

An Interview with

JOHN LANDRY

OH 386

Conducted by David Grier

on

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Abstract

John Landry's experience in the computer software industry spans a wide range of computer applications, designed and developed while working for a number of prominent independent software companies. He was the technical leader at McCormack & Dodge in architecting their accounting system and at a later point in designing and building Millenium which was a significant advance in constructing online applications systems. After M&D was acquired by Dun & Bradstreet, Landry and Bob Weiler joined Distribution Management System and developed an expert system which could be incorporated into commercial applications. Landry then sold the company to Cullinet, and he tells how he got Cullinet to invest in building client/server systems. He talks about convincing the Cullinet Board to sell the company to Computer Associates, somewhat over John Cullinane's objections. Landry then describes going back to work at Dun & Bradstreet and later joining Lotus Development. He was instrumental in supporting Ray Ozzie in building Lotus Notes and in the sale of Lotus to IBM. He concludes by discussing his consulting work for IBM and specifically as an advisor to Lou Gerstner and becoming an investor in a series of new technology companies.

Preface

As part of the Software History Center's collection and preservation activities, and in conjunction with its meeting on the history of personal computer software held in Needham, MA, on May 7, 2004, the Software History Center (SHC) arranged for 14 oral histories to be conducted with computer software company founders and other key industry participants. All of these oral history interviews were conducted by historians well qualified by their knowledge and interest in computing history.

The following is a list of the people who were interviewed together with the name of their interviewer:

John Brackett and Doug Ross, interviewed by Michael Mahoney
Dan Bricklin and Bob Frankston, interviewed by Martin Campbell-Kelly
Dan Bricklin and Bob Frankston, interviewed by Paul Ceruzzi
Jerry Dreyer, interviewed by Thomas Haigh
Ben Dyer, interviewed by Nathan Ensmenger
Dan Fylstra, interviewed by Thomas Haigh
Gary Harpst, interviewed by Tim Bergin
John Imlay, interviewed by Bill Aspray
Luanne Johnson, interviewed by Janet Abbate
John Landry, interviewed by David Grier
Mike Maples, interviewed by Nathan Ensmenger
Seymour Rubinstein, interviewed by Jeffrey Yost
Jonathan Sachs, interviewed by Martin Campbell-Kelly
Oscar Schachter, interviewed by Thomas Haigh

Each interview was tape recorded, transcribed and edited by the SHC, the interviewer and the interviewee to ensure clarity and readability without changing the style or flow. The original tapes along with the edited transcripts were donated by SHC to the Charles Babbage Institute (CBI), which placed the edited transcripts on the CBI website and have archived the audio tapes.

On January 1, 2005 the Software History Center merged with the Computer History Museum, and its work is continuing as the Software Business History Committee as part of the Museum's activities (see www.softwarehistory.org).

**Software History Center Oral History Program
John Landry Interview**

David Grier: This is an interview of John Landry conducted by David Grier on May 7, 2004 at the Sheraton Needham Hotel in Needham, Massachusetts. Could you just start with a basic chronology of your life? Where are you from?

BACKGROUND AND EDUCATION

John Landry: I was born in Oak Park, Illinois. I grew up in Clareton Hills, Illinois, a suburb of Chicago.

Grier: You went to high school there?

Landry: I went to high school at Hinsdale Township High School. I graduated in 1965. During that period of time, for whatever it's worth, I began trading stocks in the 6th grade and became quite proficient at it to the extent that I wound up buying myself a Malibu Super Sport convertible when I was older.

Grier: I had been told we were going to get onto the sports car before long, and we may do that. Can we get just the chronology down? I want to get back to trading stocks in the 6th grade. But you graduated from Hinsdale High School in 1965. College?

Landry: I then went to Babson College. The reason I went to Babson College comes out of the trading stock story. I was a student of the stock market and Roger Babson was one of the most renowned traders who sold the market short in 1929. Despite being accepted at many other schools, that's what I thought I was going to do. Therefore, I would go to his school to become a proficient stock trader.

Grier: Okay. You graduated in 1969?

Landry: 1969. I was then in the Lottery for the draft. I had a relatively low number. I had gone in to apply to the National Guard 18 months before and got my notice of my draft physical and acceptance into the National Guard on the same day. I went into the National Guard. I had to spend a year screwing around washing cars because nobody would hire you if you had active duty requirements, which you did for six months to go into the Guard.

Grier: And you were in the National Guard in Massachusetts?

Landry: I was, but active duty was in Ft. Jackson, South Carolina, which was interesting because I was in what was called the Yankee Division, and when you're in South Carolina, anything having to do with Yankee is not a good place to be. I came out of the National Guard probably in late 1970. I came out of active duty and ran into a friend of mine in downtown Boston two days later who graduated from Babson. He said they were hiring at Shawmut Bank, in the finance

department. Shawmut was the second largest bank in Boston then and my degree was in finance and accounting.

Grier: That's a BBA in Finance and Accounting?

FIRST JOB – SHAWMUT BANK

Landry: No, a BSBA. I went to work at Shawmut Bank in the accounting department. About four months into my career there, there was a system that was architected by Peat Marwick and Mitchell. It was a responsibility accounting system, a system that essentially allowed for the creation of budgets at the cost center level and the comparison of actual expenses to those budgets for each department. Even by today's standards, it was a very good system. The guy who was running that system was in the accounting department. He got fired because he wasn't doing a particularly good job and the head of the department, the controller, what would now be the CFO, looked at all the resumes of the people who worked in the department to see if they had any computer skills. I had one class in computer programming at Babson, which was one class more than anyone else had. He said, "Landry, you've got the job, sink or swim." That was my first experience with a comparable system.

Grier: You had one class at Babson?

Landry: That's correct.

Grier: Basic introduction to computers? Computer programming? It's a 1969 era class?

Landry: Probably a 1967 era class when I took it. Let me put it this way. It wasn't particularly relevant to what I wound up doing.

Grier: You learned a little COBOL, learned a little bit about hierarchical memory?

Landry: Disc memory, which was considered a new concept then, and so I fell in love with it. I self-taught myself. I wanted to get some changes made to this system. I went over to the IT group, which was called MIS back then, Management Information Systems, and they said that I couldn't do that. I said it looked pretty simple. I started learning COBOL and assembly language on my own.

Grier: And this was probably on an IBM 360?

Landry: Yes, a 360/50 which I think the bank had. That gave me enough to go and show the guys when they said you can't do that, I would bring the code with me and said, "Of course you can, it's right here." That worked out pretty well. Subsequently, what happened was that I had become more proficient, not just in programming but also in seeing what was going on when the software industry started with products that could do the same things that this customized system had done.

Grier: So the time frame of this is 1971, 1972, that time frame?

Landry: Yes.

Grier: So the software industry is just barely out of the gates?

Landry: Correct. And most of it was focused on banking because banking had to be automated, so the players back then, Management Science America (MSA) and University Computing Company (UCC), largely had banking products. They had demand deposit accounting, installment loan, commercial loan, and general ledger and responsibility accounting, but they were largely part of the banking systems that were being sold then. The commercial market hadn't really developed that much at that time.

Grier: So it's 1971, 1972. How long were you with Shawmut Bank?

Landry: Well, I got the job, then I made a recommendation that we should dump this system and buy a system, and I was given the responsibility of finding the system to buy, and I did some extensive research on it, largely between UCC and MSA. I got to know John Imlay of MSA at that period of time; I got to go to user conferences for both of these companies to help me make my decision, talk to some other users, got to know the guys in both of these companies and chose UCC, much to MSA's dismay, because I became UCC's best reference. In fact, this was now 1972, I was such a good reference that UCC wanted to hire me, which was kind of interesting because sometimes you're better if you're not hired if you're a good reference, and I was offered a job to take over customer services for UCC.

Grier: And this is about 1972?

Landry: Yes. And I accepted that job. It would have meant going to Dallas. I was single, so it didn't really matter. I was a pretty young guy at that time and very excited about this industry because compared to a few old stiffs at the bank, these guys were young players. So it was very appealing. UCC also had a beautiful building on the Stemmons Freeway down in Dallas with satellite dishes and microwave towers and I thought, "Gosh, this is space-age stuff, and this is going to be a neat thing for me to do." So, I accepted the job and told the bank, self-servingly perhaps, that I thought four weeks would be appropriate for me to transition out, because I was in a fairly good position there. I had also had responsibility for buying other software at that time. We bought the commercial loan products, etc., so I was really getting tied to the software business.

Grier: And when you say "responsible for it," were you responsible for it because of your position, because you knew what you were doing or because this was a position that was now buying software?

Landry: There was a new position created that was called the Financial Systems Officer, and I was an officer of the bank, I was the youngest officer for the bank at that time, and the job was to essentially manage the purchase of software in the bank. That was a good job and got me closer to the software guys that I liked. I liked going to the user meetings, I liked meeting these guys, we had a lot of fun, and so I thought this is the business for me. So, I accepted the job with UCC and UCC was competing, as I said, against MSA. MSA had a complete product line, including fixed asset accounting and accounts payable and all these other peripheral products, whereas UCC just had general ledger in their banking products. General ledger is kind of the cornerstone product and the other things are sold with it. So UCC had formed a partnership with a company called McCormack & Dodge in order to fill out the product line with the pieces that they didn't have. They would bring McCormack & Dodge in to present payables or fixed assets or something like that. At those user meetings I referred to, I got to meet Jim McCormack.

