

Minicomputer Software Workshop: Session 4 - DEC/DG Industry Relations

Moderator: Burton Grad

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Minicomputer Software Workshop Session 4: DEC/DG Industry Relations

Conducted by Software Industry Special Interest Group

Abstract: This is the fourth session of the pioneer meeting on minicomputer software with a panel of software pioneers who specialized in producing software for Digital Equipment Corp. (DEC) and Data General (DG) minicomputers. These companies had vendor relationships with ISVs [independent software vendors] and VARs [value-added resellers]). Panelists discuss these relationships and their program foundations. The pioneers recall technical collaboration, sales force cooperation, contractual requirements and marketing and resale agreements with the manufacturers as well as other business conditions that impacted their success.

Participants:

Name	Affiliation
Burt Grad	Moderator, SI SIG
Paul Gustafson	Argonaut Information Systems
Joe Hensley	Argonaut Information Systems
Karol Hines	Ross Systems
Luanne Johnson	Argonaut Information Systems
Jan Phillips	DEC
John Phillips	Creative Socio Medics
Bruce Ray	Wild Hare
Ken Ross	Ross Systems
Oscar Schachter	ACT, Creative Socio Medics
Gerard Alberts	Historian

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Thomas Haigh	Historian
Michael Mahoney	Historian
Ian Walsh	Historian
Doug Jerger	SI SIG
Ed LaHay	SI SIG

Vendor Agreements

Burt Grad: While our initial focus in this session is going to be on relations with the manufacturers, we will explore some other things as we have time. We've mentioned this in some other context, and I'd like to bring it back together and, in this case, broaden it. John Phillips has brought up the fact that he's had relationships with a number of manufacturers besides DEC and DG, and we'd like to explore what the differences were, plusses and minuses. Let me start with a very simple question. What kind of contractual relationship did you have with those companies?

John Phillips: Oscar [Schachter] always set up a contract with whatever the third party was.

Grad: Did any of the others here have a resale agreement on hardware? Is it a correct statement, or incorrect, that you didn't have a resale agreement on hardware? That is, that you bought it.

Karol Hines: We did for like one year, I think.

Grad: You didn't resell it?

Karol Hines: No.

Grad: And I don't think Argonaut ever resold hardware. Bruce, Wild Hare never resold.

Hines: Ross Systems did not.

Grad: If you were marketing software that ran on their products, did you have any kind of a business relationship? Was there a business partnership, like IBM had their business partners?

Bruce Ray: Yes. Each of the major companies—DEC, DG, HP, AT&T, IBM, Altos, Stratus, NCR—all of those companies had ISV (independent software vendor) programs. And I think there was a lot of the second-tier and third-tier companies as well. Oh, Sun. Sun Catalyst programs. Each vendor, at least by the late 1980s through the 1990s had a very active, independent software vendor program, at least for those who didn't compete in any major way with anything the vendor was directly involved with. So we had language software that did not complete with any vendor, and the vendor did offer certification that our software ran on their own equipment.

We found that most of the vendors, all of the vendors were very consistent, but most were proactive—that is, they had meetings, annual meetings. They had newsletters and, in the majority of cases, had books each year. For example, a salesman from that vendor would go into a client site and say, "You have an application. We probably have a solution for you." This was true on each one of those major vendors. There usually was not an annual extensive commitment financially with any of those vendors.

Perhaps, you've found the same thing, Paul, etc., that each one of the vendor programs were very low cost or no cost.

Paul Gustafson: We got hardware concessions, I believe, at Ross, and we also got that from HP.

Ray: Right. They'd loan (get rid of) their obsolete inventory on you so that you could continue developing and maintaining software for their system even though you were working with other hardware vendors at the same time.

Grad: Did most of you get machines from the vendors, since you were running on 17 different platforms? What did you get from what vendors?

Gustafson: I believe Ross numerous times got hardware concessions from Digital. Again, Ross and Digital had a very tight relationship. It was very mutually beneficial to both companies until client/server came along. Up until then, I believe that either DEC loaned Ross the hardware or gave a discounted rate. I know it was not the full list price that anybody off the street or any other ISV would be able to pick up the hardware for.

Grad: From how many different vendors did you have hardware? Half a dozen or more?

Ray: Thirteen, 14.

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Grad: For each supplier, did you have to pay for that hardware in total?

Ray: Most of the time, no. Most of the time it was a loaner, which they promptly forgot about.

Grad: Did you sign any kind of a nondisclosure agreement with them? Did you have access to private information, any of those kinds of things?

Ray: I don't think so. I don't think there was any advanced notice that was given.

Grad: You weren't given preannouncement materials?

Ray: I don't recall that. In fact, I do have the agreements that I just looked at for the first time in 28 years. It's mostly noncompete and kind of boilerplate: "You aren't a representative of us. We aren't a representative of you."

