RDBMS Workshop: Growing and Selling

Moderator:
Luanne Johnson

Recorded: June 13, 2007
Mountain View, California

Table of Contents

RDBMS Workshop: Growing and Selling

Conducted by Software Industry SIG – Oral History Project

Abstract:

Representatives from Oracle, Sybase, Informix and IBM discussed how their companies grew and marketed their products after they were established. They covered a variety of subjects including how each of the companies pursued growth through technological advances and through platform selection. They also discussed the marketing directions each took in terms of both vertical (industry) markets and horizontal (general applications and tools). There was a discussion of personnel transfers among the companies and some their efforts at acquiring other companies. The adoption of SQL as the standard language was explored and the importance of specific 4GL's in helping customers build applications. Finally, the impact of interoperability and client server on the companies was examined.

Participants:

Name	Affiliation
Luanne Johnson	Moderator
Don Haderle	IBM
Mark Hoffman	Sybase
Mike Humphries	Oracle
Robert MacDonald	Informix
Roger Sippl	Informix
Thomas Haigh	Historian, Univ. of Wisconsin

Luanne Johnson: To recap a little bit. Yesterday, we really focused on how the independent RDBMS companies got started and how they originally saw their initial markets and we learned that most of them were clearly bootstrapped. Oracle, I believe, was initially supported by consulting and services revenues. Sybase was bootstrapped, but just not quite as long as some of the others since you came along enough later; by that point, there was more

opportunity to go after venture capital. So while you were initially bootstrapped, you didn't have to live under that mode for quite as long as the others.

Mark Hoffman: Only under duress.

Johnson: While we don't have any Ingres people here today, but they were not bootstrapped. When they went out of the university, they went out with venture capital money.

Hoffman: Well, it sounds like they got it off the ground on their own savings but that was probably only six to 12 months or so.

Johnson: Anyway, I want to talk a little bit this morning about the growth rates and I want to talk about how much of that growth was internal and to the degree that people got involved in acquisitions and how that affected them. We touched on some of this yesterday but let's just see from where people started with their initial concept of what kind of a company it was going to be and how it went from there. So anybody want to start off with that?

Hoffman: What period of time are you thinking of, Luanne?

Johnson: Yesterday, we were really looking at up through about 1985. I think Burt had envisioned this as more being from 1985 and then on into the 1990s. We want to explore the 1990s and what happened then, how the whole database marketplace changed then.

Don Haderle: Did anybody here stay with their companies after the early 1990s?

Hoffman: I was there until 1996.

Haderle: So was I.

Mike Humphries: Longer.

Sybase and Informix Growth

Hoffman: Part of our original business plan at Sybase was that we were going to OEM our product and so, as we were building it, we were out talking to other companies. But to a person, they all came back and just said no, no, no, we're going to build it ourselves; we can do it ourselves; we don't need you guys. After about a year, we still hadn't shipped the product yet, so we just said that's not going to work and we shifted our product to selling it directly ourselves and going after the marketplace. During the growth period, particularly after this initial stuff, it was just knocking on doors and exposing people to the new ideas, why we're different from the

other databases that were out there sooner and that they were probably already using databases in some fashion for at least some applications. We had to begin to grow the company that way. As I said yesterday, we really had some breakthroughs with some of the large applications and, most important of all, with Wall Street. We had phenomenal growth through the Wall Street firms and probably we were into every single major firm on Wall Street at one point, ran their applications. We totally dominated that area.

Johnson: Was that a case of unhooking them from another database product? I would think that those firms would have been database focused very early on. Was that a case of going in and displacing somebody else that was there?

Hoffman: Not really, because they were trying to use these workstations. You'd go to a broker, and he would have maybe five or six workstations sitting there and he'd be looking at data over here and looking at data over there, trying to figure out how to make that transaction.

Johnson: Okay, so it was a natural for a database company going in, then.

Hoffman: Right. And then Sun came in and, of course, they could bring it all into a single window and manage it that way and then get a common database where they could really just look at one or two systems and analyze what was going on in a stock and then place the order, which was really a powerful solution.

Thomas Haigh: So, was that bringing you close to the applications business?

Hoffman: Did that bring us close to it? No. We didn't build any of those applications ourselves; we were just providing the database management. They were all rolling out their own applications themselves.

Robert MacDonald: But in a sense, Mark, your professional services were probably like ours where, when they were building those apps, some of our guys might be on the project team assisting them.

Hoffman: Yes, but totally around the database.

MacDonald: But when we'd go into retail, like for K-Mart, they were doing all these new systems to be able to find out what was going on in the stores and things like that and so we sent a bunch of professional services people up to K-Mart headquarters. The customer owned the app, they were building the app, but they needed a bunch of our experts on hand so that the database aspects of the thing were going to work flawlessly. So you sort of were involved with the development of the application but you didn't own it.

Haigh: One of the interesting things that came up in the Oracle session yesterday was Oracle's determined push into the applications business, which failed several times but they kept pushing into this area. Now, obviously, it's turned into competition with SAP. So, strategically, did you ever think, oh, maybe we can integrate here and have a second business as this application area is where our database is strongest or was that just never on the table?

Hoffman: We never pursued providing the applications. We were, at that point in time, just growing the business as aggressively as we could. Once we started shipping in 1987, up through 1995, it was just growing and managing the main business.

Johnson: You were talking yesterday about some of these fantastic growth rates that Sybase had. Please state that again just to make sure we have it on the record.

Hoffman: Yes. And I can only really remember the earlier periods. In 1987, we did six million dollars in revenue. Then it was 24 million, 56 million, 102 million dollars and then I think it was 200 million and something dollars.

Johnson: This is all in a matter of a few years.

MacDonald: That kind of tracks. I'm looking at the Informix 1989 annual report and you look at the five-year period because we were already in existence, but we did 18 million in 1985 and then it jumps 36 million in 1986, 68 million in 1987, 103 million in 1988, 145 million in 1989. So you look at just those four years going from 18 million to 145 million, I mean, very similar. Plus, I think, there's something else very important here. As we talked about yesterday, you look at the Wall Street stories Mark's talking about, you look at our memory of it, by 1989, we were selling to a lot of end user organizations directly, which means we were getting a much greater percentage of the revenue because, the majority of our business had shifted from the indirect to the direct. And there was an incredible amount of direct business so that just fueled revenue growth like crazy.

Johnson: Yes.

Hoffman: Also very important was the global growth that was going on, too; we first shipped in 1987 but, by the end of 1988, we were into Europe. Some of it was because we were dealing with DP and, of course, we went to their headquarters over there and we just started to work business for the global companies and so, we began to grow Europe aggressively and then, about a year later, we went into Asia, Japan first and began to grow those and that was the same demand because just a year or a year and a half later and, Europe was probably a hundred million dollars for us.

Johnson: Wow!

MacDonald: People's Republic of China?

Hoffman: In the People's Hall. And we pulled up in this big, really, like the only limo that they had in Beijing at the time. And we had rented it. People were just staring at us as we went down the street in this big thing.

MacDonald: It was bizarre back then; it was big news because I remember when we opened our Beijing office; it was on the evening news. Which was bizarre to me. Okay, we're a database company. We don't get coverage like this anywhere else.

Johnson: Interesting.

IBM Growth with DB2

Humphries: I was wondering, how does that compare in terms of revenue and the number of people with DB2 at that time?

Haderle: DB2 was developed for the mainframe on a 360, 370, 390 mainframe at that time. First DB2 on the VM operating system, which was purely for decision support type operations, was in 1981. There were about 40 people on that and then the DB2 on mainframe that had 300 people on it and that was in 1980 through 1983, when we went out for what was called limited availability where you're in Beta. You just have a prolonged availability timeframe, prolonged. <laughter> And there were 300 people on it then and now there's 1200-1400 people on the various DB2s that are around. IBM was a hardware company aligned on hardware lines, S/360, S/370 and PC and AS/400 hardware lines. Your success was based on how your hardware line was doing. Underneath the main hardware line of the mainframes, they had storage devices and so we were financed out of the Storage Division because there was an affinity between database and storage.

Johnson: Yes, sure.