Grier: The user meetings were UCC user meetings?

Landry: Yes. I had gone to MSA user meetings as well, but I found it suspicious that MSA kept me out of certain sessions. UCC let me go to any session and subsequently when I was a user, I would go as a user to those meetings. One that I recall fondly was at the Fontainebleau in New Orleans. Just a great time. It was at that one that I met Jim McCormack. I really liked Jim. He was a great guy and he was building a business that at this point was just three guys. This was now getting up to 1973, and I had taken a job with UCC. I gave it four weeks. In the middle of those four weeks, I got a call from Jim McCormack. He said, "Why don't you come and build a general ledger system for us?" And I had become quite proficient at general ledger systems because that's the core of what I started to buy. So, I thought about it. My father was an officer in a bank, actually in nine banks. He never left any of the banks, nor did he ever get fired, but he worked for nine different banks because they just kept merging. So he thought that a bank was a great career and his son was following in his footsteps. But now I was going into this crazy software business that he couldn't understand. First he thought it had something to do with lingerie, and secondly he could not understand how you could get \$100,000 for two reels of tape and a book.

FAMILY BACKGROUND

Grier: Could we just explore your father just a little bit? What was his background and training?

Landry: My dad went to Northwestern University, but he never graduated. He only went for three years and never got a degree, but he got into banking. He was a trust officer, so he was the Vice President of the Trust Department of Continental Illinois National Bank working with rich widows, which always kind of disturbed my mother.

Grier: I can understand how that might have disturbed her. At some level, this is your connection to the business world and to the world of stock trading.

Landry: He was the connection to the world of stock trading. He got me started in it.

Grier: He financed you as a sixth grader?

Landry: I had my own investment company called Invest, Inc., in which I sold stock like a mutual fund, to my relatives who, of course, felt obligated to buy something. Then I would issue dividends in postage stamps because the amount of money was so small you couldn't do anything else with it.

Grier: Nonetheless, you had a sense of how an investment company worked as a sixth grader?

Landry: Precisely, and through high school I had a friend that I was doing this with because it would have been a lonely process to do by myself, so we not only talked about girls on the phone, we'd talk about what the market did that day. And the only relevance of that is that it set me up very much for subsequently what I did. I've sold nine companies now. So, I still believe I wound up doing stock trading in my career, but in a very different way than I thought I would.

McCORMACK & DODGE

Grier: One of the themes that is emerging as you are talking is controlling technical processes and technical products, when you understand something about it but you're not an expert in it. We're back in 1973 and you've now decided to go to McCormack & Dodge.

Landry: I called UCC and told them I had changed my mind, which wasn't really well taken, and would go to McCormack & Dodge. McCormack & Dodge, at that point, was Jim McCormack, Frank Dodge, a guy named Dudley Clark, and a secretary/receptionist.

Grier: And where was it located?

Landry: It was located at 1 Wells Avenue, Newton, Massachusetts, which is just down the street from this hotel.

Grier: Just north of here.

Landry: I started with a storage box as my desk drawer and a tape. We were all in one room, and we had one system that was selling, a fixed asset accounting system. Frank had just developed the accounts payable system, and my job was to develop the general ledger system.

Grier: What aspect of this appealed to you? The entrepreneurial concept, being in charge of your own destiny?

Landry: I wanted to build a system. I wanted to fix the problems that existed in the other systems. In other words, take the best about what they had and then add some stuff that I thought was needed and essentially synthesize what they had done and then add onto it, which was typically the software business.

Grier: Okay, and as you saw yourself going into this, building this system, you were not going to be the coder, you were not going to be the one building the program?

Landry: I did do coding. But that wasn't the job; it wasn't to do the coding.

Grier: You were the system architect?

Landry: Correct. I got involved also at the same time with Frank Dodge's system and also became pretty good at accounts payable. They were about to launch the system and asked me to take a look at it, and I thought it had some real serious problems with it. So those problems were fixed before it was launched and it turned out to be a pretty decent system.

Grier: You were working with things that were targeted largely at the IBM computer family using COBOL?

Landry: Yes. These were written in COBOL, Assembler and RPG. They sold not only to System 360 but also System 3 users. We had our own System 3. We bought time on a 360, which

was in the insurance company next door. We bought time because, I mean, you had to take card decks, so it wasn't like you got out of line.

Grier: In building the system, you were doing some of the coding, but someone else was helping you with the coding?

Landry: Well, it took a good year to design and it took three years to build that system. The work started in 1974 and it was released in 1977. But I think it was two years nine months to be correct.

SYSTEM DESIGN

Grier: Okay, what were you doing in the first year?

Landry: Design. Essentially, ripping off everything that I could from everything that was in the other systems. Remember, scarcity was present then and that's why value was associated with software. I could argue now that scarcity isn't present and that's one of the problems.

Grier: Scarcity was present in what sense?

Landry: Money. There wasn't a venture capital market at that time. Talent. There weren't a lot of programmers back then. Third, if they were programmers, they were probably programmers who had learned something that wasn't necessarily modern. In other words, they were back a couple of generations because training was also scarce. There was no Internet to get on to learn the latest in Microsoft technology. You had to go to classes. Frequently, those classes would be in Chicago. You didn't have the money to send a programmer to Chicago. The result of that was you didn't have the ability to have the people well trained. And finally competitive information. You want to find out something on a competitor today, you go the Internet and download their product. Back then, if you wanted to find out what a competitor had, you had to fake your way into a seminar that they were giving in your town, registering as someone else. In order to find out what the systems that I was going to be competing against were about, beyond MSA and UCC, you had to do a lot of research. So, it was a year of research and design of what the system was and then coding. We started coding in 1975. It was a sophisticated system. It had some technology in it that nobody else had.

Grier: Such as?

Landry: Preprocessor. A preprocessor was an ability to tie into any other system to feed into the general ledger without getting into the code. You could program it to use essentially all the inputs.

Grier: In effect, it could take input from another system, reorder it the way it needed to be?

Landry: Right, so that the ledger would essentially be able to translate it, to determine if it's this code here, then it's this account here and essentially automate that process in a way that historically had been only done through painful coding. The way that the system was architected, typically back then you had ledger accounts that were built as control codes, the first three letters or digits as the division or the department. We blew all that up. We said the hell with all the hierarchy. Because the only way you can change the hierarchy is to change the account structure and that

means everything gets all screwed up, the feeder systems, etc. We separated the hierarchy of the organization, the way that it rolls up in the tree structure in the hierarchy of the accounts and the hierarchy of the products, into separate hierarchical tables that then would allow for these codes to always remain the same, but the way that they would roll up would be completely different. By doing that, we also had vehicles then to do mass maintenance on certain subsections of the accounts for example.

Grier: What do you mean by mass maintenance?

Landry: One change, one card could influence 5,000 accounts. Which accounts? Well the accounts that are under this part of the tree structure, just blow it up. That was, back then, unique. I had three report writers. One I had licensed from a consulting company in Vancouver, Canada which was a spreadsheet format. It had some limitations. Now, remember, this is still using punched cards. It was a system that had essentially a notion of 99 lines and 13 columns that constituted a page. You could have calculations within that page, just like a spreadsheet, and then you could link the pages together and pull data from one page into another page and you had essentially a very good consolidation vehicle, very flexible as to the way that it worked. That was one report writer that we put with the system for that type of reporting, consolidated reporting, but much more in now what would be a spreadsheet-type of format. Two, we had an extra print report writer, a report writer that essentially goes through transactions or accounts and based upon control break logic and sort sequences, allows for reports to be produced that are typically transactional-type report. This was again all under user control, not IT control. The third one was really what was called the detail report writer, one that essentially rolled up those tree structures creating those responsibility reports. That was really the core of what a good financial reporting system will do, to maintain budget control and allow for planning and budgeting to take place. Using those tree structures in conjunction with that report writer and having the ability for the financial guys to be able to do that without having any IT involvement, was also unique. Whereas, the other guys had maybe one extra print report, we had three. Three is better than one, that was the story. We had graphics, which was kind of nuts. I mean, there was line printer graphics, and we had variable budgeting. It was a very good system, and it sold like hot cakes.

ADAPSO

Grier: Okay. You finished the system which sold like hot cakes. A couple of things that I want to sort of clarify. You're writing this program in the 1974 to 1977 period. You've talked about trying to figure out what your competitors did. What kind of contact did you have with them, other than trying to find their products? Was there any kind of sharing of information?

Landry: Yes. ADAPSO was one of those vehicles which I also joined, given my penchant for having a good time; ADAPSO had a lot of great folks in it that were building an industry. I got involved with ADAPSO during that period of time.

Grier: What was the first attraction, other than having a great time, of going to ADAPSO?

Landry: I thought the content of the sessions that they had on software and selling software and marketing software were valuable things for me to know. I had 10% of McCormack & Dodge. I

didn't mention that, but I remember when Jim made the offer with Frank Dodge; Frank was a member of the Charles River Country Club here. We had lunch, and that was when they put the move on me. I was not, despite all my stock trading, knowledgeable of what percentage of a company I should own; it was something that was totally mysterious. I didn't know how that worked. I knew how stock trading worked, but this was bringing it right to me. So, I said that I had to have equity, not knowing exactly what I meant by that statement, but knowing it was a good thing but not knowing what it meant. Jim asked how much I want and I said I thought 10% sounded good. He said, "Sold." I have a feeling if I had said 25%, he would've said, "Sold." You better know what you want going in, because once you put it on the table, it's set.