Grad: The opposite thing then. And you had those with 13 different vendors.

Ray: At least. Right.

Grad: Karol, was that an exclusive, contractual relationship with DEC?

Hines: I don't think that we ever had an overlying contract. We might have had contracts on different projects. But we weren't getting anything from them by us saying we'd be exclusive.

Grad: That's interesting because you make that commitment, for your own benefit, obviously, but you made it. I would have thought at least you might have gotten equipment or at a hell of a discount.

Hines: Oh, we might have gotten it at a discount, but I don't think we got the discount because we had any kind of a signed agreement.

Grad: Really.

Hines: We did sign a VAR agreement at one point, but it was only for like a year, and it just didn't make any sense for us. It was all informal.

Schachter: I have two problems. One is that during the large part of the 1970s and the 1980s, I was actually on the business side of the company rather than on the legal side. We had

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another lawyer, Dave Goldstein, who took over most of the legal function. Second, I was traveling back and forth to Iran until 1978, so I was out of the country a good deal of the time.

As I remember, the most important thing was the discount that they were willing to give us. We had a VAX in our service bureau at that point, which I think we also used for development as well as for our service operation. The thing that was negotiated on a yearly basis, based on the plans for the year, was how much we were going to sell. That was the basis for the discount which they would offer us, the hardware, so that we could resell it to our client, hopefully at list or at list plus.

- Grad: Twenty or 30 percent more?
- Schachter: Something like that.

Manufacturer Relations and Pricing

John Phillips: We had someone always responsible for VAR relations because it was big business for us. There was always a VAR agreement that we signed. A fellow like Oscar would sit down and try to modify things that we wanted modified in the agreement, and that was part of the negotiation. You wanted two things for sure. As Oscar said, you wanted the discount. That was the whole discussion/negotiation. And that led to a requirement of at least a yearly marketing review, if not every six months. But there was that in which you both talked about what you could do.

The second thing you wanted was a complete organizational chart on the liaison. How are they going to work with you? How are they going to market with you? How are they going to sell with you? How are they going to handle joint issues of maintenance with you and problems as we discussed earlier There were other things negotiated. I've forgotten that example that Oscar gave, but things like computers in-house to be used for joint development and so forth.

On the issue of marketing, that was a huge area of opportunity and problem. The opportunity was you do things jointly. We did a lot of things with the manufacturers that they handle certain costs because in many ways, they got as much out of it or more out of it than we did. And the second thing is the issue of conflict. I don't think we ever signed an agreement where we would exclusively use that, which was one of the issues we had with the more successful manufacturers. The more they were hungry, the less they argue that issue. But that was a major issue.

On our side, we were concerned that they never sell around us. That was the major issue. That would ultimately have us stop working with somebody: if they sold around us or sold after we had the contract. We had major issues with DEC on that—millions of dollars.

Grad: Give an example.

John Phillips: Well, the case of the outfit in Washington: the Psychiatric Institute of America. We did a pilot with them. The first installation was a huge project. It took like three years of constant arguing. The future of it was that we were going to put this system in what they expected would be hundreds of hospitals. And DEC built an agreement with them around us as we finished the initial installation. Their argument was, it wasn't their fault, it was the client's fault. He insisted. Our response to that was, "If they insisted, you could have said we'll do it any way you want, but we still get our cut."

Grad: I'm sorry. They sold the hardware around you. Did they match your price? Is that what they did?

John Phillips: Well, they made the prices. We had to match their price. In other words, if they sold this system for \$1 million a hospital and when we handled it, we got let's say \$150,000 per hospital. When it comes to them selling directly, they can sell it anywhere between \$150,000 and \$1 million. There wasn't just one price.

Grad: I was just wondering; one of the ways to protect is price guarantee.

John Phillips: It wasn't price. It wasn't price. It was they wanted to control it. They wanted to take it over. They didn't need us any more on that sale, and they used the excuse of the client. Now, in here, in the ADAPSO model contract, you should all look at at least the first two pages because it describes why it's important for the VARs and the manufacturers to get together. It's very good. A little write-up in there. But there's 16 vendors in here. Some may not exist any more, but their responses to the questions are interesting. They all said that VARs were very important to them, even Digital. Even IBM said that VARs were very important to them. That was the biggest issue that we went over at ADAPSO: channel conflict by the manufacturers. It wasn't discounts. They all had plans that were fairly competitive. It was that which was the main issue.

Grad: Now, with HP, at least I was told, whether you or the salesman made the sale, the salesman got the same commission. Therefore, I would have thought that would have eliminated the channel conflict issue.

John Phillips: Well, that doesn't eliminate it, no. And it may not be the same commission.

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Grad: I was told they got exactly the same commission. That's what I was told. I will find out more on Thursday.

