happening. But knowing and doing something about it are two different things.

Two things happened that were of interest, strategically. We were totally wedded to DEC, if you will, and DEC came out with their personal computers, and we decided to migrate our software to them. They had three of them: the Rainbow, the CAD, and the Pro 350, which is based on PDP-11 architecture.

In parallel, a friend at PriceWaterhouse showed me a general ledger they had developed in Cobol that ran on HP. It seemed like a great product. I was totally intrigued with it, and negotiated the VAX rights to the product. I had this idea that we would just switch from being decision support and time-sharing to selling large corporate accounting software.

*Johnson:* Okay. And this would have been in...

*Ross:*

'83. So two things went on in that time frame. One, we had quite a bit of development work to do on this general ledger package to convert it, and, two, we were working with these DEC PCs and there was so much hype in the PC market back then, who knew if DEC was going to succeed or not. I mean, DEC totally failed, and we were totally frustrated working with them, and that's a different story.

But, the general ledger package came out in '84. We started developing a family of software products and our positioning was "mainframe-class financial software." And, you know, the market started going.

We were faced with diminishing time-sharing revenues, and rapidly growing software revenue, but the software revenues were growing from a small base. So, we were sort of level for a couple of years, right? And then the software business started taking off. I mean, we were the people that accurately forecast the DEC mini-computer commercial software market. I mean, we were the king of the DEC VAX market back then in financial software products.

*Johnson:*

Yes, I remember that.

*Ross:*

And we defined how you develop a partnership with DEC. DEC loved us in that market. The company grew to be \$25,000,000, and I sold it at the end of '88.

*Johnson:*

One of the issues that was so contentious between the guys that were selling software on the IBM platform and IBM was the whole question of IBM's reluctance to release technical information. IBM never really, until very, very late, got over the idea that they were in competition with these guys. It took them a long time to understand these guys were sales drivers, as opposed to competitors. So they always wanted to hold back on technical information, and not release it in time, so that they had a competitive advantage with their customers. Compare that to how DEC...

*Ross:*

We didn't have that problem. I'll tell you the good and the bad part of working with DEC. When we were trying to take our financial modeling package and put it on the DEC Pro 350, it was totally frustrating because we felt that they're not going to sell computers if they don't have software.

Here we are, we have software, we're totally dedicated; they

should be helping us, they should be funding us, they should be doing whatever, right? And, what they were doing was fighting us and negotiating and trying to drive a hard bargain to get royalties, and basically making it totally difficult. And it was a frustrating experience and the DEC Pro 350 was a total bomb.

*Johnson:* Yes, I don't think they ever really had corporate commitment behind it.

*Ross:* It was totally frustrating and we were very fortunate to have this other iron in the fire with the accounting software. And there it was really interesting, because, initially, we had a problem. We had to convince people to buy DEC VAXes for their accounting, and that was a hard sale.

*Johnson:* Did you get anything from that? Were you a DEC reseller?

*Ross:* No, we made a decision all along that we didn't want to be in the hardware business. It was probably the right decision.

*Johnson:* It was just another objection that you had to overcome in order to sell your software.

*Ross:* Right. But, the DEC VAX was ahead of its time in terms of networking and architecture. So as that market evolved and DEC became more successful, we had a highly successful working relationship with DEC, because our software only ran on DEC. So, if the DEC sales force brought us in, they knew that if the customer liked our software they would have to buy DEC. If they brought in J.D. Edwards or McCormick and Dodge, then they may like the software, but that software could also run on a Hewlett Packard, or a small mainframe or whatever. So, DEC loved us. Ross was synonymous with DEC, and we had this great positioning statement, which was mainframe-class financial software for DEC VAX. And as that market evolved, we were great.

*Johnson:* Let me go back a little bit to the plan in which you were opening other offices. One of the things that I see is that people have a hard time going from a technical services environment to a product environment because of the change in the selling structure. In a technical services environment, the top guy is really the top salesman, and you have an ongoing relationship with the client that leads to the next sale. Whereas in selling software product, you have to have a sales force. So, you must've had to put a sales force in place when you opened these other offices. And generally

people that come from your background have difficulty knowing how to manage sales people. So, how did you deal with that issue?

*Ross:* When we opened the other time-sharing offices, we hired regional managers that were good businessmen. I was fortunate to have made some really good people decisions. That's very important in this business. I hired Dick Giorandella to run the office in the East, and he's a sharp guy who complemented me.

Basically, I was a techie. You're right, I was probably the archetypical technical guy that could sell big developing projects, but Dick had come from a sales background. He brought his team in that were sales guys from NCSS and so we complemented each other.

But we were also very committed to the transition to a product-oriented business. I'm not aware of any other time-sharing company, Tymshare or GE or RapidData, that was able to make the transition the way we were.

*Johnson:* What about Comshare?

*Ross:* Well, it took them a long time. We made the transition relatively rapidly.

*Johnson:* It sounds like you made it in about a year and a half.

*Ross:* Well, let's say three years of hard work. The cultural issues are really different. If you have a group of people that are into time-sharing and you're trying to wrench the company around to make it product-oriented, it takes a lot of work.

*Johnson:* What were some of the issues?

*Ross:* Well, the whole revenue model of products is deal driven. You've got to schedule and meet commitment dates on product development, you've got to have your hotline customer support, and you've got to have QA, and you don't have any of these issues in time-sharing. In time-sharing, you build up your revenue base, and you've got repeating revenue. So, every aspect of it is completely different and you really have to be committed. We ended up hiring people from competitors, so that we could learn. We were really focused on that objective, once we put our mind to it. And we learned some stuff the hard way.

*Johnson:* Yeah, everybody does. But it's unusual. It doesn't happen very

often.