Grier: In building the business during this time, most people date the software industry, with the un-bundling decision of IBM in 1969. How much contact did you have with IBM?

Landry: Very little back then.

Grier: And they just didn't care?

Landry: We were such a small company. We were off their radar screen.

FIRST CUSTOMER

Grier: What was the first customer for your software, the first company of importance?

Landry: The first customer was William B. Reilly, a coffee company in New Orleans, Louisiana.

Grier: They were a coffee importer?

Landry: They were a coffee importer and roaster.

Grier: How did they find out about you, or how did you find out about them?

Landry: I actually don't remember. They landed on our doorstep, and I can't remember how they got there. We were selling software, so we were selling fixed assets and payables, so it was probably one of the sales guys ran into them and started pitching ledger and they said, "Sounds good. Let's take a look."

Grier: You're a small company. You've got a sale. You've got a somewhat complex product. You go down to install it?

Landry: Yes. I was down there for weeks.

Grier: How many weeks?

Landry: Three weeks. I trained them. The only guy that knew the system at that point was largely me.

Grier: So, you were the one who did it, you installed it, you had their staff to train. How much did you have to change the system when you were installing it?

Landry: We didn't change it. It was more of how do you customize the system from the ability that we gave to the users to do the stuff that they needed to do, the way they wanted their reports, how to structure their hierarchies to make the thing work.

Grier: In terms of developing the system, this is a bit of a management or software engineering question; you obviously had to set up something going, "We're creating a product. We have to stabilize it. We have to know how to fix it. We have to change it in an orderly manner." Those techniques were being developed at that time. What did you do to sort of set up that process or think about that process?

INITIAL EMPLOYEES

Landry: I ran a fairly small team, which is always wonderful. It started with Mike Apostoli and Beverly Booth, two programmers. Mike smoked cigarettes nonstop and was an excellent coder. Beverly was an excellent coder who didn't smoke.

Grier: How did you find these two individuals?

Landry: Ad in the paper. Recruited.

Grier: Do you remember their backgrounds?

Landry: No. They started writing the original code, and it took a while. Conceptually, this was fairly different from traditional systems because it was all user-controlled and there were these roll-ups and all this sort of stuff. So, I was a prototyper, let's take a shot at it. A prerequisite for me working with the developer is if I tell you thanks a lot for your effort but we're going to throw that away and start again, you've got to be willing to say that's okay. That's how we built the software, essentially saying let's take a look at it as it's developing, test it out, see how it feels, then go back and recycle it again. We did that. So the system evolved as opposed to let's have a design document and everybody work off that design document. That was fairly different because a lot of people were asking me where the design document was. Well, the design documents were, and I've used this ever since as well, the outputs. It's output-driven design. So, I'm not going design everything. I'm going to show you, here's the outputs that we need to get to and here's the inputs that we have. Now, what we have to do is figure out in the middle what happens. It was output-driven. My designs were the outputs. Also, some of the inputs. We worked on efficiency of card formatting and grappling with that. So there wasn't a big formal design document. It was essentially the synthesis of all those other systems, the special sauce we added to it, reflected largely in outputs and then backfilling away from those outputs to what we needed to do.

BUSINESS GROWTH

Grier: Now, if William B. Reilly was your first customer in 1977, within a year, how many customers did you have?

Landry: We got an award from Larry Welke. We got the ICP Million-in-One award, which was one of the best awards. That was for \$1 million worth of sales in one year. Larry Welke, who is here, ran ICP, the wonderful venue for the catalog was where people went to find software.

Grier: This says you sold \$1 million worth of software?

Landry: Million-in-One was considered out of this world.

Grier: Do you remember some of your early customers beyond Reilly?

Landry: Sure. Acushnet, the people who do the Titleist golf balls. Teledyne, which was a huge conglomerate back then. Johnson and Johnson.

Grier: Did you do all the installations at the start?

Landry: Yes, in the beginning. I was usually there for the first five customers and after that, we were hiring like crazy.

Grier: At what point did the pressure come from the users to start improving and modifying the system?

Landry: Again, this sounds ridiculous, but they loved the system. There weren't a lot of pressures to change it. It was more, how do we really maximize the usage of these tools that we've got to make it do the things we need to do. Ledger had another huge benefit in that the product drags the other products along, so you got into selling the suite, and we had a good suite. Each product stood on its own very nicely by that time. But ledger was the thing that kind of consolidated it and brought it forward.

Grier: I'm just trying to probe the early development of things we now see in the software industry like the interaction with customers. I assume as you did this, you found bugs from time to time. Did you put together a formal procedure for reporting them and fixing them or did someone just call up and say, "Hey, can you look at this?"

Landry: Support was handled separately. We started growing the organization, and it was decided that development and support would be separate organizations.

Grier: At that point, who made that decision?

Landry: We as a management team, of which there were four of us, Jim and Frank, Dudley Clark and I. Dudley wound up getting support, and I continued to do development, which was just fine with me. We argued about where QA, Quality Assurance, should be and those arguments still go on as to whether it's part of development, because it's kind of nice to have it as part of development because you're testing it as it's being built, or whether it's part of support, which sometimes implies that it's tested after it's built, which is kind of too late to do that. But there is a feeling that QA should be separate from development, otherwise it's an inside game and you've got influence to make the QA guys do what you want to meet your dates. So, as the companies get bigger, it's more difficult to figure out how that works. So the bug fixing was part of development,

but the bug recording and the interfacing with the customers for that type of problem was done largely through the support organization.

Grier: During this time, of course, the computer industry was changing rapidly. You had new models of IBM equipment coming out. Did that influence what you thought about the product or how you managed the product?

Landry: The biggest change, and this is fast forwarding quite a bit, was online. When the 3270 hit, that was revolutionary. We were going from card systems to online systems.

Grier: And when did the 3270 hit your business?

Landry: I would guess it was about 1981 when they first started hitting. They were expensive. Green screen, big honking monitors, you remember? It was typically joined with CICS, which was the somewhat misnamed Customer Information Control System, which was really an online transaction processing system. In a limited memory environment, CICS allowed for multiple different user programs to be washing in and out.

COMPETITION

Grier: We've moved up through 1977. We have the 3270 in 1981. We have about a four-year period in there. How did the business evolve during that time? What were the major influences upon it?

Landry: We continued to develop new features into ledger, none of which I can recall because most of the stuff I did subsequently was working on online application but that period in between was an era of really fast growth for McCormack & Dodge. We moved offices probably four times in that period of time.

Grier: Remaining mainly in this area?

Landry: In this area. We had not really grown the sales organization but we had some great early success with general ledger. We were thinking, okay. The way this business works, I guess, is when you have a good product, they just come to you. That was silly and arrogant. We decided to hire this guy, Maurice Giguere. Maurice was a sales guy who had come out of the food business. He had worked, I believe, for IBM as a sales guy and was pretty knowledgeable in IBM sales techniques; but he was also a street fighter and he got a hold of ledger and started selling the living daylights out of it, to the point where Maurice became head of sales. We had another head of sales, a guy named Bob Wilber, who did not do very well, and we had to let him go, but we brought Maurice on to take that slot, and as VP of sales he was the only sales guy. Actually, I shouldn't say that since there were a couple of others, but what was happening was Maurice had essentially kicked the daylights out of MSA and UCC that year. Every competitive deal, he'd win. After a while, the UCC guys were feeling that this isn't much fun. So, given that, Maurice figured out that these guys were on commission and that at the end of the year they were at their max money, because they were on an accelerated commission plan, that probably they're going to be looking ahead. Maybe they're going to go to the sales club, you know, go away in January, which is typical in the software business, and after they get back from club, let's go get them. So he put a full court press on the top four UCC sales people and we got them all. They were incredibly good sales people. They knew everything wrong with their

product and they knew everything that they were losing on in our product and now they were selling our product. That's when the thing just took off.

One of the best things that I've used subsequently in my career is go after the competitors. It sounds logical, but there is a time to do that and if you get that timing right, you can really accelerate your growth. That really kicked in the whole marketing and sales organization that I think was better than or as good as the development organization. We were facing MSA at that point as the primary competition. If you know anything about John Imlay, who'll be here today, or Howard Smith, all these guys who became very good friends of mine, they are quintessential sales guys, marketing guys. Their products were never that hot; they'll admit that themselves. Nonetheless, we needed to get up to their level of sales and marketing, and we did. It became quite a battle. Now, this is kind of like how Microsoft and Lotus were in the old days. MSA and McCormack & Dodge had dirty tricks going on. MSA would cancel our seminars that we were doing in hotels. We had to get a password system with hotels because the main way you gave your presentation was at breakfast seminars, something like that, and in a somewhat remote city like Omaha, people would be coming from five other cities. They'd be flying in to see this. They'd get to their hotel and they would hear that the seminar was canceled.

Grier: How often did that happen?

Landry: A lot. These are some of my good buddies now that did this stuff. MSA started it. I'll make that clear. It was funny. At the time, Donald Segretti was running around with Nixon. That was the level of the competition. It was intense competition because these were big deals. There was big money at stake here and the sales guys were going to make a bundle. Sales guys were pulling \$300,000-\$350,000 in a good year and that was back in the 1980s.