John Phillips: More and more, what you just said is true. They weren't supposed to have their commission hurt when their vendor clients made the sale. In fact, it was the opposite. They were supposed to have plans that, if they had three VAR clients, that's what they had. All of their measurements were through that. There was no other measurement. If it was not going to be our sale, it went to somebody else. So we looked for that kind of a relationship.

The fact of the matter is, most of the time, that was the relationship. The VAR salesman of manufacturer A, their plan was based on their selling through VARs, that's all. Some of them were very good at helping the VAR in every way feasible.

Grad: Why was there any motivation to DEC to sell around you?

John Phillips: Two reasons. One, they control the client. They don't need you any more. You take DEC at their worst time, which we're going over. They didn't want you to control anything. They wanted you to be at their disposal, and that's the way they wound up treating you in the final analysis. The fact of the matter is, if they control the client, they can do three things. One, they can approach list price to whatever extent they want, in which case there's no commission to you. Second, they can make sure that DEC is selling everything that DEC can sell to them. Don't forget, with an organization like us, they could theoretically think, we'll sell Data General on the next installation. It's feasible. It's not what we did, but it's feasible. The third one is just, I think, an ego thing. They wanted to control it. You know, two was about money and one was about control.

Grad: That's guaranteed to make the VARs mad.

John Phillips: Well, when the manufacturers were hungry, they worried about that. When they were riding high, they didn't worry about that any more.

Ian Walsh: What happened in this example?

John Phillips: In that example, we went up against DEC at the time that they were in their apogee so to speak, the days of the Monte Carlo meetings and so forth. Do you remember that?

Thomas Haigh: What year was that?

John Phillips: That would have been around 1989, I would think.

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Schachter: Yes, the beginning of the 1990s.

John Phillips: Give or take a year, about 1987 they had the biggest year.

Jan Phillips: I took the buyout from DEC in 1990. So obviously, they were not in the Monte Carlo days.

John Phillips: Well, this was where they had the big Monte Carlo conference and the big Boston conference where they took over those cities. They had to put people on ships, and everything else like that. And they announced to the VARs in a big VAR meeting, and they announced the green zones and the red zones and the white zones. Was anybody else around for that? In it, they announced a complete revamping of how they would market with VARs. They also announced places they were going to build applications and cut you out..

At that time, when we went up against them we said, "Hey, you can't do this. This isn't fair. This isn't right." The people we dealt with told us, "That's the way it is. That's where DEC is going." The only fun I've had out of that is the three lead guys have come to us for jobs since then. <laughter> That was the only fun part. Okay. But they said DEC would live forever and a little outfit like us would be gone. And they wouldn't bend.

Grad: Did you depend upon DEC for the leads? It sounded to me like you were getting leads directly.

John Phillips: No, not at all.

Grad: Lead generation did not come from DEC?

John Phillips: Yes, but they were able to say the client came to them. The client wanted to do it that way.

Grad: Boy, that sounds very shortsighted. Were other of the vendors doing the same thing? Or was DEC unique in that regard?

Ray: No.

DEC Management and Organization

John Phillips: DEC was a unique case, believe me. But if you watch vendors, the hungrier they were, the more they would do unlimited rainbows of things for you. The more they got solid, the more, let's say, disciplined they'd be on what they would do for you and what they wouldn't do, which is the way life is.

Grad: Fair enough.

John Phillips: But DEC became unique in that particular phase.

Grad: In general, let's talk about their attitude and response to ISVs and to VARs. Jan, why don't you tell us a little bit about that. During the 1980s, you were working there at DEC, and one of your goals was to get the DEC management people involved in ADAPSO because that was where the software companies were.

Jan Phillips: That wasn't until 1987 and after.

Grad: It took some years on your part to get them even to pay attention, right?

Jan Phillips: Yes. I don't know about years. In like 1987 I first appeared at ADAPSO and I think these guys came along, you know, within the year.

Grad: Was there an ISV group in DEC?

Jan Phillips: No. Remember, I had no connection whatsoever with many of those. I did have an early job in the 1981 or 1982 time frame, or maybe a little later with. terminals that were resellers in VARs, but that was all. sales, which you know was very separate from corporate and marketing.

Grad: Jan is a squirrel, if you'll pardon the expression. She saves everything. And I asked here for some org charts of DEC in the 1980s. At corporate.

Jan Phillips: Oh, okay.

Grad: Well, some of the organizations made the charts.

John Phillips: There might have been marketing functions, but at the sales level, almost all of the things that we did as VARs, you had distributors, ISVs. You had all of what we might call

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the resellers or the third parties that were all part of the same process.. And you'd see that at all the meetings. It was true at ADAPSO too, and it was true in the VAR magazines. They were all treated as ISVs..

Grad: From any of your standpoints, were there any particular vendors, any particular manufacturers who were especially helpful, especially supportive?

John Phillips: For us, it was Data General.

Ray: HP and DG were both pretty supportive. To a lesser extent, DEC.