Haderle: More database usage, more storage. So that was our VC, if you will, the Storage Division. They wanted us to push more storage on mainframes so DB2 was designed for the mainframe, which, in that era, in the 1970s, the mainframe was largely used for doing batch processing. A little interactive had slipped in during the 1970s. A little transaction processing had slipped in. It looked like transactions were going to take off but that was still basically batch processing with some transactions involved; and it was largely for doing business operations, not decision support, not query, not analysis. That was on a different operating system. So DB2 was designed for that environment because that was the sweet spot with the growth of our market. DB2 came out in 1983 and the customers were largely transaction customers. It was direct sales only. IBM was not in the applications business. It was a hardware company. They

were providing platforms, not applications. It wasn't until the late 1980s that they carved off and created a software business; it wasn't until 1987 or 1988, when Earl Wheeler created the software business inside of IBM. At that point, they thought of going into the applications business, attempted to and failed and then realized that they had conflicts with channels and partners. They had all the things that you have when you go up against the guys that are going to support you, right? So they backed out of the applications business. They have never gone into it again and had made it rather explicit that they're not going to be in the applications business; they are just in the platform business, so they don't aggravate partners and channels. By 1985, we went out of limited availability into general availability with DB2. By 1988, we recouped all of our expenses. We paid back our investors so we were profitable by 1988, having paid them back. And, by the end of 1980s, we were turning in roughly a billion dollars a year.

Johnson: Okay. So, at this point in time, IBM was able to track software product revenues?

Haderle: They were able to track software product revenue but, for us to make our case with our investor, we had to show the drag on the storage because they had financed us.

MacDonald: That was an important metric they won.

Haderle: Yes, that was an important metric.

MacDonald: We need to sell some disks.

Haigh: Did they ever ask you to compress things less and make for more storage.

Haderle: No, actually, it's whatever would advantage the storage and so compression, in fact, instead of doing compression in the mainframe, we went to compression outboard. They tried to advantage the outboard side but we actually switched our investor in 1987. When we first created software the disk guys had funded us and then they gave this product over to Earl Wheeler, who was running the software division, just at the time we became profitable

MacDonald: If they had kept it, they could have glowed, yes.

Haderle: I see these guys out at the Alameda Country Club all the time and they are still pissed off.

Johnson: This is totally a diversion but I thought you guys would enjoy this. One of the events they had down here, they had a bunch of people from disk drive companies talking about

the evolution of the disk drive industry, very specifically including a guy from IBM. They talked about the transition from the point in time when everybody was trying to build bigger and bigger disk drives to the contemporary mode, which is the RAID [Redundant Array of Inexpensive Devices] and the IBM guy said that what DB2 did was it changed the disk drive business from a hardware business to a software business because it obviously takes software to manage all those independent devices. Which is a good thing, because all hardware eventually fails…and all software eventually works. <laughter>

Humphries: If you live that long.

MacDonald: It's interesting about the size of stuff because I remember when we were thrilled, in our neck of the woods, the kind of open RDBMS systems, when we could start talking about going after terabytes. That was a big deal when we got to start using the "T" word because things had grown that big. And I've been driving around for the last two days with two terabytes in my trunk because I need stuff for downloading video and it's still a shock to me that I have two terabytes for 400 or 500 bucks in my trunk when that was a big deal back then.

Working with Disk Manufacturers

Haigh: So in the case of the independent companies, did you ever work with storage producers or have any input on standards or specifications or anything on that side of things?

Hoffman: For disk drives, no.

MacDonald: No, but we dealt with the manufacturers of the boxes quite a bit because they wanted to ensure that our stuff was available on their box, then there would be those interchanges. Remember, yesterday, Roger (Sippl) was talking about the way we had to work with the UNIX operating system, like Sequent out of Portland. They were doing symmetric multi-processing boxes and so they wanted to make sure we could run on them so then they wanted to ensure that their derivative version of UNIX had the stuff that we needed. So there'd be those kinds of discussions. They were very interesting.

Haderle: More of that happened on the mainframe high end. I don't know why we called it high and low, but at the high end part of the market Oracle would be working with EMC...

Hoffman: Yes.

Haderle: But in the low end side of the market down at the PC, you just spread yourself on any damn thing that was going to be there and hope to God it was still there by the time you delivered.

Hoffman: Well, we talked to the operating system guys.

Haderle: Yes, but not the hardware guys.

Hoffman: We didn't talk to the hardware guys.

Haderle: No. But on the high end yes, we talked to EMC, even though we were at IBM. And I know that Oracle was also talking to EMC and the large mainframe shops. They would end up talking to Intel, we all talked to Fujitsu; we talked to Amdahl, all of our high end guys to make sure that the things worked because that's where the money was.

Hoffman: We would talk to them, too, because, like we were saying yesterday, where we didn't make much use of the operating system so we had to work with the hardware guys also but we didn't get into kind of disk drives or disk drive optimization or standards or anything like that.

Sippl: We were involved occasionally, as in the Sequent case, where they were pioneering this multi-CPU architecture. Their own software engineers didn't communicate as well as one would have liked with their own hardware engineers. So this write back memory problem they had did slow down their machine and the fact they lacked what I would call global shared memory so that any processor of the four, eight or 12 could get to a common chunk of memory where we could put a buffer pool of disk pages. They didn't have that and so that was the number one problem with the multi-processor machines holding back the development of high throughput database products that took advantage of those multiple processing machines.

Johnson: Yes.

Sippl: But it was a long road from the marketing guys to the operating system guys to the hardware guys and you usually found yourself trying to bridge gaps within the company's own groups in order to move an agenda forward and it always begged the question, are you going to succeed? Is it worth the effort?

Haderle: Our largest competitors, though, as we went into the mainframe in the 1980s was nobody that's in this room. It was the hierarchical database vendors that were out there. It was against ADABAS and Datacom and IDMS and it wasn't until Teradata came on in the middle 1980s that this really revamped the market in terms of high end query decision support platforms. And, in fact, that's where we invested significantly in the late 1980s and, as I said, IBM graduated from being a hardware vendor to transitioning over to being a services and software vendor as we moved through time and that's when we moved DB2 onto open systems, UNIX, etcetera; but, by that time, it was a little late in the market as you go into the early 1990s. So we were in a come-from-behind position.

Oracle Growth

Johnson: Let's go back to this growth. Roger was saying yesterday about how Oracle was so much farther ahead, that, even though you kept doubling, there just was no way to catch up. At what point did Oracle suddenly get that much farther ahead? Was it just that they had a couple years' head start?

MacDonald: They had three years head start.

Sippl: They were always further ahead.

Hoffman: They started in 1977 and Ingres started in 1979 and Informix started in 1980.

Humphries: I've got Oracle's approximate numbers; we could do a comparison.

Haderle: Two to the third is eight so let's see if there was an eight-fold difference.

Humphries: This is to the best of memory. I know the early ones are right. So 1985-- remember, our fiscal year was April 30 so 1985, which would put you about the middle of 1985, we were 25 million dollars in revenue. 1986, we were 60 million. 1987, we were about 130 million.

Hoffman: In 1986, we were 20 million and then we were 40 million or so in1987.

Humphries: In 1988, we were 280 million, approximately. This is where my memory starts to get fuzzy. We were never less than 100% growth. In some years, we exceeded it by a reasonable amount and in others we were squeaky close. And then, 1989, the last year I have a recollection of, revenue was somewhere between 650 million and 700 million dollars.

MacDonald: And we were 145 million dollars.

Humphries: I was reflecting on yesterday's meeting last night and some of the things you guys have said here, Sybase was going into the financial market, IBM deciding to have a software division. I'd like to ask this question: there's some inflection points, business decisions that were made that were sort of like little booster rockets for each company that made a difference. Some were decisions that were made consciously. Other decisions were made kind of accidentally, reactive, I guess, something happened in the marketplace. So I sat down and I thought, well, what were those inflection points for Oracle and I'm sure every company represented here has some collection of turning points or inflection points that ended up making a difference in your companies so I thought I'd introduce that subject.

Johnson: Great question. Why don't you tell us what you think the ones were for Oracle.