ARCHITECTING ONLINE SYSTEMS

Grier: You talked about a turning point in 1981 when you went interactive and that you were involved in that. Can you describe that transition process?

Landry: It was interesting. When you had batch systems, for the most part, there was no user interface. The only user interface you had was through the transmittal form and the reports that came out. The implication of that is whether they kind of looked the same, if it was corp code here and corp there.

Grier: Corp code being?

Landry: The corporation code that you would be putting into your transmittal form. Given that nobody for the most part was using more than one system, interfacing with that, it didn't matter if the wording was the same on that sort of stuff, and your reports still came out. In other words, the systems didn't have to be that integrated. The individual applications could be part of the same family and you did your best, but for the most part the user is not going to see whether these were written by the same company or not. So, batch kind of gave you that flexibility. Online starts coming about and I'm thinking, Wow! That means the system is right in your face and there would be a benefit therefore to having a system that looked the same and ran the same across all the applications because now you have access to all the applications data and that would require a degree of integration that we hadn't had to deal with before.

Grier: Okay.

Landry: So I was watching what the competitors were doing. This was around 1981 and largely they were looking at on line as an extension of batch. Some of them even went to far as to even more or less put up the card image: this is a keypunch machine with a screen on it. Well, that is not really what it could have been. This scenario has played out multiple times. When the incumbents faced a new technology they looked at it as an extension of what they had already done, rather than looking at it as something completely different; this puts them at great risk against the new company that comes out and says that there is something completely different, and I don't care what the old stuff is, because it is irrelevant. This happened at that period with a company called Walker Interactive. Jeff Walker started the company that was only based upon on line and referred to all the incumbents as dinosaurs. So I thought, "Gee, this is an interesting phenomenon, because I don't think it is going to evolve as just an extension. It is brand new. It is going to be pretty cool stuff."

So I started working on the idea that first of all it was very time consuming to deal with these individual on line systems. By doing it as an extension of your existing systems, you are not only maintaining your existing systems, but now you have to maintain all the new codes that are extending that system, and you are not getting any efficiencies out of it. It is just more code. So I thought there could be a way of really extracting out the design of on line systems, transaction processing systems, and also we had done some work on data bases, called Inverted List Data Bases, with a very high ability to be queried quickly, because the data base market was still early then. So the idea was to build a new system that would allow us to build all these on line applications very quickly for all of our applications, because at the end of the day, by extracting out the design and having a data base to run on top that was consistent, we would be able to very quickly build these on line applications and they would all run the same way. They would all look the same. It would force integration, and we'd be able to have an integrated product suite on line faster than anybody else. It also had a development tool built into it to allow for customization by the user or by the systems integrators, and that was Millennium. So we went to work on Millennium, probably, I would guess in 1981. Two years later we came out with it in 1983.

In the interim we came out with another product, I think in 1982, called Highlight or Probe. I think it went under Highlight finally. Probe was a vehicle to do on line query of our existing batch information data bases, but it was using the same inverted list data bases that we developed ourselves that was being applied to the VSAM files to allow for very quick access on line to the data that existed. It was a very cool system if I do say so myself. It was released as a separate product even though it was going to be the core of Millennium which was the big product. So Highlight kind of gave us a good boost for that year's sales, because MSA, for example, had nothing to compare with it, and it demoed like crazy. You could get anything you wanted and people were really interested in that. So Millennium was interesting, not only because we were building the product to build the other products, but concurrently we were building the other products while we were still building the product that they were being built into.

Grier: That was a little bit of challenging development?

Landry: Yes, it was, but we did it, and it worked. It went like crazy. It gave McCormack & Dodge another whole new boost, and we got through the keyhole of the transition from batch to on

line, whereas many of our brethren, like Software International, which was a very big software company in the batch area, never made it through. They never got on line.

VENTURE CAPITAL INVESTORS

Grier: And for you this keyhole was in 1981 to about 1987 or 1988?

Landry: Yes, we were acquired in 1985, so things started getting changed. McCormack & Dodge, for whatever it is worth, was bootstrapped up until 1981, so we went from 1974 to 1981 on our own money, on internal money. There was talk that McCormack & Dodge were rich. The grand total of capital that was invested in McCormack & Dodge was \$2,000.00. Everything else was generated inside.

Grier: And then you went public in 1981.

Landry: No, in 1981 the venture guys came knocking: Greylock, Fidelity Ventures, and TA Associates (Tucker Anthony here in Boston and Henry McCance who is legendary and Jackie Morby who is also legendary, a guy named Peter Danforth who left the business because Fidelity shut down their venture arm. But the bottom line is they came knocking, but we didn't need money. So they said, "Well, we know that. Well, wouldn't you like some money, you guys?" It was a liquidity event for the owners. We sold a portion of our stock to the venture capitalists. The company didn't get anything, so it was not financing of the company. It was to allow us to realize some money that was locked up in the private company. A very good investment as it turned out for those companies, because in 1983 we were sold to Dun & Bradstreet for what amounted to an astronomical figure back then. People couldn't believe 75 million dollars.

Grier: So, you never went public in the traditional sense. You had three venture capital firms that bought some of the owners' stock.

Landry: I think they bought 20% of the company; but we still had 80% of the company. The remaining 80% was split so that McCormack had 40%, Dodge had 40%, Clark had 10% and Landry had 10%. That was how we were owned.

DUN & BRADSTREET ACQUISITION

Grier: And then when Dun & Bradstreet took over, your role changed slightly?

Landry: No, actually the deal was the following. Dun & Bradstreet had determined in conjunction with Bain, a consulting firm, that the software industry was a great business to be in, and that D&B should pursue it as part of their information technology philosophy.

Grier: They were pursuing other firms at the time?

Landry: Yes, they were. They had bought a company called TSI, and Connie Galley, who is here, ran that company. They had started up a company called Dunsplus, which was a PC-based attempt to do some stuff, and another company called Dunsnet which was to do networking. Bob Weissman, who is pretty well known around these parts, was running the place back then. They

decided that they wanted to particularly go after the application software business. They were using the Boston consulting group, Matrix, 2X2 Matrix, which is fairly well known for its market growth and market share concepts. The idea being that the companies that are in high-market growth opportunities that are in the #2 market share position have an opportunity with investment to be pushed up the chart over to the market leader, and so they were looking for a #2 company, and McCormack & Dodge was that #2 company. We had gone from, I remember having statistics that we were one-quarter the size of MSA and in three years we had gone to about four-fifth their size in terms of current revenue. So we were definitely moving up that scale. So that was the stimulus for them to do the acquisition, and I think Frank, Jim and I were attracted by the idea that this was a cash deal and we were going to get money for it. It was structured as an earn-out, and the structuring as an earn-out essentially said that there was something like \$50 million up front, and then there were three-year goal posts that you had to get to, and they were based on a formula. It was a step-function formula using revenues and profit. So it was a pretty aggressive formula that required you not to spend too much to get revenue, because you wouldn't be getting anything on the bottom line, and not to kind of shut down the company in order to get the profits up because you still had to grow the revenue. So it was actually fairly well structured to do what D&B wanted us to do.

EARNOUTS

But there are some problems in earn-outs that I think come about, and that is that you wind up not investing in new strategic directions when the market changes because, "Gee, I have to make that earn out." I have never been a big fan of earn outs since. But the first year, my job was the same, and I was highly motivated to make the numbers work and get on the road and make the presentations and all the speeches and all that sort of stuff. Largely it was what I was doing and in fact, Dun & Bradstreet wanted us to take some of their other properties and bring them into McCormack & Dodge. One of them was Turnkey Systems, Inc. which was TSI. We chose not to do that. We thought it would be distracting to our earn outs, and therefore even though from a D&B corporate view it probably would have been a good thing to do, to have a bigger company, the earn outs stopped that from happening. So that was another indication that earn outs don't necessarily work that well. So the first year we clocked it, we made the numbers. The second year we made the numbers. It got interesting. It was to the point where because it was a step function earn out, meaning that if you got to one level, you would get this percent, but if you got just this one increment above that, you would get this larger percent. So it got to the point where I was considering, in the second year, in the end of December when I was seeing how the numbers were coming out, whether or not I should buy three general ledger systems for myself, because if I bought the three general ledgers, I would go to the next tier and make a lot more money than it would cost me to buy the three general ledgers.

Grier: Did you do that?

Landry: No, I did not. But the thought had come to mind, internal investment. What are you going to do? Three general ledgers. But in any case, we had a CFO back then by the name of Roger Weissman, who was an excellent CFO, and Roger was as honest as the day is long. At that point, if you know what happened with Computer Associates, they would leave the quarter open and see what happens, and then backdate the contract. Roger said, "If that contract is not in here on the fax machine by 12:00 midnight on 12/31, it ain't getting booked." So we were all sitting around the fax machine on 12/31 with our spreadsheets calculating our net worth because we could see that

every contract that came in was going to have a radical impact on our payout. Yeah, Brazil, look at the Brazil contract.