National versus Regional Sales

Grad: Paul, as far as this is concerned with Argonaut, with Ross, DEC was the key one. But before that, were there any particular vendors that were the easiest or best to work with?

Gustafson: I think our connection at Ross was a better experience than Argonaut had with HP. HP re-licensed the payroll in HR actually for a couple of years and gave it back to us when they decided they didn't want to be in the application business. At that point in time, they gave us access to their full sales force, etc. It was pretty amazing how fragmented or difficult it was to get information out of the sales force and give it any continuity. Their sales force seemed pretty disconnected to me.

Grad: Are there some other areas where you developed relationships with particular regions or particular sales offices that they found very productive?

Gustafson: Nothing done at a national level.

Grad: Or done less at national, yes.

Gustafson: Right. It's done at a more local level, out of a particular branch office or whatever.

Grad: Was that true in your case?

Gustafson: That is what we found. We tried doing flyers and stuff. We knew the address of every single sales rep in the country, and we produced flyers and sent out stuff to every single sales rep. They said you had to win them over one sales rep at a time; that's what it boiled down to.

Grad: The national programs didn't do you much good.

Gustafson: No.

Joe Hensly: You were going for mind share in individual operations. You could usually only get their attention when there was a prospective client that you were working with. Other than that, the only way I found to effectively get their attention was when I would go to any region to be working on an opportunity. I'd buy lunch. That got their attention.

I developed a million-dollar ploy with them. I'd give lottery tickets in exchange for business cards. And I'd get all the business cards and pull it out. I mean, this is the way I got the names because there was not much coordination in terms of here's who you're going to be working with. So I got the business cards that way.

Then in Vancouver one time the sales manager up there took me aside and put his arm around my shoulder. He goes, "You know, I don't know if you ought to bring those lottery tickets in here any more, because if one of these guys wins, I'm gonna lose a valuable employee."<laughter>

Demand for VAX

John Phillips: Well, you know there was a time when the VAX took off. It was the only time I can remember where we had so much of a demand by end users for a particular manufacturer. That was another reason we had to keep working as well as we possibly could no matter what came up. It reached a point where we probably made more money with DEC even with all the difficulties than with all the other manufacturers combined. That was the reality of the situation, and then it passed.

That leveled off and the issue of the manufacturer started to reduce itself again in terms of end users. They were more concerned about functionality. But there was a time there when DEC looked unbeatable. Unbeatable.

Grad: I remember. Now, this might be a different time period, when the Nova and SuperNova were really, technically and price wise, outperforming DEC at those points in time. Is that correct?

Ray: Almost all DG outperformed comparable DEC hardware.

Grad: Are you saying the VAX was so attractive that people were asking for it?

John Phillips: We found there was a point when the VAX marketing was uniform, from here to there, describing all of the kinds of very, very popular terminology and theoretical capabilities. Then it became, in our experience, overwhelming in terms of demand.

Gustafson: It's not just price per MIP. I mean, you kind of give the impression that everybody is out there with their price per MIP calculation trying to determine which hardware vendor is cheaper. DEC is out there selling the solution, selling the advantages of the VMS operating system. It was a very powerful, easy-to-use operating system that was elegantly designed, and in essence, they totally blew it, letting Unix take over by keeping their price points high.

Ray: DEC also had the 32-bitters before DG did. They had a two years' advantage.

Gustafson: It had connectivity between multiple VAXs. It was all just very seamless. It had the ability to network with PCs and a faster network file-sharing system that was extremely well-architected and easy for someone to use.

Grad: Here's a case where the technology really drove the market.

Ray: Far superior than anything else in the market? I'd say just the opposite. The technology did not drive the market. The DEC hardware was not as technically high-performing.

Grad: I'm talking technology of the system software you're seeing.

Shift in VAR Relationships with DEC

John Phillips: It was an elegant description. It was elegant, easy to understand, especially by a nontechnical person—let's call it a business person. It was a very elegant description. I've been in marketing for 40 years. I've never seen a better description of a hardware family since maybe the IBM 360.

Nobody that I saw matched that description. It just was, in our marketplace, extremely saleable beyond us. We were being asked for it.

Jan Phillips: In the early 1980s, each marketing group owned a part of the sales team. When I was with the medical systems group—that's up to 1983 or 1984—this portion of people belonged to us and after that, they all disappeared. Marketing was trying to capture the mindshare of the sales people. I wrote a particular piece when I was in the MCAD group, so that was before 1985 or 1986, and the three people or companies I was working with or we were was Ansys, Patron, IBU, Dynamic Research, and Hibbert Carlson. We, DEC, created this article

with their agreement, of course, and put this out. I think there were lots of disconnects in the company while they kept reorganizing and changing things.

John Phillips: They had a reaction; they had that big meeting, and that to me was the end. A lot of the sales people or marketing people I worked with said, "It looks like a bunch of MBAs were put in a room and told to lay out this marketing plan. And they laid it out in what was to be some logical fashion—totally unrealistic, totally unreasonable."