Humphries: Yes. Well, okay, I wrote them down in little scribbles here. Unlike Sybase, we never really pursued a market to the depth that Sybase did. We intended to after a while but we were more of a company that spread ourselves sideways so we added things like the ISV channel. Let me just read the things off the list here. In about 1987 is when we went into the applications business and the applications business was not successful for about three iterations and that was an attempt to do kind of what you were doing, although your point was that you didn't write the applications. We did try to write them but it wasn't very successful but what was successful at the same time is we did verticals. So we had, for sure, I know we had federal government, state government, the financial sector, manufacturing, and we had a couple of others that I can't remember any more. We dealt with named accounts and that was a good learning lesson for us. In a vertical, you really should know almost as much as your customer does and that's how you sell successfully to them. We divided the accounts up, the top ones or the top prospects. We had teams that were 100% assigned to those verticals. Our guys didn't know nearly as much as they should and we were accused by people across a lot of the verticals of just doing named accounts and it was true. We didn't realize that but that's what we'd done but it caused us to have to get better at it. So, eventually, Oracle got really good. It took several years because, if you're driven as hard as you were at Oracle, you didn't spend a lot of time doing homework. You spent most of your time out trying to close sales. But, eventually, they became good and became professional.

MacDonald: You started that in 1987?

Humphries: Yes, that's what I wrote down, 1987.

MacDonald: Which is years ahead of us doing that. We didn't do it until the early 1990s.

Humphries: And I remember the moment that I was having a one-on-one with Larry Ellison because I had run national accounts. We took the top 100 mover and shaker accounts in the country and across all the sales offices and the sales guys. We designated those and we concentrated on them and I was meeting with Larry. It wasn't working very well: it was just named accounts again. That's part of the reason why. I was meeting with Larry and I had also pulled off some homework. You remember how our homework was done back in those days? You had to actually go to the library yourself for information? <laughter> So I had done some homework from a study that showed, by vertical designations, how much IT business was forecasted for each of those markets and Larry and I were talking. I'll never forget this because this was unusually humble of Larry. Larry starts talking about the vertical stuff and he says, "May I have this sheet?" And I thought, wow, what a weird thing for Larry Ellison to say. May I have this sheet? This is the way Larry Ellison worked. You could see the little light bulb go on

in his head. From that moment on, the idea of pursuing verticals was a real major item with him and he pushed it, drove it.

Haigh: Vertical applications or vertical markets?

Humphries: Well, it's vertical expertise that could lead to vertical applications but we did not do vertical applications. What it is, is you talk their language, you understand their problems, you understand their growth and ambitions and objectives so you're better able to sell to them and the side you present to them in the vertical is you're better able to serve them. But, of course, on the selling side, it's how do we have an advantage at selling to them? And the only way to do that in the long run is to offer something that's of more value to them than your competition. So, therefore, you have to speak the language and understand the problems and that's why I said we were accused of not doing that and it's true. It took us a long time, several years, to finally get to where we had expertise.

I think the biggest difference on that was the federal group. Our federal group was a real success once it got going and everybody that sold there knows that selling to the federal government is a whole different thing. But we got some guys that were really good at it and that became a real major driver. We had a big turning point in 1985 when we took marketing from being Larry Ellison and a guy named Ken Cohen, who would sit together and strategize. That was kind of our marketing with some underlings to carry things out. We brought in Mike Thoma, who you guys may know. Thoma lasted for about a year, there's some really funny stories about him that I won't tell now and then Peter Tierney came in, I think, in 1986. They formalized marketing, which Thoma did a good job of, and making marketing a force and a strategic thinking group and a very execution-driven group; it started with him and then Tierney made it really excellent and, all of a sudden, Larry had close to an equal in strategic thinking for marketing and execution.

International Sales

Humphries: And then the final thing I'll mention is International. John Luongo had run International and International was a small percentage of our overall revenues. In about 1986 or 1987, I can't remember when, Geoffrey Squire came into the company and Geoff took Europe and some other countries, it was really funny, when you'd ask Geoff what he had, because Luongo was V.P. of International with some modifier and Squire was V.P. of International with another modifier-- you'd ask Squire, so what's the difference? Squire would say, "I have all the countries that you don't have to have shots to go to." I remember the day, at an executive meeting where Squire said, "We will be more than 50% of Oracle's revenues by..." and he said some year and I think the year was 1988 and he did come pretty close to that. That was a huge rocket boost. Geoff Squire is still bouncing around in the industry. I don't know where he is right now but he was a powerful force in the company and, when you get that

untapped potential in International to all of a sudden come up to 50% of the level and the rest of us weren't slacking, I'll tell you, for him to be able to do that was quite an accomplishment.

MacDonald: It was a shock to us. It was a shock to me when that surge happened. There were several things about it. One was just the sheer size of it. At one point, Oracle had more people in the UK than we had in our whole company. And that was a shock to me. I used to argue with our head of Europe because our head of Europe used to tell me that the business in Europe was different from the U.S. and that it was an indirect business, it wasn't a direct business and I used to argue. I said, "Look at the Oracle people in the UK. There are not 2,500 people in the UK selling indirect." It's a huge direct business.

Sippl: Quickly, a few of the other things happened for our growth.

MacDonald: Well, yes, but this was in the early 1990s when UNIX had really surged.

Sippl: And it was surging. I would say it surged yet. The problem was the banks were still buying VMS.

Hoffman: The financial institutions, the people that spent money like it was water on data processing, they still weren't buying UNIX machines just yet. It was more the later, mid-1990s.

MacDonald: Well, that's interesting because this surge based on those numbers you were giving, Mike, in the late 1985 to 1988, that was a DEC [Digital Equipment Corporation] zenith because I remember when DEC used to have the big festivals in the Boston Harbor where they'd bring in the cruise ships just to house all the people. So I would assume a lot of that surge, when you were going from the 30 to the 600 million dollars in just a few years, there was a lot of VMS revenue in there?

Humphries: There was a lot of VMS and I think that was probably the bulk of it. I don't remember any of the numbers on how it broke down but my gut feel is that what you're saying is true. I'm sorry we couldn't bring some other of the Oracle people from that era.

Hoffman: Yes, if you were only selling UNIX products, you wouldn't have done anywhere near that well.

MacDonald: Now, what's interesting here is if Ingres had kept pace with Oracle, they could have had some of that.

Switching to SQL

Sippl: Yes, that ball got dropped because they weren't SQL.

Johnson: Is that what really held them back?

Sippl: Yes, you were talking about pivotal points, so when we bit that bullet in 1983, 1984 to go to SQL, it sounded like, from the conversation yesterday, it was a good three years later that Ingres bit the bullet. And what we did, I mentioned it yesterday but it might have seemed like a nuance but it was a major issue, was we abandoned our installed base and created a completely new and compatible product when we went to Informix.

Johnson: That was a very gutsy move.

Humphries: Is that why you had a dip in 1987?

Sippl: No, no, this was 1983, 1984 that we did this so we were small enough we could get away with it and I asked Larry [Rowe] yesterday, when the camera wasn't running, when he was talking about this and he said, the problem for us was that the optimizer couldn't handle both SQL and QUEL. I said, "Well, why did you try to make it compatible with both? I mean, it seems like that would have been a very hard problem." Roy [Harrington] and I discussed that in 1983, 1984 and we decided we're going to take our lumps because we just can't do one product that would work on both our proprietary query language and SQL. It was just too much to ask. So we bit our bullet then and we bit it bigger and harder than the Ingres guys did. Now, in their defense, since they did wait that long, it would have been very tough for them to have abandoned their installed base to come up with a new release that did not run existing programs. But, in 1983 or 1984, when we announced it, they did have the opportunity to make a decision then and try to do something then. I think that was, of the decisions we made, some of which we were right, some of which were wrong, those two, to switch to SQL early, and to come up with a new product as opposed to try to make our old product compatible with it, those were key moves. And I've got the manuals for both products so you can see the differences if you want to down the line.

Hoffman: Do you think that that slowed you down and let Oracle surge ahead?

Sippl: No, we didn't miss nearly as much of a beat as I thought we would. It was hectic for a quarter or so maybe but, actually, I think, net net, we did okay. I'm not sure it really hurt us because people were waiting for us to have an SQL product.

MacDonald: I think we were tracking with the UNIX growth fine so we didn't lose anything with that arc. It was just, without that VMS arc, the three years plus the VMS arc fueled an engine, it was an advantage. I think that was a clear advantage because there were just dollars there that weren't there yet in UNIX.

Sippl: Now, if I could have gotten venture capital in 1982 or 1983, and I found some notes from some board meetings that I brought in that are pretty funny, and it shows when I was trying to do it and who I was trying to get it from. Then we would have been able to fund the VMS port then. I could not afford the VMS port until, I don't know, what was it, 1985 or 1986-something when we tried to do it and it was water under the bridge by then. Trying to get into the VMS market would have just been a little too tough for us. It might have even been later. It might have been 1986 or 1987.