I should comment on one other thing. Weissman was the CFO. I believe McCormack had left the business by then. Dodge was running the place, but really the way that it worked was that Bob Weiler had sales, marketing and support. I had development. I can't remember if Dudley Clark was gone by that time either actually. Yes, I think he was gone. So I made them, Weiler sold them and Roger counted them. I had known Bob Weiler before this period. They had hired him in as a sales guy. We took him into a restaurant down here, Callahan's. He was like the fourteenth guy we had hired here. Callahan's was the place. They had martinis that were served in 16 oz. frappe glasses. It was a place that people went for lunch. It was a wild time back then. I mean, it wasn't just us. Other people were obviously there, but one of the ideas was that if this guy is a sales guy, he is going to be put into situations where he better be able to hold his liquor. So Jim and I took him out as part of the interview process to Callahan's and from 12:00 to 4:00 tried to get him drunk to see if he could hold his liquor. In fact, he did. We were gone, but he was still going strong. So that was the interview that we had with Bob.

LEAVING D&B AND MANAGING DMS

In any case, Bob Weiler turned out to be a terrific salesman and then a terrific sales manager. He became head of sales and also one of my good friends. The point behind that is that we looked, in 1985 now, at what the earn out was looking like, and we thought we were not going to make it. So it was time to start looking at other opportunities. Bob and I decided jointly that we would start looking at other opportunities and we went to our venture capital friends, who were the same guys who had funded us, and in fact they had a company. By this time McCormack & Dodge had acquired a number of companies, which I had left out, so we were in financials; we were in human resources; we were in manufacturing, and those were essentially the major software plays that were going on back then. Manufacturing was the newest one, MRP. So we bought a company called Rath and Strong, "Milleniumized" their software and put it in as part of the folio and sold it largely to defense contractors. What happened was that when Bob and I were thinking about where we were going to go next, the idea was what is after manufacturing. Well what's after manufacturing is distribution, logistics, warehouse management. And as it turned out, there was a company here in Lexington, Massachusetts called Distribution Management Systems, and it was in trouble. We were kind of brash young guys who figured we could do anything, because we had done it once already. So we took that company over. We got a third of the company from the venture guys to take it over. I had some ideas back then about the use of artificial intelligence technology as applied to commercial applications systems. I became somewhat enamored of it. I went out to Stanford and talked to some professors out there. I met a few guys who were starting companies, TechKnowledge, Telecorp, and a guy named Harry Reinstein, who did Aion, who had come out of IBM. There was this diversity of opinion that AI was completely separate and required LISP and LISP machines, and it is very complicated and you wouldn't understand it. And I thought, "Gee, there are some components of it like backward chaining inference engines that aren't that difficult to understand and could be wonderfully applied to commercial applications systems, but not on a separate box, on the same box as the applications systems." So at DMS, Distribution Management Systems, when we got there, the idea was to take the logistics systems and apply our artificial intelligence to them but in a commercial environment. So I wrote an inference engine in COBOL. Well this, of course, was up against the high priests of Lisp and Prolog, and it was laughed at by that community. Of course, that community went away. And needless to say, I was on every

speaking circuit going at that point with a very compelling story which was that this is great technology that has been absolutely misapplied. It needs to come back into the commercial world. And we did that. We introduced a product called Application Expert, and it was an expert system for integrating Expert Systems technology into commercial systems. In particular, again, it was based upon the idea that user interfaces could be very much more intelligent than just you fill out a form and I will tell you what you did wrong, which was really the way that most systems worked. Instead, the system was based upon what you have told it so far, will ask you only relevant questions which are correct to what you have already told it. To this day I believe that that is under-exploited. So we began selling that product in conjunction with our warehouse management product.

Grier: This particular market was targeted for people doing what?

Landry: Largely warehouse management. That was anybody who had big volumes, whether it was auto parts or food or whatever, it was the idea of optimizing truck routes, you know forklift routes around the warehouse. Here is the pick list, now how do you optimize the route the guy takes? You know, these products back here in the warehouse are getting picked a lot with this product, why don't we move them closer together? In fact, why don't we move them closer to the front of the warehouse, because those are the most frequent? So the system would monitor all this information and then optimize the way that it would be done. It was distribution software which was the opportunity that we saw. It was very highly fragmented. As it turned out, we discovered that we were the largest player in the space even with only a 1 % market share. There were no statistics in fact. This is one anecdote. Since this was what was called a burn out turnaround, meaning that it had a set of investors, the company had not done very well, a new set of investors wanted to come in and wanted to bring a new management team in and that was us, and those were our investors. But we found out that the timing of doing this was critical. They had better settle what the deal is between the new investors and the old investors, before the new management team steps in, because what happens is the old guys say, "I'm not getting burned out here. You guys can go to hell. I'll put it into the tank." So to raise money from the new investors who were bringing us in was, in fact, much more difficult. We thought it was all done. In fact, we came on board, and it wasn't. So we had to go raise some more money. One of the venture funds that we had gone to was a company called Morganthaler Ventures out of Cleveland. I remember it well, because the day that we went there to give them the presentation in Cleveland was the day that the shuttle disaster happened. So I at least have one point that has a fixed mark.

Grier: 1986.

Landry: I guess. That's probably right. So Bob and I go out there, and we make the pitch, and they call us back in about a week, and they say, "We really love what you guys are doing, but we can't find any statistics about it to say whether it is a big market or a little market or whatever, and we require that. So we are going to fund a study by Arthur D. Little to analyze this market and determine its size and its potential growth, and if we like the results of that study, we will invest, and if we don't like the results of that study, we will at least give you the study." So we said, "Okay." And I have always been very suspicious about market share, market growth statistics, because I think in many cases they are made up by the analysts. Because you know the science and rigor isn't really there. To that end, three days go by, and we get a call. It's Arthur D. Little. "We have determined that you are the largest player in this market. We are under contract to look at the size and the growth of this market. Can you tell us some statistics about how fast is your growth?"

Grier: Did they have any idea who they were calling?

Landry: We told them a bunch of crap. The venture guys called back up and they say, “You wouldn’t believe what a fast growing business you have. We are investing.” These are lessons that I have learned subsequently, but I thought that one was particularly apt. It was so recursive in the way that it worked. So we got the money and things started going well, and we were pitching both the expert system story, as well as distribution being the next big wave of software. Largely, Bob and I thought we could sell the company, and we had become somewhat fond of the idea of selling the company because of the money that we had made off of the McCormack & Dodge sale, and we thought, “Gee, this seems to be a pattern; that the larger software companies are going to be looking for innovation because they are too big and maybe we can provide that innovation.” That is why we picked distribution, because we thought it was going to be the next pickup that would take place. Much to our surprise, in fact, it seemed to work. Eighteen months later, we got a call from Cullinet saying they wanted to talk to us about buying the company. Oddly enough, it was after an article in Business Week where I was quoted as being extremely critical of Cullinet, because they were going to lose out to DB2 on the mainframes. The database vendors were going to lose to DB2, and they were kind of asleep at the switch regarding SQL. John Cullinane personally called me on that. What happened was that the quote ran in Business Week and I got a call from Cullinane, who I knew but not very well, and I figured he wanted to talk to me about the article that I had been quoted in that had been critical of his company. No, he wanted to talk about buying DMS. I thought, “Boy, this isn’t bad.”

WORKING AT CULLINET

So I believe in 1987 we sold DMS. The venture guys made four times their money in 18 months, and we went to work at Cullinet, Bob Weiler and I. Cullinet had essentially spent a lot of money on acquisitions, including our own, that were perhaps not great. I frankly think DMS was a very good acquisition, but they made some other ones that were really troubling, and at the same time they were struggling with not having a Sequel data base, and their core business was data base. You have to remember that Cullinet, if you are not familiar with it, had 27 consecutive quarters of uninterrupted earnings growth, and was the first software company on the New York Stock Exchange. It was a powerhouse company. But they had kind of missed the boat on the PC. They had a Golden Gate product, and that didn’t go anywhere. Dave Litwack was running development, and then we got acquired. At that time Dave Chapman was the president of Cullinet. He was running it. John Cullinane was chairman, I believe, at that point. I came in, and they put me as head of applications development reporting to Chapman instead of to Litwack who had all development prior to the time I got there. Litwack was a very smart guy, but he was slow on the pickup of getting to SQL, and that was killing him. The problem that I had as head of applications was that they had a pretty rich applications suite. They had actually licensed McCormack & Dodge’s General Ledger. I was back to having my own ledger in front of my own portfolio. But the problem was that the applications, as I referred to it, were at the end of Litwack’s sewer. I was stuck running an applications division that was dependent on the tools and the data base of the other guy, both of which I thought weren’t that good. So I decided that it wasn’t going to be pleasant, but I became very enamored by client/server architectures which was very early in 1987. I thought Cullinet had an opportunity to take its base into the client/server world and become a leader again in that space, but that wasn’t going to happen, because that would have nested a tools group in the data base group, and we were going to have to make that happen, and that wasn’t my group. I was in the applications group.

So I decided to do a “Go for Broke” at a management meeting that was being scheduled where they brought in the top forty guys worldwide. Unfortunately or fortunately, Litwack couldn’t be there for that meeting. He was in Puerto Rico with a customer issue that was going on. I had put together a presentation on the client/server that this was the new wave, and this is what we should be doing. It was apparently compelling, because by the end of that day, Dave Litwack was reporting to me. Needless to say, Dave was not particularly pleased, and I could understand that, when he got back. He said that he believed that client/server was one of the dumbest ideas in the world, and that he was getting out of there. He couldn’t stand working with Chapman, and he certainly wasn’t going to work for me. So I wished him well.