The reaction by the VARs was quite staggering, quite staggering. I think that was a major fall off in missed opportunities with the VARs. You had to see it to believe it, that the same group that was creating marketing materials, so to speak, for the VAX and the plans for the VAX could come out with an idea like this. It was very radical, very traumatic. It just changed relationships of many, many VARs with them drastically.

Grad: What did the VARs do as a result? Did they say, "I won't do business with DEC any more?"

John Phillips: I don't think they said that any more than we did. I won't do business with you. But I think there was a recognition: this is going to keep getting worse, so I've got to do my homework. Then you figured out how much homework you could do. In our case, over time, we were able to work with other organizations and we were able to find some ways, at a field level, to work better with DEC on the situations that developed. But it was a plan that was basically saying, in a sense, "You were my partner. Now I'm going to make you less and less of a partner, and you've got to sit there and take it because you need me and I don't need you."

Schachter: I assume we worked more with Data General as a result.

John Phillips: Yes.

Lack of Internal Champions within Manufacturer Organizations

Grad: Were there particular people by name at the headquarters levels who were your champions? People at DEC or DG that you really felt understood what you offered in the marketplace and how you could sell their machines. Any of you?

John Phillips: I found it was a very hierarchical organization, and most of the people that I dealt with, not like some of the other manufacturers, just went by the book. They took no risks, and they took no chances. They followed up on everything back up the line. And I would say no. I knew of no champion there; some people gave lip service, but they wouldn't do anything.

Grad: I spoke to a man named Jit Seitsena, and his name came up as we were looking for people to invite from DEC and DG. He was at Data General. He's got a very successful company up in the Boston area now, and this was an area of his responsibility. But that's not a name any of you heard.

I have a list of 12 to 15 names from both DEC and DG whose supposedly primary involvement was in ISVs and VARs over these periods in the 1970s through the 1990s. And Ed Johnson was another name at DEC.

John Phillips: We had one funny experience with Data General. Data General salesmen were given a lot of leeway, or they took a lot of leeway. I don't know how it worked, but there were no controls. The problem they used to run into sometimes was that people higher up would say, "You don't work for the VAR. You know, you work for us." And so I would say that at some point of time, we hired everyone who had been a DG salesman for us. When they couldn't get any further, they wound up coming to us.

Grad: Did you have particular people at Ross whom you worked with who were DEC people who you said were champions, the ones who really believed in this?

Hines: I think the sales force had people. There were some marketing people too who worked with our marketing people.

Grad: That doesn't sound like headquarters people though.

Hines: I remember there were a couple of people we had strong relationships with at headquarters, but I wasn't involved in that area; so it was Ken [Olsen] and the marketing people. I mean, we were making trips to DEC all the time. When I would go there, I would usually go because we were working with the finance people or with people who were using our products.

Grad: Here's why I wanted to explore this point. IBM was totally hardware oriented. "We're going to sell hardware. We're going to sell hardware." I was building application software in the company and basically got no respect, the Rodney Dangerfield approach to things. They didn't care. When I tried to announce a product, the issue was this: how much hardware is it going to sell? And this is through the entire 1970s, literally. That didn't change until much later, in IBM a lot, I'm told,. They made nice to us through ADAPSO and other places later on. We had love-ins. But as a fundamental strategy, that was not a primary strategy.

That changed with Gerstner coming in. That was a primary change: we're going to build the software business. We're going to build the services business. I was wondering if anything of this kind strategically occurred at any of the many mini manufacturers.

Manufacturer Turnover and Turmoil

Ray: Well, I think it's a cyclical, human situation where in DG, during say 1981, we had Bob Miller come in. They had Dick Farwell for the VARs. So they had a concerted effort to renew the ISV and VAR relationship. After everyone either got pissed off or got chummy and happy, the honeymoon was over. People had to go to work for a few years.

Then in 1989, we had the same thing going on all over again. You had the complete change in Data General from the MV architecture to the RISC "open systems" architecture—whatever that means. You had Joel Schwartz come in. He was responsible for the ISV and the VAR. So you go through that for a few more years. Then 1997 comes. You hear the rumblings about buyouts or another change at Data General.

Every five or seven years, you had a fairly major shift or completion of one full circuit of the cycle: a newly instituted, dramatically changed policy, the adaptation, the pushback, and then the reexamination review and reinstitution of yet another policy. Different people, repeat as necessary.

Grad: It does seem to be that if they could lock in the third-party vendors to their equipment, and their equipment is going to sell because people wanted applications, that at least one of those vendors should have seen that as an ongoing strategy instead of as a cyclical or sine-wave kind of approach. Apparently it didn't happen, did it?

John Phillips: Some of them had other issues though. For example, the saddest one I remember is when Texas Instruments started to build a mini. I forget the name of it.