*Ross:* That right. I think very few people successfully really make that transition.

*Johnson:* Did you run into the credibility issue? People that were in the software products business in the IBM mainframe market in the early '70s ran into a big credibility issue, where people did not believe that a small software company was able to produce and support a significant software product. Did you encounter that "not invented here" syndrome? Was there a period in the development of Ross in which part of your challenge was to convince the customer that something that wasn't written inhouse could really work for them? Even with the time-sharing business?

*Ross:* No, not in the time-sharing business because people could see the benefit. But certainly in the early days of the software package business in the early '80s, there were a lot of custom-developed systems, and that was always an option. Nowadays, it seems people just buy packages. You know, one of the things I think was really key is that every company needs to do things its own way. In the early days of the package business, when code was maintained on punched cards, it was hard to customize, to fine-tune the software, so you could do your own report writing. The software wasn't flexible enough to be adaptive to the unique requirements of the customer.

The thing that was most important about our general ledger software product, which was done in the early '80s, was that it had a very flexible report writer. And then mini-computers had CRT screens, right? So, with a very flexible report writer, and CRT screens, VT100s, people could see the flexibility of the system and they could see that they could buy a standard package, and yet make it flexible so it could run their business.

So, to me, that was a really important thing.. Obviously as a small company, you always had a credibility issue when you were selling a large company software that's going to run their business. I'll give you a funny story, actually. Roughly in the mid '80s, there was a company called Software International.

*Johnson:* I know them.

*Ross:* Okay. And they were owned by General Electric.

*Johnson:* Yeah, they were bought by General Electric sometime in the latter

part of the '70s.

*Ross:* They were arch competitors in the VAX market. It was a wholly owned subsidiary of General Electric and they were real sleazy sales guys. They were slinging mud, and it was really frustrating to us. So one time, in this very frustrating competitive environment, we got hold of something in writing given to a prospect. It made statements about us that were untrue, and we had a big law firm write a really nasty letter to the GE corporate guy, ten levels above these guys, and everything stopped instantaneously. Years later, I talked to some of those Software International guys, who talked about how hard the corporate guys came down on them for their competitive practices. So that was an amazing thing.

*Johnson:* Tell me about some of the really big challenges that you faced when you were starting out. Getting good people is a big issue right now but that was a problem back in the late '60s, early '70s, too. And then there's the whole question of sources of funding.

*Ross:* Well, the problem was that you didn't have well-established markets, and everybody was doing his own thing. The first time I can remember there was a real market for DEC financial software was in the mid '80s. By then there were trade shows and newsletters. But before that you were sort of scratching out a living all by yourself. So finding good people then, for a small company that was doing well, was relatively easy. In my mind, the hardest challenge we had was during the transition period when our people were frustrated because we weren't doing well. We had a lot of turnover during that period of time. And then, when the company started becoming successful again, that stopped.

*Johnson:* What about your funding? Were you all internally funded?

*Ross:* We raised our first venture capital, right at the height of time-sharing profitability in 1981, and everything was downhill after that. But we had money in the bank.

Today, the market is so big for software, that even if you get a little bit, you can be a big company. Back in the time-sharing days, there were only a few companies. Even in the DEC VAX software business, there wasn't a really a big market. So companies didn't create big values. As we look back on it now with 20/20 hindsight, it was an emerging market. Now we've emerged.

*Johnson:* Yes, the scale is just so different now in terms of what's

considered a successful big company. What about your competitors? Were they bigger companies than Ross?

*Ross:* The competition was Tymshare, Rapid Data, General Electric, NCSS...

*Johnson:* And those were all pretty big guys.

*Ross:* They were all pretty big national companies. You didn't have time-sharing companies serving only local markets.

As we moved into the accounting software, our competitors were J.D. Edwards, McCormack and Dodge and Software International. There we had the problem of getting people to get the DEC VAX. That was the initial problem. In the early days, there weren't very many other mainframe type of vendors in the VAX market, but there wasn't a very good VAX market. Then as the VAX market became more attractive, that's when competition came in.

*Johnson:* It's really a fascinating contrast to what the guys who were selling in the IBM market were doing because they were following the IBM salesmen around. When IBM was selling the 360, they sold so much more computer power than there was software to run on it, so if you were selling software that would run an IBM 360, it was hard to make a fatal mistake. You were in the opposite situation where people had to buy a DEC computer to use your software.

*Ross:* Well, by the late '80s everybody sort of recognized that distributed computing was coming on, and the DEC VAX was there. Then there was a bigger market

*Johnson:* What was behind your decision to sell Ross?

*Ross:* I had been doing this for 17 years, and I was getting tired, and I wanted liquidity. And, to be honest, with client server coming on, I foresaw the need to yet again change the culture of the company, and I didn't have the energy. It's too hard. In fact, it's almost impossible.

Very few people have been successful in the client-server market if they came out of the mainframe environment. Especially small companies. I just didn't have the energy. And the DEC market was hot then, it was the top of the market, so it was a good time to get out. I was bored, I wanted to do something new, I needed money.

*Johnson:* I think it's interesting that, having gone through the process of cranking around the company culture that you knew what you were facing.

*Ross:* Well, if had been a bigger company, it would have been infinitely worse. You always have the problem that your customers are your best asset and your greatest liability. You have a huge problem trying to carve out something brand new while still supporting your current customers. And not just supporting your current customers because they all want upgrades and enhancements and so you wind up doing two things at once. You've got to make sure all the people working for you are dedicated to the change despite the fact that a lot of them are being paid based on the revenues from the old products. So it's very difficult to do.

*Johnson:* Well, thanks very much, Ken. It's been a really interesting and informative interview. I appreciate your spending the time with me.

*Ross:* You're very welcome.