Haigh: So why was SQL so important? Was it because that was the language that developed visual learning?

MacDonald: Yesterday, in the session, I was talking about how things had a way of being of interest among the buyers and then it would become a must. It would make it onto the checklist that, if you didn't have it, you couldn't play. And somehow, I think it was through the conversations between end user organizations and the discussions going on in the industry...

Sippl: There was this Oracle ad campaign. Just pounding the drum every week.

MacDonald: Yes. Well, no, and when certain vendors went to it, it reached a threshold where, all of a sudden, it's in the ether and I just remembered things would get that way and I remember our discussions that it was inevitable. We had to switch to it because we felt we were going to start getting locked out of deals without it.

Humphries: Just like arguing for Esperanto or something as a better language. It didn't matter. It was an academic thing.

SQL as a Standard

Haderle: We took Sequel [SQL in IBM-speak] to ANSI, the American National Standards Institute. And so we got pushed through ANSI. Once you get it pushed through ANSI, it becomes a requirement on government contracts. So you can't bid on a government job unless you have it.

MacDonald: You can't bid without it.

Haderle: That's true. We brought Sequel over into the worldwide standards organization so if you were going to do business in the UK, it was going to have to be on that standards base.

MacDonald: DB2 did come out. It was a product. It was a successful product.

Haderle: Well, DB2 came out but, equally important, if we put an investment into the worldwide standards committee we would end up getting Sequel through on the standards, which makes it part of the procurement requirement to come out of all the government agencies and then the banks and so on.

MacDonald: And then it starts showing up on the procurement from the large corporations.

Haderle: So you're toast if you don't have it.

Humphries: Yes. So, back in those days, and it's still true today a little bit but not as much, when you guys [IBM] announced that you were going to do something, everybody assumed that's what was going to happen and tried to figure out how to make their plan fit in with that. So you guys were the forcing function. The rest of us worked at enabling for the rest of the platforms that were out there. That's what made it to reality. If we hadn't with all of our companies made it enabling, something else may have happened because IBM wasn't going to write for all those platforms, but we did and so it became easy to accept it.

Sippl: I think if all the rest of us would have picked some other language, any other relational query language which used our embedded programmatic interface and our interactive query language, we could have probably muted SQL. It probably would have been two languages.

Haderle: You'd have still had to work through ANSI.

Sippl: Yes, but we could have started our own effort with the standards groups

Haderle: You'd have had to combine together and you weren't combining it at all.

Sippl: I know. But if we had, who knows.

Haderle: IBM did more relationship with Oracle than any of you-- in that time period, even-- because we were never going to be on a DEC platform so what did we care?

Humphries: And a serious run wasn't exactly likely.

Haderle: No. So we knew that we weren't going to be on these other hardware platforms so, in fact, we would end up partnering with Oracle to go into the ANSI committee to show that it was going to be across vendors.

Sippl: Well, if Oracle had gone with QUEL and if we had of all been derivatives of the Ingres Berkeley project or something like that, there would be two database languages today.

Haderle: But as he said, he was going into government contracts and you can't bid on government contracts without SQL.

Humphries: Unless there was an ANSI QUEL committee. But it didn't get organized because only Ingres had it.

Haderle: It didn't matter because being compatible with Oracle was as good as being compatible with anyone else.

Hoffman: I would say it drove the whole industry in a sense that once you had that, you had a unified front, everybody was talking the same language and I would suspect it expanded growth for all of us.

Sippl: It did. It made it easier for all packages — report-writers and stuff to come from third parties that weren't involved in databases.

Humphries: It's a lot like CP/M was a contender at one time on PCs until IBM picked DOS and then everybody saw the writing on the wall, right? It changed real quickly. Did I tell the story yesterday about how Larry [Ellison] used to illustrate the difference between Sequel and QUEL?

Johnson: You may have but not in this session.

Humphries: As I remember a conversation that I had with someone at Oracle, Larry jumped on Sequel early on and he made that his thing. I'm not sure, philosophically, how concerned he was. He just made the commitment and that's where he was. And, because we had Ingres in our sights a lot of the time, he used to say, well, "QUEL and Sequel, a lot of people say, at Ingres, that QUEL is pretty much like Sequel." He said, "Well, Spanish is pretty much like Portuguese but if you speak Spanish, try going to Brazil and see how far it will get you." And that was his illustration of the differences, some subtle but important differences can make a huge difference and he made that a part of the ridicule campaign against Ingres, which went on for about a year and a half. I'm sure you guys saw what was happening and were glad that it wasn't aimed at any of you, right?

Sippl: Yes, it was more fun watching you guys pick on Ingres. We were under your radar.

MacDonald: See, this is also that period where Oracle and Ingres were going head to head because Ingres was Oracle's competitor in VMS. Mark was just getting started up at that point and we were in a dog fight with Unify at that point. So all of our stuff was Informix vs. Unify, there was the Oracle vs. Ingres going on and then the stealth project was coming out of Emeryville over here, which was going to surprise us all of a sudden and, then, all of a sudden, we were on each other's battlefields...

Humphries: This is what I find so interesting about our history: listening to different versions of the code and stuff is great for the technical guys, but there was a lot of drama and soap opera stuff that went on in this businesses and I can think of millions of stories and you guys had millions of stories that are just really entertaining. A lot of stuff we did either set the precedent for the way business is still done today in software or, in many cases, it set the precedent for not ever being able to do it again. A lot of booking rules and everything else have changed drastically because of what we all did in those days and I still feel the impact.

Haderle: Still not talking about it, are you?

Humphries: My guy is in the witness program.

MacDonald: We need to embargo this tape for 20 years.

Sippl: But there weren't a lot of rules around. It wasn't like you were breaking the law.

Humphries: Can you imagine if Sarbanes-Oxley had been in place when we were trying to grow those companies?

Other Competitors

Sippl: I found a UNIX DBMS market leaders report from Yates Ventures, which wasn't always that accurate, but in 1984 it shows Unify, 35%, Relational Database Systems [Informix], 35%, Others, 24%, RTI, 2%, Rodnius, 4%. So that was the UNIX database battle the year they started...

Humphries: Wait a minute. What were those things?

Hoffman: Orbit, Rodnius.

Sippl: I think they had the Mistress [Empress} database or something. It was out of the University of Toronto. It was their research database.

Haigh: And you mentioned Unify?

Sippl: Unify was tied with us at 35%.

Haigh: What was Unify? I never heard of it.

Sippl: What was Unify? That's what I was trying to say yesterday. The war among the four companies represented here didn't really get going fully until the 1990s. We had to kill off a dozen little database companies to win the UNIX database leadership in the 1980s. So it wasn't that we had to beat Oracle to stay alive in 1984 or 1985, although they were annoying because we'd have these OEM deals keyed up and they'd come in and get them for four times as much and not deliver anything. So that was just annoying. But we would not lose deals on UNIX machines to Oracle, generally speaking. We would lose them to Unify because they were also a small, quasi-relational database that went really fast. So we had trouble with them.

Johnson: What happened to Unify?

Sippl: They never got a very flexible, underlying retrieval method. They were probably late going to SQL as well.

Humphries: They weren't good at marketing or selling, either. They were a client of mine in 1991 and I saw it from the inside and after dealing with all of our other competitors, they were a sad shadow of a company when it came to sales and marketing and, at that point in time, 1991 I think, they were considering taking the tools that they developed and making it into a tools company.

Sippl: Right, right. They launched a huge tools initiative based on the success of watching our Informix 4-GL do well. They launched a big tools initiative and there's another company that's never been mentioned, it's Progress. And Progress had a fourth generation language that had its own ISAM style retrieval method within it and that was a competitor to us as well in our 4-GL market. So they were more a pure tools play but, on the other hand, they usually didn't sit on top of a database system, either. They had their own retrieval method so...

Johnson: So did Unify eventually get bought by somebody else?

Sippl: Unify eventually went public and their market cap is 20 or 30 million dollars today.

Johnson: They're still around?

Sippl: They bought Gupta. They bought a couple of small database companies that are still bringing in 10 or 20 million dollars in revenue each year.