They were down there in Texas, and we said, "Look, we want MUMPS," and they said, "We're not sure MUMPS can run on this machine." They spent technical time and then handed it all to the sales force. So there's the mini and the MUMPS all perfect. We started to sell their stuff, and they were tremendously helpful, but they couldn't finally compete with the other mini manufacturers. The other mini manufacturers were going well, and they couldn't quite go beyond a certain point. At some point, clients wouldn't take that equipment, so we had no choice. They were trying on a marketing level and the support level to be very, very helpful.

And as I say, Data General was another good example.

Schachter: Yes, according to this survey in 1989, Data General is saying that 50 percent of their sales are done through VARs.

Grad: One would have thought that seeing that kind of picture, the manufacturer would try to lock the ISVs and VARs in if they could and that would have been great. They could lock them in through discounts or something else, but it doesn't look like any of them had that as a consistent pattern. It's interesting to me.

Ray: Oscar, did it say happy VARs in that article? <laughter>

Schachter: No, it just says 50 percent. < laughter>

John Phillips: Frankly, I don't remember. Maybe it's the nature of our application. It wasn't pushing any limits. I don't know. But I don't remember any particular problems with DG installations. I don't know if you do, Oscar, any more than DEC installations or anything like that.

Schachter: No.

John Phillips: It's just that at some point, you know, DEC just seemed for a while there to be unbeatable. Then of course, they had their problems.

Schachter: Of the 16 computer hardware vendors in this survey in 1989, only three of them still exist: Hewlett Packard, IBM, and Apple. Only three. The other 13 are out of business, right? Altos went to AT&T and then to Bull Honeywell. I guess Bull still exists overseas. But Data General, Digital, NEC, Plexus, Prime, Tandem— some of these are absorbed in other organizations now, but they've clearly disappeared. Texas Instruments.

VAR/ISV Survival and Vertical Software Markets

Grad: That's going to lead us up to my next comment. The software world. There were a bunch of VARs and ISVs out there. We talk about not just the core. Who still exists? What platforms are they running on? Do any of these companies still exist? Cognos, for example, I guess was one of the companies in those days. I guess Metatech's just an HP thing.

Schachter: They're very successful. Metatech.

Grad: How about in the DEC/DG world? Are there still some of these vendors around that you remember from back in the 1970s and 1980s? Anything exist still?

John Phillips: I really have trouble thinking of any that are.

Hensley: In the business application world, is there anybody left other than Oracle and those German guys, SAP?

John Phillips	: Isn't Peachtree still around?
Schacter:	No, they're not around.
Hensely:	I'm in the B&B business now, so I forget all the VARs
Gustafson:	Well, Ross still exists, as part of china.com.
Hines:	Yes, china.com
Grad:	What do they do?

Gustafson: They still sell enterprise software to somebody. I think more on a global basis versus domestically within the U.S.

Haigh: You know, I think all those vertical software niches have still got companies that sell to them. For one of my classes, there's a company that sells herd management software for dairy farmers.

Grad: There are plenty of vendors in those niches. The question is, did any of the mini software vendors or mini software VARs migrate and still exist, or are they just new companies that replaced them?

John Phillips: We know that in our own vertical market there are still several people who would have been considered VARs who still exist. I think VAR-dom for the most part had a historical point in this evolution, and the VARs that still exist for the most part. You'll find maybe one leader in a given vertical market and then a bunch of outfits that have found a way to continue to exist but not grow. They have a list of clients that they work with all the time, and they've almost become a family of clients to some extent.

Let's say in our marketplace, leaving out the top area, all those firms still exist. The Ross Perots, Cerner, and the other large companies—they all still exist because of their size and their span.

Schachter: But they're not focused in this area really.

John Phillips: No, we know their size and span. That's the point. They're not focused. They do work in this area. They're not focused, but when you get below that minicomputer, most of them have either been absorbed or their client base has been absorbed. Or they've stayed the same size they're at or a little smaller, sucking the opportunities out of the client base that they had. This is probably true in several vertical markets. You don't hear about them any more.

Grad: Bruce, you were in touch with a lot of people. You said there's a lot of DG software and DG simulated hardware still in existence. Is that a true statement?

Ray: Yes. There's a lot of especially 32-bit machines, and the 16-bit Eclipses are still being used around the world. A surprising number of applications.

As far as the VARs, I'm just writing down a couple of the ones that, perhaps, some have heard of around here: Cyberscience, Cognos, Wild Hare, Rhine Tech, IPT, NCBA. Anyone heard of Real World Software? It used to be called SSI, Satellite Software. They were Word Perfect. That's still around.

Grad: They were bought by Corel, but they basically became a pure PC company.

Ray: Right.

Grad: Their first implementation was on DG, I believe.