We began work on client/server at Cullinet. The irony of this story I’ll come back to in a second. In any case, the problem was we didn’t have enough money. They had spent all the cash on acquisitions and the market value was so low that you couldn’t get another financing that would give you the money to do it. By this time they had what Weiler and I decided to call the “Saturday night massacre.” Cullinane fired Dave Chapman as president, he fired the CFO, he fired the chief counsel. Weiler became president. I had been on the Board the whole time at Cullinet, so now Bob was running the company but we were both looking at it and saying, “This ain’t gonna work. We have to get rid of this company.” Cullinet was a fairly large company. It was still publicly listed. Cullinane is a justifiably very proud man, and we’re thinking that we need to sell it. John was not really fond of the idea of selling the company. Finally, we got him convinced that we should sell the company, but he was still very uncertain about it. As it turned out, there was only one company to really sell it to and that was Computer Associates, because Computer Associates was the company that took customer bases and essentially milked them for maintenance and that’s where we were at. We’re not going to be able to build this new architecture and get it out and so we had a Board meeting and I was on the Board. That was going to be the Board meeting to determine whether or not to sell the company.

We knew that John had a very large board, about 20-25 guys on it, Bobby Orr, the hockey player was on it, Gerard Dougherty, who was Kennedy’s political advisor in the White House, was John’s political advisor on the board. It was a New York Stock Exchange Board politics company and board and we had kind of seen how certain decisions were made at the board level before, the most notable being the Saturday Night Massacre where essentially John had lined up the board the previous night by making phone calls to each one of them and lining up the votes, so when the management came in, who were also part of the board, Kaboom!. The first thing on the agenda is their dismissal and how did that happen. Well, John had organized everybody the night before. We had decided it wouldn’t be surprising that John might try to do this on the day of the sale of the company and the sale of the company was going to be to CA and just as kind of a definite thing, of course, Charlie Wang was a Chinese guy and John’s a South Boston Irish guy, and I think the idea of that was very disconcerting to John. So, we thought that he might try calling the board the night before and try to upset this, and we didn’t really want that to happen, so Bob decided we would wait until 8:00 PM that night and Bob would call all the members of the board saying if you turn this off or down, you’re potentially in trouble for lack of fiduciary responsibility because we think this thing is going down, which we did. If you take it down, you are potentially liable at this point for rejecting this offer. Apparently, that worked. It’s true. It wasn’t made up.

Grier: Did Cullinane call the board as well?

Landry: The story is yes, but we called them after he did. So when that happened, I believe it came as somewhat of a surprise to him when the vote was tallied. I don't want to indicate that it was so disruptive, but we did believe that it was appropriate for us to call the board to tell them, I didn't call, Bob did all the calls, but to tell the board that they should take this deal because it's the right deal and the management is telling you that's the deal that you better take because we don't have a better story. So, we sold the company to CA for \$387,000,000. It was a decent deal and I think CA actually did well by it as well. But, one of the things that CA conveniently does is that they want to inject their culture immediately into their acquired company and they literally have the sign guys come in the morning of the deal getting done to take the Cullinet sign down and put the CA sign up on the building just to get everybody kind of oriented that this is a new game in town. And the other thing they did was they believed that the culture of a company is embodied in the top management of the company, so therefore, they got rid of all the top management, which was fine by us. The last thing we wanted to do was go work for CA. So, we took our options and exercised them and left.

STARTING AGILITY

Bob went to Interleaf and I decided to start another company. I had been working with a guy named Tom Malone at MIT, probably in 1988 when Cullinet was sold. Right after that, Malone and I started a company. Tom had developed this technology called Information Lens at MIT, at the Sloane School, and Information Lens was a new technique to use electronic mail as a vehicle for collaboration for requesting information out of systems via an email message that comes back to you with an answer via an email message, really quite wonderful thinking. I had read his paper, got to know him, so we decided to start a company to commercialize that idea. Agility Systems was born, as Tom and I formed it, and I wrote the software, the prototype software, but it was really actually fully executable in my Cape Cod house over the summer. Tom continued to teach at MIT. We'd get together every once in awhile and it was becoming a little tedious. The reason was, like Weiler and I would work together because we had very complementary skills. In the case of Tom and me, we had kind of the same skills. I was more technical than he was, but we were both developers. It's hard when you have two partners who are developing, particularly if one is an academic. Even though he's a great guy, I think both of us realized that this probably wasn't a match made in heaven in the long term because we didn't have the sales and marketing guy. We had two development guys. At the end of the summer, in September, I wound up showing the system to some guys at Dun & Bradstreet, and Dun & Bradstreet, of course, had acquired McCormack & Dodge back in 1983. Now, one of the guys at D&B was John Imlay who was head of MSA. He had been acquired by Dun & Bradstreet in what I think was just a horrible acquisition with Dun & Bradstreet thinking that they could essentially own the applications market. The problem was that market, as defined by large mainframe software companies, was going away. So now you've got the whole market but it's going away. Nonetheless, they were looking for ways to revive it, and I think John also wanted me to come back to help him out. The convenient way to do that was for D&B to buy Agility. So, they bought us and I went back to work at Dun & Bradstreet as CTO.

I discovered that things hadn't progressed at all since I was there the last time. In fact, it had gotten worse because the rivalries between MSA and McCormack & Dodge that I alluded to earlier, now that the companies were together, here they have two product lines that are completely different from each other, in fact competed with each other. Now they're coming from the same company and it's like, do you want the Millennium version or do you want the Information Expert version.

BACK AT D&B

What happened was I needed to do something quickly and I wanted it to be client/server, but they hadn't developed any good client/server technology. Well, neither had Cullinet for the reasons that I indicated, even though I wanted to do that back then. I wound up getting a call from a guy named Mitchell Kertzman, who is very well-known for what I'm going to tell you. Mitchell was a friend of mine who had an application software company in the HP3000 manufacturing resource planning arena here for 12 years that was marginally okay but living day-to-day. Great guy though. He called me to say that he wanted to start taking his manufacturing software and putting it into a client/server environment. He was looking for some lead guy to make that happen. One of the guys who had come to see him was a guy named Dave Litwack. Litwack was the guy who had said it was the dumbest idea that he'd ever heard of. Now, one year later, he's at Mitchell's doorstep saying he wants to lead him into client/server. I said, if Dave's got client/server religion, hire him in a heartbeat because he's technically great. Dave hired him. The company was called Computer Solutions at that time. Dave started building the software to take their manufacturing software to a client/server environment. He built it somewhat like Millennium was built, as a tool that could be used to now build this software and other software. Well, in somewhat of an incredible irony, the company became Powersoft, and the product was Power Builder. Powersoft was a blockbuster IPO which was subsequently acquired by Sybase. So the guy who left Cullinet because he thought client/server was the dumbest idea ended up building the premier client/server product in the world, Power Builder. At the same time, I went to a conference; this was early on, probably still in 1989. I wound up getting a seat next to Dave Litwack. I said, "So what are you doing at Computer Solutions?" He said, "I'm building this product." I said, "Well, let me see it." I took a look at it and said, "That's what I need for Dun & Bradstreet." I licensed that product for Dun & Bradstreet. I was the first licensee for Powersoft in the country and having the Dun & Bradstreet name associated with Powersoft was the endorsement it needed in order to take off and make it. It was an incredible series of relationships that caused that to happen, and Mitchell did very, very well. As did Dave.

LOTUS AND NOTES

I, on the other hand, was at Dun & Bradstreet. We were doing the work, but it was very tedious work, and somewhat conveniently, I got a call from Jim Manzi at Lotus. This is now 1990. Manzi had just endured getting 1-2-3 for Windows out, which was a freakin' disaster. He wanted to clean house and get rid of Frank King, who was heading up development there, and he asked me if I wanted to be the chief technology officer at Lotus and I did, but not for anything to do with spreadsheets or word processing, but because of Lotus Notes. The work that I had done with Malone was in this collaborative space. Lotus Notes was just being introduced. I had seen it. I really liked it. I thought I could help, but I wanted to be a part of it. So, I told Jim yes and I became the CTO at Lotus. That was the first time Lotus had a CTO and a head of development. This was 1990. Essentially, then, Lotus was a great trip. It was a huge company and Manzi is a piece of work to work with. He's still a very good friend. We were doomed in the spreadsheet business because Microsoft had knowledge of what was in the operating system and was able to make the new release take advantage of all the new features in their product, but we couldn't put them in our product because we hadn't even seen what was in the new operating system until it was released. That was a game that we were just going to lose. Even if our software was better, which I maintain it was, it wasn't going to matter.

Grier: In fact, you were ready to fold in 1990?

Landry: I recommended that we get out of the desktop products business. The problem was that it was the cash cow that was still feeding Notes. While Notes was building up, we needed the cash cow. We were a public company so you can't have one of these things in your revenue. So, essentially we were not investing a lot in the desktop products company. We were investing in the Notes and email business, which was quite smart because while Microsoft finally got email, and it took them a long time to get email, they never got Notes. They never understood it. To this day, they don't understand Notes. Unfortunately, neither does IBM, who now owns it. It was a very interesting product. One of the things that was interesting about Notes was the way that it got funded at Lotus. Jim Manzi came into Lotus when Mitch Kapor was there. Mitch had liked Jim when he was at McKinsey & Co.. At McKinsey, Manzi had no knowledge of the software business at all. He was a reporter for a Westchester newspaper prior to being at McKinsey. Then he went from McKinsey to Lotus. He was assigned by McKinsey to Lotus and then subsequently became an employee at Lotus and was, I think, president when Mitch was chairman. The idea was that Jim was a very hardcore operational guy and, of course, Mitch was a "let all the flowers bloom," transcendental meditation guy, so most of the industry thought this was a pretty good mix because you had operational discipline with a good creative guy. But that idea was busted up when Mitch decided to leave about four months later and just get out of the business completely and here's Jim running the business. Of course, having 1-2-3, which was printing money back then (there probably hasn't been since a more successful product than Lotus 1-2-3), so any follow-on product was by definition not going to be another 1-2-3. So, you were kind of doomed in many ways that no matter what product you came out with, it was never going to be as good as the one that you're known for. Jim tried and experimented with a number of different products. Unfortunately, some of them were very creative products, but didn't turn into mass market products.