Humphries: And these companies that got stymied, it sounds kind of self-serving for all of us here because I think that the combination of good technology and aggressive sales and marketing made every company that's represented here survive and do well. Gupta was a good example. Umat Gupta left Oracle; he had been an Oracle guy. He left Oracle in 1983, I think, or maybe 1984, formed his own company. About two years after that, I was asked to come over and interview at Gupta with a guy that I knew from Oracle and I respected a lot, a really, really smart guy; I believe he'd become VP of marketing. So I interviewed with about four of the key executives over there during the course of a day. You didn't have to be looking, but you just always went to these things. And, at the end of the day, I got back together with this guy and I said, "So what do you think about Gupta?" And he said, " Mike, if I used a histogram or a bar chart to represent the people at Oracle, how competent and sharp and all them are, there'd be all these high bars and, every once in awhile, there's a low bar, representing the people." He said, "At Gupta, there's a whole bunch of low bars and, every once in awhile, there's a high bar," and I think that's what finally killed them off. I interviewed people. I asked them about things and found out that they kind of structured their hours and that they worked to make the commute easy on them and all. We had a warrior mentality over at Oracle. Stuff like personal comfort entered into it nowhere and what you're doing-- and these guys were kind of developing a lifestyle company before I ever heard the term lifestyle company. Well, I think a lot of our competitors were that way. I don't think any of the companies represented here were that way.

Sippl: Yes, well, Unify was out in Sacramento and they had a different talent pool to pull from, that's all there was to it. Aggressive people in Sacramento moved to the Bay area to work for one of us.

Johnson: Yes. One of the challenges of doing this history stuff is that sitting here a few minutes ago and hearing you guys talk about the incredible opportunity that was there for database companies in the 1980s, it was, like, who could fail? But it isn't until you talk to the people who did fail that you begin to understand that it wasn't just a matter of being in the right place at the right time. The problem is finding and then getting the people who did fail to come to a session like this and give their stories. You can't even find them.

Humphries: So, Luanne, in 1985, when I was doing the OEM business for Oracle, I believe I counted almost 25 relational database companies that claimed to be in the business and I can't even remember the names. Until you mentioned Progress, I hadn't even thought of Progress but there are a bunch of others that, if you said them, I would say, oh, yes, I recognize that but I can't remember now even who they were.

Hoffman: Yes, we used to say when we were trying to get funded, we thought there were roughly 50 database companies.

Sippl: By the time you got funded, we had knocked off a lot of them. But there were probably others still in business.

Hoffman: Yes. Well, they were there.

Haderle: On mainframe alone, there were 12 different companies that were in there, of which-- I'll give you a buck if you can name more than three.

Hoffman: That were relational?

Humphries: Yes, you're right.

Sippl: This forecaster estimated the total UNIX database market in 1983 to be12 million, 1984, 26; 1985, 66; and then the growth slowed down to 74% growth from 1985 to 1986 would be 114 million in 1986. So we had 20 million in revenue then. And 1987, it would be 162 million, having only been 42% growth over all. So my original business plan actually stopped in 1984. I only projected it out to 1984 and I projected my revenue to go from $47,000 or something like that to stop at $1.350 million. When I started the company that's all the farthest I could see out that I thought I'd get it all the way up to maybe a little over 1 million dollars.

Humphries: We must have done better because, in 1985, we did 18 million dollars so you must have done better than that in 1984 for real.

RDBMS Tools

Haigh: I have a question that goes with the time period you're talking about here. As time went on, we already discussed applications, which Oracle did and the other companies didn't, but how about tools? Right now, Oracle has CASE tools and user interfaces, data modeling capabilities. Were you integrating those areas into the product line? Were you working with parts vendors?

MacDonald: There's an interesting thing because I made a note here. We were asking for things that were turbo thrusters; we talked OLTP yesterday and that was clearly a big thing, when open systems started taking over OLTP and becoming competitive for OLTP applications against the proprietary DBMS systems that had been in place. A huge turbo thruster was data warehousing because data warehousing became a hot topic, people were putting up these new, open systems. They were consolidating all this stuff. I remember going on speaking tours and

you guys probably had seminars or whatever and I remember we used to pull in 400 people in a city to hear about data warehousing. That was a 1990s kind of thing that just added even more fervor for the data management products and we did a whole bunch of compatible data warehousing tools and things.

Johnson: Yes, I was just going to ask about those.

Hoffman: In our case, we didn't go after the data warehousing market; that was someone else. We were doing the seminars but in that period of time, you'd pack seminars on almost anything and it was just amazing. We'd have hundreds of people.

MacDonald: Hundreds of people.

Sippl: What I regret is that we let the business intelligence industry happen without us. We should have led the business intelligence market.

MacDonald: Oh, since we had the query stuff?

Sippl: We had the report writers, too. We had the best report writing technology all through the 1980s and how a whole separate industry of report writing tools got going without us, that's probably one of my biggest regrets. In this opportunity plan I wrote for the board in 1984, I actually wrote about word processing, spreadsheets. I was talking about things we might acquire or get into and these things didn't exist on UNIX yet but Lotus 1-2-3 just combined spreadsheet and graphics and database all into one so I was talking about possibly getting into that. But I also have a graph by example report writer, whatever that meant. So, clearly, we were thinking that way and if we had an acquisition opportunity along those lines, this was 1984 before we were public so it's not like we were going to acquire much. But, later on, instead of going into the office automation business or, I wish I would have done that or at least, if I hadn't done it, I wish I would have taken the graphics stuff out of the spreadsheet product that was really hot and turned it into a product.

MacDonald: And started early...

Sippl: Yes, I know. I could have turned that lemon into lemonade.

Haigh: When did Crystal workbooks come along?

Sippl: I'm thinking-- it's 1990s, probably 1993ish, 1995ish, somewhere around there. Business objects did not start until later.

Hoffman: I think it was earlier than that.

Sippl: Crystal reports? Could be. I mean, they came out of a disk drive company. It was a very strange product that way.

MacDonald: Mark, you acquired some tools, didn't you?

Hoffman: Yes.

Sippl: Well, Progress with PowerBuilder, yes.

Hoffman: But we did middleware.

Sippl: Oh, you did SQR.

Hoffman: Our first one was SQR.

Johnson: Talk about that. Was that the middleware that you're talking about, the SQR?

Hoffman: No, that was the query tools.

Johnson: Oh, the query tools. Okay, yes, sure, that makes sense.

Hoffman: And he also had a professional services group and that actually was great. Made a lot of money on that. And then we did middleware. I can't remember some of the names.

Johnson: What was the name of the company?

Hoffman: No, it was just the middleware. And then we did the development tools, which was PowerSoft.

Haigh: So the development tools were an interesting story, too, right? It was purely you're a platform, platform needs developers, developers need tools and if you think about the success that Microsoft had with Visual Basic and integration of their database products, so presumably it's the idea of buying PowerSoft to do the same thing.

Hoffman:	Well there were a couple thrusts if you go back to Microsoft. We had built this piece of software called-- and I can't remember what Microsoft called it but it was-- or if they actually kept the name of DB-Library.

Humphries:	Yes, that was the name for a long time.

Hoffman:	Anyway, so we built that. That was our piece of software and what we did is we gave it to Microsoft to jointly develop it and then they didn't want to jointly develop it...

Humphries:	Seemed like a good idea at the time, though.

Hoffman:	Well, for a long time it went on that way and so we just let them claim it and develop it. But that was the idea that started building the application with DB Library; you could access both Microsoft and anybody else who supported it.

Humphries:	Didn't you guys license them SQL Server?

Hoffman:	Well, we did license them SQL Server, too. Yes, their product is ours.

Humphries:	There are two ways to go in this area and they weren't exclusive. There were two ways you could go and you could do a combination of them. You could write your own products and tools or you could, in your ISV community, develop them and it was a very powerful thing to have your collection of ISVs, have people who wrote tools for your database because it helped to make you look more like a standard if it weren't just you writing all the tools. And I have to say one of the things that we probably should have done better is we eventually had hundreds and hundreds of ISVs divided between people who wrote applications for manufacturing and financial, CRM and stuff like that and people that had tools, that did various things and developers and database administrators and others have used. I don't think we paid real close attention to what most of our vendors were doing or we would have gotten some really good ideas. We were mostly interested in getting money from them and seeing them grow but we weren't spending a lot of time paying attention to what their ideas were and they had some good ones.