Ray: Let's see. Cognos. Dynamic. Those are some of the big ones that we've seen from the software standpoint. I know that most of these are still in business, but they've evolved.

Marketplace Shifts

Grad: There's a shifting thing. This adaptation to the Unix platform should not have been difficult for most of the companies in the mini area, I would have thought. Because in most cases, like Ross, you were running on a variety of machines. It was the right kind of sized system. They needed VARs to sell the applications. They weren't going to build them. That would have seemed to me a reasonable, easy transition, you know the HP UX and the DEC equivalent.

Ray: With that shift came a different pricing structure. Say, someone sold a proprietary Alpha versus a VAX, what was the price difference between the two?

Grad: Was there a big price cut?

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Ray: Five times the performance in the Alpha, for half the price? How do you sell in that marketplace?

Grad: Well, if you're not selling the hardware, and you're not depending upon the hardware revenue, you are depending upon the software. To me that would be, "My god, look what you've given me." I mean, I now have a much more powerful machine for less money and my application that I can now sell to smaller businesses.

Ray: So the client says to you, "Well, I'm paying \$50,000 for the software, and the hardware is \$150,000. Now, you're offering me something that's, let's say, \$25,000 to \$50,000 and I'm spending percentage wise..."

Grad: Was that a significant ratio? It was in the PC world. Was that significant in this one?

Ray: We found it was. We found it was a traumatic shift.

Gustafson: In the application space, I'd say no. There's not been price compression at all. If anything, with PeopleSoft and SAP offering clients several versions at that point in time, the price went up.

Grad: They raised their prices? They did just the opposite.

Gustafson: It has to do with the paradigm shift to client-server, which is not just the open systems. You have to again have the clients. Ross had character-based products that ran on Unix-based operating systems, but customers didn't want that. They wanted the graphical front end. They were obsessed with basically getting a graphical front end with buttons and icons and different font sizes. What they saw, what that was going to give them—that was not calculated in the spreadsheet. It was an emotional purchase.

Grad: You approached this before. Let's accept that as a fact. For whatever their reason was, whether it was economic, or whether emotional, they wanted to go to client-server. Now, why didn't these vendors make that shift?

Gustafson: Because they failed at the transition, just as McCormack & Dodge failed in their transition to client-server. McCormack & Dodge did not offer a client-server version in a timely enough manner to basically compete effectively against PeopleSoft.

Grad: Why not? Was it a technological barrier? Was it a strategic barrier? What stopped them from doing it?

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Schachter: People are wed to what they've been doing.

Hines: Yes.

Schachter: It's a mind set. Making that leap, changing a company from one paradigm to another paradigm is very, very difficult. It's not easy. Maybe IBM because of its size has been able to successfully move from hardware to services as a major core business.

Grad: It took them 20 years.

Hines: Well, yes, it wasn't done quickly.

Schachter: No, it wasn't quick. It took them 10, 12 years to make that shift. But a lot of companies haven't been able to. I knew that in the case of Netsmart, I think, or CSM, that the shift to a GUI was because so many of the people who were using the system were clinicians; they were people who didn't have any technical background. It really changed their lives, I think, in terms of being able to use a computer system as compared to having the old interface.

Grad: So you were able to ride the wave and stay with it.

Schachter: Yes, we did.

Product Feature Transition

John Phillips: Once again, because of the early technical decisions and the people that we brought in who are called productizers, for lack of a better term, that example of changing to graphical, which I thought was better for several of our applications, enabled us to make the transition on a very, as Oscar said earlier, step-by-step basis. We didn't have to throw everything out to add GUI, for example. We didn't throw anything out. We have clients running right now the same applications. Some of them still have parts of the system that they like that way in graphical. So it doesn't make any difference to our product.

Grad: So the surviving companies, the few, were the ones who were able to ride that wave and make that transition...

John Phillips: Yes, make the transition, be able to afford to make the transition, and not have traumatic processes. For example, some people have to make the transition, and they lose all the clients before they get there, right? I've seen that happen. How do you do it on some safe, relatively logical basis that you can afford and that doesn't hurt the marketing process too

much? We were able to sell stuff and say, "Don't worry. You're going to get that anyway." All of our clients that we've had, you could talk to them, so don't worry about it. Because a lot of people made radical transitions when they changed their application technology, radical transitions. We know companies that went out of business going through that process.

Gustafson: I think it depends on the competitive landscape. In a vertical environment, if you don't have another competing vendor that's offering a client-server version or the technology paradigm, you can afford to go and move in at a different rate than if you're selling in a different vertical that has a compelling interface or has made the paradigm shift.

John Phillips: I worked at Control Data when IBM put them out of business, and we used to use the same technique. If someone said, "You know, so and so is now showing us a graphical interface. They're showing us client-server," we'd say, "How many processors have they gone through so far? Is this the first thing they're doing? Okay. If you stay with us, this is the process." Many times, that kept people from going with IBM.