So, he was taking quite a bit of heat in Wall Street and he has somewhat of a semi-abrasive personality; when challenged, he can come right back at you. He wasn't winning a lot of friends, but the result was that Ray Ozzie came to Jim with an idea. Ray had written Symphony, which was supposed to be the follow on product to 1-2-3 but was not a very successful product. Ray had another idea to write largely a conferencing, a discussion system using local area networks. Now, local area networks back then were infantile, so, totally unreliable. If you were going to write a system like this, you were going to have to write a lot of the local area network code yourself as well, and it was risky and Jim wasn't sure. He decided, let's do it in what would be called off-balance sheet. Here was the deal that he offered Ray. You can set up a company of your own. We will fund the development of the product in that company in return for having exclusive marketing rights if the product comes out. We will pay 8% royalties back to you off the top for everything we sell, and by the way, did you hear me say that we'll pay all your expenses for development and we'll do all the sales, marketing, QA, support and everything else, and we'll pay 8%. How long do you think it took Ray to say, "Sold. I'll take that deal." And he did. So, what happened was that another company, Iris, was formed. Iris developed Notes. It sounded good on paper. The problem was that it was the core product for Lotus and now it was actually being run by another company. So, to get things done in Notes was quite a chore for me personally because I had to negotiate with this separate company in order for them to put features in that would be complementary to Lotus' desktop products, which was really part of the key of what I wanted to do. So, what sounded like a miraculous way of getting entrepreneurship into a large company turned out to be, I think, a very painful, as we discovered later, method. We discovered it later because we started doing projections when Notes started taking off, on how much money Ray was going to make, and he was going to make scads of money. So, we decided we needed to buy him out. Every day that went by, the price went up because it was selling so well; there was no incentive for him to sell. Finally, we wound up

buying him out for an enormous amount of money, including stock. We booted the next quarter; the quarter after that deal was done. Ray came back at us with his partners and said you guys misled us. You knew you were going to blow the quarter. Anyone who is in the software business knows you never really know what your quarter is going to be until it's over. And so Ray said, "I'm going to sue you." We settled with him again, essentially doubled up his stock, which was significant in the first deal, and then we got acquired by IBM six months later, at \$64 a share. I think the deal we made with him was at \$16 per share. Ray did very, very, very well.

IBM ACQUIRES LOTUS

Grier: It sounds it. You were acquired by IBM?

Landry: In 1995, we were acquired by IBM. I was giving a presentation down at the EPA in North Carolina, their second largest office, on Notes. One of the things that I had done was hook Notes up so that it could be an alerting vehicle. It would essentially read news wires on the server and determine whether Borland, Microsoft, Novell or Lotus was mentioned in the news wire. If it was, it would strip the headline off the news wire off send it to my pager, which was a particularly cool piece of demoware. I was giving this speech. 7:30 in the morning it started. It was a very early gig. I opened it up to Q & A. There were about 40-45 people in the room. This woman, this is a true story, she literally asked, "What is your relationship now with IBM?" because we had a relationship with IBM for the selling of Notes. The buzzer goes off in my pocket. I'm beginning to answer her question and I see the headline IBM in hostile takeover of Lotus for \$60 share. I looked at that and I said, "It's changing." I read what it was. That's what happened. Gerstner had essentially arranged for a hostile takeover of Lotus, largely wanting Notes as the key item because Notes would give them a presence on desktops that they never had before and it would also pull in a large amount of services contracts, and they were heading towards a very large professional services operation. So, that was the rationale for it. Jim went ballistic. He was ripped about this. He got a call from Gerstner that morning saying I just want to tell you what we're doing. So, the way that it was done, not that Jim would've done it any other way, he didn't want to do it period. But the rest of the management team wanted to do it. We thought that we would never see \$64 share for Lotus stock again. We were competing against Microsoft and the desktop business was going away, but Notes was really growing. We were going to go into that Valley of Fatigue and that wasn't going to treat the stock well. I had already seen what happens to company whose stock prices go down to the point that they can't do anything.

This was a great deal for the employees and for the stockholders. Jim, I think, didn't want to do it largely because he wouldn't be running Lotus anymore. He referred to Lou as his supervisor, Lou Gerstner, CEO of IBM. He tried to throw up every legal blockade that you can do, and they all failed. We put KC Branscomb, who was the head of the business development at Lotus on the negotiating front. KC, when appropriate, could do something we call the wall of sound, which was talk nonstop. She talked nonstop for three days to the IBM deal team and eventually they said stop. \$64 bucks a share. We'll up the offer by \$4 if you just stop talking, and they upped the offer. We sold the company for \$64 a share.

THE INTERNET

I got a call from Gerstner during the period while it was still waiting for SEC approval saying, "John, I want you to head up a team to determine the Internet strategy at IBM." I was planning on leaving.

I knew IBM well and I respected Gerstner a lot. I thought he was a good move for IBM, but I just couldn't picture myself working at IBM. But, I thought the guy just paid \$4 billion. The least I can do is fulfill this wish. I actually thought IBM had a great opportunity on the Internet. I thought the Internet was going to require all the attributes that, for example, Microsoft didn't have then which was scalability, power, reliability, and security. . . all those things that Windows still doesn't have. And that therefore it was going to be an opportunity for IBM to excel again. You'd still have a Windows browser but the back end was going to be the place where everything was really happening. So, when he gave me that opportunity, I said yes. I built the team, the task force, to essentially make a recommendation. Without sounding like a jerk, I'd say I was not particularly impressed with the guys I had on the team because I didn't think they knew the Internet very well. They didn't see the same opportunity. In fact, at the management level, nobody understood the Internet at IBM. www was a mysterious term. I remember Lou telling me this early on. He said he knew I was passionate about the Internet, but he talked to CEOs every day and not one of them ever mentions a thing about the Internet. I said that was good because when they do, you're going to have something special. He bought it. So, I made a presentation in 1995. It was amazing in a software company. This has happened repeatedly. My wife thinks the Lord has put me on Earth to do this, to try to bring people forward on this. Manzi, for example, thought that the way this was going to evolve is that the Internet was literally for geeks like me. I showed them the cover of Time magazine. I said, "It's on the cover of Time magazine, Jim. It's not just for geeks like me."

Grier: No, it's not.

BUILDING AND INTRODUCING DOMINO

Landry: I'll go back to Lotus for a second, the 1994 or 1995 user meeting at Lotus. I was having a hard time getting the management at Lotus to understand the opportunity in the Internet. In fact, one of the worst groups to understand it was Iris where Notes was. They just missed it. Now you have to remember that Gates missed it too. So it wasn't as if everybody understood, and we were the only guys that didn't. But I was convinced this was going to be huge, and to that end, given that I was CTO at Lotus, I did not want to go down in history as the guy at Lotus who missed the Internet. So I had already started a project called Domino, which was a bootleg, literally hidden away project, because I knew if Manzi saw it, he would kill it, because he thought it was going to go to AT&T and it wasn't going to go the way of the Internet, and I thought it was going to go Internet. So we started this project up, and we layered on top of Iris's code our own interface using the Internet, which would have been a lot better done by Iris, but Iris didn't get it. They thought it was a dumb idea. So I had this group, which was called the Domino group largely because two of the guys, Miguel and Julio Strata, two brothers, played dominos at lunch. So when we were looking for a code name for this project, we looked at the dominoes and called it Domino. If you know anything about Domino, Domino is now the premier brand coming out of IBM for what Notes used to be.