MacDonald:	Yes. And if you had, you might have assimilated them.

Haderle:	Thomas keeps bringing up a point, trying to push us into the application business. He brought it up the last two days several times and it'd be interesting discussion, because we've all had the little business trying to go and, if you pushed too much in this direction, you'll aggravate the vendors you're trying to get to support you in that space and you can't go too far in that direction. If they don't support you, you got to put something out there

and so how did you fight through that? In the IBM case, if you went out and provided your own applications in HR, well, then you'd piss off the SAP guys and then they'd go and they'd push it out on a different platform and so you'd lose the whole platform play. So you didn't go into that particular space, right? Or you attempted not to, unless they would partner with you. If they did, then, okay, you'd push more in that direction. If they didn't, then you'd try to build something competitive to aggravate the hell out of them. And, that was pretty much how it was for us all the way around, whether it would be in the database tools, in which case we had Candle, Computer Associates and those guys, and they would actually sway the customers to go with a different database than our database and we would end up trying to get them supported but we'd put out a little bit of tools so that you'd get enough going to try to stand alone but not to aggravate them. And the same thing with the query and report writers. We'd put out just a little bit but not enough to aggravate SAS or all the other guys in that space because we were trying to provide the database and, if you did, you'd aggravate those guys and they'd go someplace else.

Relations with ISVs

Sippl: You guys were smarter than we were. We didn't realize that some of the things that we would do would really aggravate people and one of the worst combinations you can do in that area is to decide to go into the application business but do bad applications. And I was running the ISV business at the time so when our guys announced Financials, I had to put up with everybody being really upset. It was just like the other shoe dropping. All my manufacturing ISVs had rightly guessed that that would be the next one so I had to spend all this time making people feel better, but here's what eventually happened. After about two iterations, most of our ISVs figured out that they didn't really have to worry about us that much.

Haderle: Because you were so bad?

Humphries: Yes. So then everything kind of came back, sort of we like the database and the tools you have and we write the applications and we're not really very worried any more about you guys taking our business.

MacDonald: Plus, I think not-- unfortunately, Mike, for your group, you had the ISVs but, in the bigger picture, Oracle could have the chutzpah because you were bringing in so much revenue.

Haderle: But not in the beginning.

MacDonald: No, no, not from the applications but they had a business machine going from just all of their licensing of their other stuff so they could afford to keep noodling it around.

Haderle: Maybe in the 1990s but not in the early 1980s.

Humphries: No, no, by 1986, when I had the ISV group, we already were making so much money that we became arrogant; I guess that is the right description for it. It built upon itself very quickly and, remember, we went public in 1986 so we had the money from going public as well. We had a lot more power then and, because we were focused on 100% growth every year, we didn't focus as much on who we were going to tick off or hurt or injure or anything else, as you would think we would. We were just focused on the goal and, if we broke a whole lot of eggs getting there, that was sort of the price that we paid to do it.

Vertical and Horizontal Applications

Sippl: Yes. I was happy to see you guys do that, because that was something we weren't going to do, especially since we were so strong with the value-added resellers. So building vertical applications and selling them really didn't seem like a good idea to me but I did have it on the list...

Haderle: Vertical to me is industry specific.

Sippl: Right.

Haderle: I'm going into the finance industry with something that they put on their desk.

Humphries: We had horizontals. People argue about this but financials are horizontal. Manufacturing probably is a vertical but we wrote the financials not for any specific industry, but we hoped for anybody. But, for Manufacturing, you couldn't do that. There were huge arguments about it. There's no point getting into that. The idea is, if you write applications and they're supposed to work like PeopleSoft or SAP or whatever else, that's what you do and that's who you compete with.

Sippl: The interesting joke there was our VP of engineering, Steve Goldsworthy, left Informix in 1989 or 1990 and I helped him write a business plan for an application company, which was a customer support software system called Vantage, and helped fund the company and it went on to be a very successful company, go public, had a billion dollar market cap, and then we hired John Luongo. I went and recruited John to be the CEO but Steve picked Sybase and it really pissed Luongo off, "Oh, no, can't you pick something else?"

Humphries: I'll tell you an interesting story about applications, an insider story that I haven't seen written up anywhere. Tom Siebel was a contemporary of mine at Oracle and Tom took over our inside sales, which was mostly telesales and he made it a competitor to the field sales. It wasn't supposed to be that way but that's the way Tom was. They were supposed to be developing leads and doing other stuff to help the field sales guys, but what they were really doing was they were closing business themselves because that's the way Tom operated. But

Tom talked to me one day and he said, "Hey, we need a sales system for our guys. We've got the crudest stuff you can possibly imagine for all these telesales people. We need something to keep track of who we've called, with notes." It was basically the start of a first spec for a sales system and I had some ISVs that had those. He said, "So I'm going to talk to some of your ISVs." So Tom had a little team that he put together. He sent the team out. They talked to everybody I had and I think I had maybe five that were doing sales force management -- it wasn't even called that then but that's what it was. And, after he talked to them and got their hopes up and everything, he then went back and wrote his own system internally and it really pissed me off because he had tweaked all of my ISVs and if he had chosen one of them the other guys would have been upset but at least it'd look like we were dealing in good faith. I view Sybase's acquisition of Tom's company, Gain Technology, as a lucky thing for Tom because he made some money there that allowed him to be able to start his new company

Hoffman: Because we bought Gain, because we were going to use Gain on the video on demand side of the picture, because we were getting some of our large customers were saying can you help us build this stuff? And we said we could. And we bought Gain and we did. And they never did anything with it. So it just kind of all of sudden died.

People Flow and Corporate Culture

Sippl: The people flow there is more interesting than the technology flow, because that was Pehong Chen, Mark Hanson and Tom Siebel   Mark Hanson was our VP North American sales for a few years before, going on to Gain. And so he ends up at Sybase. And Pehong Chen left and started Broadvision which was one of the first Internet-based marketing companies which became a multi billion market cap for a while. And there are other people flows I forget to mention. Peter Tierney left Ingres and came to Oracle, but he stopped at Informix first. I interviewed Tierney twice. And then, I think Tierney went over and took the job at Oracle. And then, I think, Mike Seashols was in my office a week later or two weeks later or something. So these guys are bouncing across from Alameda to Belmont stopping off in Menlo Park. And Thoma, I interviewed him three times.

Haigh: There might be a bigger point behind that then: that the companies were all so close together. So, how important is this movement of people between companies? Are people just bumping into each other in the supermarket or in the bar or wherever and swapping information. Do you have a sense of their being part of the community?

MacDonald: The competition in the 1990s was pretty fierce. It's interesting about how close we were. You felt like you were out in battle there.

Humphries: We were in different warring camps in the 1980s too, not just the 1990s.

MacDonald: No, but what I'm thinking among all of us here.

Johnson: Oracle was always in a warring camp regardless of when it's at.

Humphries: We were the Klingons of the basin.

MacDonald: Look it was the evil empire and it was right up there. And anything we could do like yesterday we were talking about when we put up the billboard and then it tweaked you guys, it was the biggest thrill to us because it was, "Hey we're getting the Evil alliance here."

Sippl: We had a sense of humor about that, though. These guys were actually ticked off.

MacDonald: I know.

Johnson: This is an unusual sector of the software industry in the sense that it is so geographically concentrated.

Haderle: The technologists all went to the same school. They all went to the same bars. They all went to the same standards committees. They went to the ACM committees, to the IEEE. They all met and interchanged with one other.

Sippl: Jim Gray, to his credit, I never knew who he was working for. Whenever I'd see him at a standards committee, it was kind of like if three companies got in a big squabble over which technical proposal is the best, but everyone always wanted the one to match their product level.

Haderle: The technology level, all of the technology …

Sippl: And we would say, "Okay, we better ask, Jim."

Johnson: What company does he work with?

Sippl: I don't know. [Editor's note: Jim in 2009 was a "Technical Fellow" in the Scalable Servers Research Group (Sky Server, Terra Server) and manager of Microsoft's Bay Area Research Center (BARC)]. It was Tandem or IBM or something.

Haigh: So finish up with Jim Gray and tell your story.

Sippl: Well he was the arbitrator so you'd always give it to Jim to decide which one is actually technically best, because he never carried an agenda for whatever company was paying his paycheck as best I could tell.

Haigh: And his employees didn't mind that?

Sippl: Well, no one every told his boss. I'm not sure he had a boss. Some guys were senior as technical gods in this industry; they could do whatever they wanted really.

MacDonald: I think Don brought up a very good point; you could separate the technology community from the sales and marketing community because the sales and marketing organizations were fiercely competitive. And you knew it because of just the battle stories of competing against one another, and then also when people would switch organizations for a better position or something like that, they'd bring the other perspective. So you'd hire an ex-Oracle guy and you'd hear about, "Well when you did X, it really made us mad over there, and so we did Y." And then somebody would come from Sybase and you would hear about our sales tactics versus theirs. So it was fun in a competitive way. There was a lot of esprit de corps among the field organizations.

Humphries: It was a lot of fun. And when you say esprit de corps, you mean within your group.

MacDonald: Within our group battling out there on the battle field.

Humphries: That's what it felt like. It felt like our tribe battling your tribe and it was fun. It was very competitive. If you listen to the way Ken Jacobs speaks, and his manner is that he doesn't get excited about things; that's characteristic of the people on the technical side at Oracle which is totally uncharacteristic of everybody else there. I invited two key people besides Ken who wouldn't come. One was Derry Kabcenell, the head of our kernel group for years and years and years and he is the most softspoken guy. He's got a couple of degrees from MIT. He's the first guy I ever saw who, while he was programming, was wearing a headset with a Sony Walkman. He said, "I'm not very good in groups and speaking and so I just can't come although I'd like to." The other was Jerry Baker who reported directly to Larry [Ellison] for years, and ran a large part of the company. Jerry expressed kind of the same thing, although he's not nearly as timid as Derry is. So, there was a difference, even inside the companies. I guess your companies were the same way, but ours was the warrior culture, the crazy guys that the technical guys didn't understand and didn't like very much to be around for long periods of time. But they knew that those guys were doing their part to take the technology that was developed and turn it into money. And so there was coexistence between the two. There wasn't a lot of camaraderie.

Sippl: I think there was a bit of a difference though in culture between Oracle and Informix. Even our product managers and our product marketing people were super technical and they tended to be really nice people. I mean they were not at war. In fact, our sales guys, they fought hard, but they were pretty gentlemanly about it too. And I swear, we won a bunch of deals just because the customers preferred our approach versus yours for whatever that's worth.

Hoffman: I was on the fringe from you guys. So we were like way out in Berkeley. And so when I went to my guys and we started to form the company everybody was from Berkeley. And as you can see in all of these photos back then, I wore a coat and tie, and I made our management team wear a coat and tie.

Sippl: We did too.

Hoffman: I did it just so we didn't get painted with Berkeley, with those Birkenstock guys that they keep in the back room.

Sippl: We were so young, I made everyone wear a coat and tie so we looked like grownups.

MacDonald: The development team was in coat and ties early on. We just wanted, when people visited, when we were less than 20 people, "We're serious about UNIX."

Sippl: Yes, you can give us some venture capital, finally, somebody please because we're serious and we know what we're doing.

Interoperability

Haigh: All right, another area, although this may be pushing up against the timeframe for some of you is the transition to client server, ODBC and interoperability. And so now, and which is happening, as I understand it, pretty much at the same time as the transition to graphical applications, and these kinds of rapid graphical application development tools. So what does that mean in terms of the business and in terms of the tools that you have to do in the relationships?

Hoffman: Well ODBC is DB-Live and the work that went on around that.

Sippl: Quite a bit. I actually had to go chair the committee that got to be known as the SQL Access Group to get it to not just adapt DB-Live. I got the committee to actually modify it quite a bit and add other stuff to it, so that it wasn't a marketing problem for the competitors, API

has been adopted as the world standard. But Microsoft and Sybase had this collusion at the committee and it was hard to break. And so it was big political fight. Actually, we had to form two committees within that committee, the technical committee where everyone got along. And the marketing committee where it was just a bloodbath of me trying to stop that from happening. I kept trying to get imbedded SQL for C. But, the call level interface, technically, was a better idea, so it inevitably won. But, I stalled things long enough to get all sorts of new technical thinking on the API to make ODBC a fair amount different but it was a tough one. ODBC also needed more stuff to deal with the fact that the SQL you're putting through the protocol was semantically different than the different database engines. So there was a bunch more handshaking in there. But, it did end up looking quite a bit like DB-Live. And they were actually trying to get your protocol which they claimed was a common protocol between Sybase and Microsoft SQL Server.

Hoffman: At that time it was still DB-Live. But Microsoft was already taking it further.

Sippl: Migrating it.

Hoffman: And starting to run with it and extend it.

Humphries: What timeframe are you talking about?

Sippl: The SQL Access Group was in the early 1990s because I still there. And I wasn't CEO, so it must have been 1990, 1991, 1992. I chaired that group for a couple of years.

Hoffman: But DB-Live was out there. And it was supported by Microsoft in the 1989 timeframe maybe even 1988.

Sippl: We should have bought Gupta. Gupta was right next door to us. We had a couple of meetings with them. We had the money.

Haigh: That was coming out of the whole open systems push for interoperability though, during that era, right?

Sippl: There was a standards group.

Haigh: but wasn't it a philosophical approach? Like in an industry where you have one dominant player, if it hadn't happened then, I doubt Oracle would go out of its way to make something like that happen.

Sippl: No, Oracle just wanted to drag its feet on the whole thing, because they were the market leaders. So why should they want a standard API [Application Programming Interface] of any kind. Why should they want to homogenize everything, so it didn't matter whether you used Oracle. Why did they want to make it easy for you to have Oracle in one department of your company and Sybase in another department, and Informix in another department? That wasn't Larry's grand plan. Larry's grand plan was you want Oracle everywhere so it's all compatible. So, anything that would make one API that you let you talk to any other database that was not marketing wise; they just tried to always kill the whole thing.

Haigh: But the rest of you were in favor of it.

Sippl: Absolutely.

Haigh: So what did you see as the benefit? On the business level, what made you think it would help you?

Sippl: On the business level, if we had a sales guy in the field, and the customer was saying, "We're 70% Oracle shop. We'd like to buy your product for this $2 million procurement because it seems like a better product for this application. But it would be easier for us to just go all Oracle, because." And then we'd say, "Because why?" And they'd go, "Well because then we can write programs once and run them everywhere." And we could answer, "Well actually, you should be writing all of your programs to this new industry standard API. And then they'll run everywhere against all of our different databases and databases yet to come." So we could nullify that objection in a sales cycle.

Humphries: This is the way the industry worked. That argument sounds really good like they really care about the customer, but what the salesrep is really doing, of course, is he's trying to get his wedge in so that he can start to take over a share of the customer's business. That's what we're all doing.

Sippl: Yes, fine.

Humphries: There wasn't any great benevolent thing going on.

MacDonald: We were playing on the excitement of the end users. The thing that they liked about open systems after decades of having to bet on a vendor and then get stuck with that vendor, the thrill of open systems for them was this vendor independence. I can buy best of class products. They were all going to work. When the bloom was in full glory on open systems, they were thrilled about this after decades of being constrained. And you could play on that emotion.

Hoffman: But how many people actually swapped out a database. I couldn't even name one right now.

Humphries: They liked being able to go to sleep at night, knowing if they really needed to they could do it.

Hoffman: They could do it, but they never did it.

Sippl: And it was mostly a thing to nullify an objection. So, usually in corporations during these big procurements it was a lot of political stuff. Different people in the buyer community had their own personalities, had their likes and dislikes, they had their buddy salesman, whatever. So they would put in these objections, some of which were just straw men, anyway. But they were just political trying to make enough noise so they could get their way. And so you had to come back with something to nullify an objection.

Client Server

Haderle: But client server really redefined computing boundaries.

Sippl: Client server was an actual phenomenon.