We built the Internet version of Notes in a hidden away project, and I introduced it at that user meeting without anybody knowing that I was going to introduce it. I had the opening keynote speech. The user meeting at Lotus is around 13-14,000 people. It is big. It was held at the Dolphin and all the adjoining hotels in downtown Orlando. I had conspired with the woman who ran the conference, Maryann Emerton, that we were going to do a stunt, because the value of emotion in memory is very clear. You always remember those things that have a lot of emotion associated with them. Whether it is bad or good emotion is irrelevant, but it is something that you are really going to

remember. As trite as it might sound, we decided that we wanted a webbed theme to this, and so I would be Spider Man, and I would actually descend out of the ceiling of the Dolphin Hotel, rappelling down a rope in a Spider Man outfit to give my speech. I would run up to the stage and give the speech. Maryann had gotten a stunt man from John Claude Van Damm's movie to teach me how to rappel the day before. We had emptied the whole place. There were only four people that knew; none of the top management at Lotus knew that this was going to be the stunt. Monday morning comes. The idea is that the spotlight is going to shine up to the ceiling. There is going to be Spider Man music coming up in the background. I am going to descend out of the ceiling, repel down, and the whole theme was the web. Get it? Okay? I had to walk down a steel beam to get to this hole in the ceiling that was like a balancing beam. If you fall, you are falling into the audience four stories down. This was probably not exactly the smartest thing I have ever done. So, I get out on the beam, and I am walking down. I get to the hole. I get into my repelling gear with the stunt man strapping me in. The light shines on the ceiling. The music starts. I start coming down. The crowd is going crazy. They love it. I get about 15 feet above the ground, and I stop and I don't know why. I can't get down. I am looking up at the guy in the ceiling, and he is just raising his hands. I have some of my own team guys who are worried that their boss is in some sort of difficulty. They are jumping up and down below me, and I am looking at them thinking, "What are you doing? Jumping really isn't going to help." What had happened was that the day that we practiced it, there was a cloth ball hanging on the end of the rope that would stretch the rope down. Some idiot had taken the cloth ball off, and the result was that there was no weight on the end of the rope, and as the rope came down, remember it is dark so you can't see, it tied itself in a knot at the end, and I was on the knot. I could not see the knot, because it was below me. So I felt around, and I am thinking, "What am I going to do?" I am stranded 15 feet above 13,000 people, and I could be there for days, and I am going to get fired over this for sure. I was thinking I could give the speech with a wireless mike hanging from the rope. Luckily, I felt down and I felt the knot, and I pulled myself up, untied the knot, came down and the audience thought that was part of the act. I ran into people on planes that would say, "Weren't you the guy who...?" So that was putting Lotus on the map, that we were hip to the Internet, and I actually do believe that is why I got the job at IBM, because now there was this perception that we knew what we were doing, and in fact I think we did.

But in any case, part of the reason that I think IBM bought us was our Internet savvy and then we made an Internet version of Notes. So I started that project. I gave the presentation to the IBM Management Committee which consists of the top 20 people at IBM, worldwide. I didn't know how it was going to go. It was supposed to be a great honor to present to this illustrious group. I'm thinking, "What is it?" and I don't know if they are going to buy this stuff, but this is it. I am going after this. I have an hour from 3:00 to 4:00 of the one day meeting, and I am told very clearly I am going to stay in bounds on that. So it is getting to be close to the end. I still have some more stuff to do, but Lou stops and says, "Blow off the guy after him. I want him to keep going." I thought that was a good sign. So I wound up going right to the end. Lou gets up and literally starts pounding the podium. He says, "You guys have been talking about network computing here for three years." He says, "None of you could ever tell me what it is. This is what it is. This is what we are going to go do. I want plans from each one of your divisions on how you are going to implement that strategy in the next two weeks." I thought, "Hmm, this is going good." He subsequently says, "Get John the private jet tonight. I want him to come to dinner. I want to talk to him. Sit him next to me."

A SPECIAL DEAL WITH IBM

Grier: So you got the private jet?

Landry: I got the private jet, but better than that, I saw him two days after that. I was back in Armonk, and I said, "Lou, you know, I think I am leaving." He says, "I know. I have heard that. I don't want you to do that. I really want you to stay. We will do anything to keep you. If you want a lab next to your house, we will build you a lab next to your house." I said, "I live on a farm. An IBM lab is seven stories. A lab with cows around it is going to look really stupid in my town." I said, "I really appreciate that. Let me tell you what I think is going on. What you heard is all coming from the companies that I work with who are small companies, because I had started investing in being on the boards of and advising small companies in the Internet space." I said, "It is all coming from those companies. You don't have any visibility into those companies, and you are not going to get it from McKinsey." I said, "One of the reasons is that I am already doing work with McKinsey. What about this? Would you think about letting me work for you in a part-time position but still as an employee, a vice president of the company to do technology strategy, but let me work the other 50% of the time with small companies in any role that I see fit that is not going to be competitive with IBM, but in that way I am going to keep my fingers into what is going on at the edges, and I will be able to feed it back to you unpoliticized. I am not defending a division. I am not building a department, and you are going to get what you just got. If you like what you just got, I think maybe we should keep that relationship going." He said, "I can't do that." This was in his office. I said, "I didn't think so, after all it is IBM." The hairs on the back of his head went up. It was more or less, "You little shit, don't you tell me this isn't your father's IBM. This is my IBM." He said, "We will talk about this after we get out of this meeting." We went to this meeting. We were forty minutes in the meeting, and when we came out he said, "You've got deal. You win." This is a word that Lou uses all the time, but he never has "you" in front of it, so this was quite a different deal.

So I worked for five years, from 1995 to the end of 2000, six years, in this dual role of working with the small companies, including two of them that I was chairman and CEO of that we sold, which is in the bio. One was Narrative which we sold to At Home and the other was Any Day which we sold to Palm while I was concurrently being VP and doing technology strategy for IBM. It was a beautiful position of being able to arbitrage information up to IBM and arbitrage information that was happening at IBM back down to the smaller companies. So that was a great period, and I enjoyed it a lot. I continued to work with the small companies. I love working with small companies and trying to grow them. I participated on the boards of a number of companies during that period of time. Most of them were either IPO'd or sold, so it was a very lucrative position. It lasted up until 2000. By that time, we had turned the battleship around. It was really fun to take IBM and move it into a different space, and we did. Certainly, I was part of it; but there were a lot of other guys who were part of it too. I really respect Gerstner. He really took this thing and moved it, but I actually felt I participated in that pretty well myself. That was fun. But by that time, after six years, it had kind of lost its charm. It had its own momentum and its own politics, which were nonexistent back in the early days as we would essentially build a completely new team, but it had really become problematic at IBM during that period of time.

AFTER IBM

So I left at the end of 2000. Steve Mills and I never got along. Where Landry's budget was, meaning where they were paying me, and they paid me dearly, which was very nice of them, was always a hot potato. I would get phone calls in October when they were trying to do the budget as

to who is picking up Landry this year? Is it Gerstner, is it Thompson in the software division or is it Herreld in the strategy division? Sometimes they would split it. There would be this kind of flurry of activity, and I never knew how it was being divvied up. Well, it turned out that three years before 2000, the strategy group with me as one of the leads had written a rather negative report about Websphere, which was a core product for IBM. The problem was that there was no product. There was a bunch of marketing hype, but there wasn't anything, and a guy named Steve Mills was running it. It was very critical, but I thought it was very right as well, and as it turned out, it worked. They got their act together and actually built Websphere. Mills and I had never gotten along. I always thought he was an insider guy and I thought IBM needed a lot more outside influences, including buying companies, to bring in some new ideas and new people. At the same time Mills thought Notes was very competitive with Websphere, which it wasn't. It could have been a beautiful complementary relationship, but he had a very defensive posture about it. So he and I had many battles. Thompson, by 2000, announces he is going to retire as the head of the software division. Mills got the job. That year, in 2000, I was in Thompson's budget. Mills sees me now and goes, "Hmmmmm." In traditional style, just unbelievable, how did I get notified that my services were not going to be needed the following year by Steve? Would he call me on the phone? Would he ask me to come down to Armonk? Would he send me an e-mail? No. He sends a fax. So bottom line is, that ended that. It was convenient at the same time. We parted on good terms. There was no animosity or anything like that. I was ready to hang it up there anyway, so the timing was right. That gave me more time to work on other companies.

I co-founded a company called Joint Solutions to do web services management with Dennis Kelly. Dennis and I had worked at M&D. He was COO; I was chairman and CTO. That was the company we sold to Palm. Dennis went to Palm and worked there as head of web services for a while and then decided to start a company with some of the guys from Any Day, including me, which we co-founded called Adjoin Web Services Management. We didn't take any venture money. We funded it ourselves. I think it was sixteen months, and we sold it to CA, another company bought by CA. So I have sold two companies to Dun & Bradstreet and two companies to Computer Associates. This one was sold positively. CA is a very different firm than it was back then. That allowed me to then recruit Dennis into Adesso, which is where I spent the last two years building a new system. That system is built upon kind of a conglomeration of things I had built before. Really if I had to say, it is a combination of Notes, Domino and Millennium. It was a lot of fun going back to build it. We built it on a shoestring budget, all first generation or non-Americans, a guy by the name Bob Hammerjon and the whole team. And I say that only because these people really work hard like the old American programmers used to. You go to Lotus and you find that people don't work that hard when they get privileged. So this was a great team. We introduced the product in October. I brought in Dennis in October as CEO. We just raised 8 million dollars in venture capital from the Carlyle group and we are kicking. So it's just the same game over and over again. But it is always fun, because the technology changes and what is good about, at least from my career, is that what I like the most about it is the new stuff. I like working on the new stuff. I don't like working on the old stuff. So how do you do that? Well you do it by starting companies and selling them to the bigger companies, because the big companies typically aren't working on the new stuff and realize that they need it. At the same time, when you are acquired you'll probably have some period of indentured service to that company, like we did at Dun & Bradstreet, but the chairman never does. So the chairman gets to leave and do the new stuff. So that is why I always take the chairman role and keep the CTO role because I think that is what I do the best, but typically, as things progress, as will happen with Adesso, I will drop the CTO title and just become chairman. It continues to work. There was a little bit of a dry spell there in the dot.com bust but I hope it continues to work. It isn't

quite the business it used to be. It is not as easy to do this as it used to be, but it is still a lot of fun.

Grier: Okay. Well I think that is the sign that we have reached the end.

Landry: Yes, perfectly timed.

Grier: Well timed. All right. Thank you.