Haderle: What we had was little islands so you had the UNIX machine in one departmental shop, the VMS machine in another department shop, the mainframe with the 3270 green screens. So you really had self contained little environments. And then you used FTP [File Transfer Protocol] to transfer files and stuff between them. And so, with client server, it really pushed out and said, "Okay, I just don't have the mainframe or the VMS, I really can distribute some of the processing out here, and link it up into one little ecosystem." And it really, really scared the bejeebers out of the mainframe guys, because that was a self contained little island and to get in there, you had to penetrate through the 3270 panels and all of the other horrible things you had to go and do. And it opened it up to really push some processing outside that you would have been doing inside. So, whether you were Hewlett Packard or IBM, it really pushed the control outside of this boundary. That's what it did. We had the PC which was used then as pretty much a standalone dumb thing sitting off to the side; we even called them dumb terminals. It was a standalone thing off to the side that maybe linked up to transfer files to it or something, but it wasn't interactive and integral into the business processing side of the house. And client server really redefined the boundaries in terms of where the computing was going to be done in 1989, with DB-Live. When Sybase came out with DB-Live it really redefined the boundaries of computing and of topology. That's when we all got invested in distributed processing to figure out how we can link all of these things together in a meaningful wider system from a technology viewpoint.

Hoffman: And we had called it requestor server.

Haderle: Yes, I know.

Hoffman: And the first time, that is what we were calling it: requestor server. And then, I think it was Forrester actually the first time they wrote a report, and we were just a part of it. But they had just interviewed us and they came back and said that they were going to call it client server.

Sippl: We said that we would go with that.

Hoffman: It actually sounded better, easier.

Haderle: So we really pushed the boundaries there and it took us out of our own little houses that we were in, because again, UNIX was an environment and didn't play with mainframe, so what did we care what happened on UNIX. And VMS was departmental and some engineering guy is using it, so what do we care about them. The guys in Bank of America they didn't use that stuff, it didn't affect them. But, suddenly this came along, that you could link all of these things up together, and just push the processing out. So now, it was a big shake up, way beyond DB-Live or how were we going to link these things up, ODBC and all of that jazz. That was just a linkage. It was really the ability to have multi tiered systems that we're going to be collaborating to do work and that was a big shift.

4GL at Informix

Sippl: There was another major aspect to it that us fourth generation language type people dealt with, and that was, as Windows came out on the PCs, then having graphical programming languages to build point and click pull down menu style applications running Windows became a big deal. And there, Informix totally missed the ball. We had a big engineering effort to take our Informix 4GL product and make it a graphical 4GL product. And it was an effort that stumbled along and failed and failed again. And had we succeed with that effort, then that graphical 4GL probably would have muted PowerBuilder. PowerBuilder would have probably been an infant company and stayed there, because we had this huge market share. And we had to struggle with the questions with our character based 4GL of whether to have it run on Oracle or not, because we felt our Informix 4GL was a hell a lot of better than the SQL forms and stuff Oracle had. And, I think it would have been a big hit had we marketed it that way, because they had such a much bigger installed base.

Humphries: Yes, our form building stuff was really, really primitive.

Sippl: So if we had ported our 4GL to VMS and run it on top of Oracle, and, if we would have come out with our graphical 4GL in a timely fashion in 1988, 1989, we would have had a huge hit there.

MacDonald: How many times did we try it? Once or twice?

Sippl: We fired two or three project leaders for that a year, year-and-a-half apart.

Impact of Personnel Movement

MacDonald: It's an interesting thing about personnel because, I think, in general we were all successful. We became part of a phenomenon, but then you look back as Mark was commenting yesterday, they had this great guy in Wall Street who knew how to sell into these things. And if that guy had wound up at Ingres, say, by some chance, what would have happened? And then we had a key guy, when we were redoing the kernel of our engine, Gary Kelly, who's now at Oracle, and he did our symmetric multi processing core. He did our massively parallel stuff. If he hadn't been around, or if he had been at another company, how would have things been different?

Johnson: Yes, it's like the people that do the Civil War history and they swap generals around and say, "What if this general had been in this battle instead of that one?" And they go for a whole different scenario.

MacDonald: And we were snake bit on this effort because it was one of the great tragedies, as we all looked back, because if we had had it, it would have been a natural.

Humphries: I think, though, up until I left Oracle in 1989, up until that point, there wasn't a lot of swapping back and forth with people that I saw. It may have occurred after that and it sounds like it did. But the people that were in certain camps, except for a few exceptions like Tierney and a few other people like Mike Seashols; it wasn't easy for people to move from one to another, for technical people?

MacDonald: I don't think people wanted to move much because we were all collectively doing well. So, I didn't see a lot of people moving.

Sippl: We had golden handcuffs on everybody, so we didn't lose too many.

Haderle: No, but it was quite easy for the technologist to move back and forth, whether they wanted to or not, but it was quite easy.

Sippl: They could have, yes, but I kept options in front of everybody with two or three or four years out.

Humphries: That's what he meant about not easy.

MacDonald: Yes.

Acquisition of PowerBuilder

Haigh: I think this era is very interesting. And one of the things we've got is the make versus buy vertical acquisitions into that kind of area. Sybase actually bought PowerBuilder in the end, right? So, how did that happen? Was it a good idea or not? How did it turn out?

Hoffman: Yes, it happened. I'm trying to think what the year would have been. I guess right around 1993 or 1994. And again, the idea was that, because we had designed Sybase a certain way, we couldn't pick up available applications. This had to do with the row level locking issues. We couldn't pick up applications that had been already written that were in the marketplace, so we were looking at what can we buy where people are generating applications that would just automatically run against us. And so that was the concept around buying PowerSoft. They were the biggest, the best application development module out there at that point in time.

MacDonald: They were a phenomenon. I remember when they first showed up at a Comdex, Mark, and it was like a fire sale was going on. The people were 10 feet deep at their booth.

Sippl: It was a great product. We couldn't get ours out. Gupta did have a graphical 4GL early on, but for whatever reason, they didn't market or sell it very well.

Hoffman: But, we had issues. No sooner had we closed this deal then the whole market started to slow down. It went from 50% growth down to 10%, 15% growth. It affected us, it affected them. There were the east/west personalities that were not blending the way they should be. And then I was talking yesterday about this, one of the really good things they had was their SQL people in Toronto. They had actually bought a database company up there.

Sippl: That was Watcom.

Hoffman: Yes, Watcom. So the Watcom database was a little jewel and actually still is in a large part of the business with Sybase today because they started to load that on small devices as the database. And they designed it so they could exchange information between the bigger Sybase database and the whole database. So the integration with PowerSoft tools didn't work

as well as we would have liked, but the other side of it, the Watcom stuff was phenomenal. And interestingly, we got along with those guys. We could talk database to them.

Haigh: The other kind of acquisition, with a horizontal acquisition, you buy a company in the same business. Now, it doesn't seem like that has happened very much in the database area. You just drive the competition into irrelevance.

Humphries: It has now but not in the 1980s.

Haigh: We're addressing through 1995-2000ish.

Humphries: At Oracle, while I was there, we acquired exactly one company and that was a miserable failure and I don't even remember the name of it. It was in Los Gatos in 1985. We were terrible. We had no idea what to do with it. We did buy several of our distributors internationally, but that was really a matter of making job offers to people - giving them big options. It wasn't like forking over $10 million to buy the business. Larry may have felt that he was burned by the investment in Foundation; did any of you guys invest in Foundation? Remember that thing, it was in the Raleigh Durham area in North Carolina, a whole bunch of companies put in money to build a kind of a 4GL thing.

MacDonald: This is ringing some kind of faint bell.

Sippl: That sounds vaguely familiar but I never believed in everybody throwing a bunch of money and no one to pay attention to.

Humphries: Digital threw money in. I think Data General had money in. Oracle for some strange reason had money in.

Sippl: But you guys bought RDB.

Humphries: Eventually. Yes, but that didn't happen for a long time.

MacDonald: And IBM bought Informix, but that was after all of our time. So I didn't even know what transpired.

Sippl: They also visited us.

Johnson: I think, actually Burt is going to want to cover some of that in the final wrap up session downstairs.

Sippl: And we almost combined with Ingres twice. We got maybe a third of the way there.

Humphries: Really, what years?

Sippl: It was in the late 1980s, when they were starting to have trouble. Some of the guys on their board approached me a couple of times. I mean it was like one conversation. I had a conversation with my board, we told them no. But it happened a couple of times.

Johnson: This is so great. So much fun. So much information. The problem is I feel like we've just scratched the surface, but it's wonderful that you guys spent the time to do it. Burt wants to do a wrap up. We're going to have a break, do a wrap up downstairs. We're going to get the technical and the business people together. And then, I'm sure he has a very specific agenda he wants to cover