We used to call it pretty face. They might have a pretty face, but what's the history? What's their business experience? How long have they had clients? Are the clients in place right now? You had to do that. There were things you had to do besides technical development. You know, I always felt that a lot of the VARs focused too much on the technical and not enough on the user. I think if you do focus on the user, you can actually get by some of the pimples, as you go through the process.

Grad: Are the vertical markets inherently different in that regard from the cross-industry type markets or the system type markets?

Gustafson: That's one other dimension I can bring in. In the application space, a lot of times, especially in the larger implementations, there's third-party consultants like a Big 6 or Big 8. It's basically managing that implementation. Their desire is to partner up with whatever vendor is going to have a high probability in succeeding and is going to maximize their revenue stream. Again, if we're talking about this client-server approach that enables business process reengineering, it allows them to do a much larger or expanded scope of that implementation, compared to just dropping in an online system and implementing that application. During the client-server era, we saw the Big 6's coming in there, and they wanted to partner with PeopleSoft because they knew that PeopleSoft was going to require this huge amount of implementation consulting work on the backend.

John Phillips: Right. I see your point.

Transition to New Technology

Grad: We have a very interesting story here in software. One, hardly any of the mainframe software vendors succeeded in mini. Hardly any of them succeeded in PC. There are some exceptions but very, very few. We're seeing the same story here with the minis, and even in the PC world, when the graphical user interface came in. You can argue that Microsoft, through its agreements and its marketing strategy, locked-out the competitors, but you got rid of WordPerfect. You got rid of Lotus 1-2-3. They were earlier on the GUI and had the knowledge there. There's a technical issue as well as the way they wrote the contracts. Does that make any sense, or does that again seem to be out of character here?

Haigh: It seems like the successful mainframe software companies were mostly tools, utilities system software and some applications, but not vertical markets and turnkey systems.

Grad: I think there were a number of software companies that were fairly successful in insurance, banking, and a number of others that ended up either killing themselves or they didn't migrate. But you're certainly right. Well, look at the example of the database management companies that were very successful; not one of them became the hero in the relational area.

Haigh: Right.

Grad: IBM was the only one that ended up being significant in the relational area. I find this very strange.

Haigh: A lot of them were selling to relatively small companies that will tend to adopt a system. Also, if it's something that's tied in with their core processes, they might be more reluctant to replace something that's still working. I mean, out there in the world, I still see text terminal interfaces at hotel front desks, at car reservation systems, and in restaurants, sometimes. The waves of new technology aren't there. Companies like that aren't necessarily going to say, "I need to have a GUI. I'm going to throw out the working system that does all our reservations or our processes to get a new one," to the same extent that places where you've got an IT staff that want to play with the new technology would do. Maybe also smaller businesses and the public sector might change things at a slower rate.

Schachter: They're slower to adapt to new technology.

Grad: We've seen that in every area; you're locked-in to the nature of the way you think of your business—the railroads, with the iron wheel and the iron rail. We've all seen it. None of us seems to learn.

Johnson: It's the innovator's dilemma.

Grad: We never seem to be willing to kill our own children.

Schachter: Look at the difficulty Microsoft is having now in really being dominant in the Net world. They just haven't been able to do what Google did, and before that, what Yahoo! did. Why? They certainly have the resources. They certainly have the money.

Johnson: Clayton Christensen's treatise *The Innovator's Dilemma* has to do with the installed customer base. Once you get an installed base of customers, you're always making your choices for your resources as to whether you're going to continue to support the ones that are already there or come up with something new to go for a new marketplace. His book shows that, for the most part, people tend to stay with putting their resources in the sure thing, which is the customers they already have. But in the long run, that turns out to be the mistake because they should be abandoning those guys and going after the new market.

John Phillips: That's a real conflict because, even in our own business, we used to look at the issue of a new innovation that would be good for the client and thought, "Holy mackerel, it'll hurt our revenue. And it'll hurt our margins. What do we do?" You finally had to lay out a plan to do it in some form or another whether you, as Oscar said, delayed it, didn't step, or find a new way to price. Microsoft certainly is a classic example of that.

Johnson: Christensen covers four different industries, one of which being the disk drive industry. Companies get locked into a disk drive of a certain type and configuration, and they cannot make the shift to the next thing, which eventually gets to be something really tiny. Some interesting dynamics there.

Gerard Alberts: VARs with their close ties with all their clients should be able to educate their clients.

Johnson: It doesn't seem to work that way.

Alberts: I hear the story of a VAR being itself stuck in a mindset rather than their clients.

Grad: This is exactly the kind of dilemma we think that history teaches people, that people only look to see what had happened in the previous generation. They might learn. Now, the generations are getting shorter and shorter, so maybe our memories will get better.

Alberts: Or we're getting older and older. <laughter>

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Hardware and Software as Commodities

Michael Mahoney: I'm wondering how much commodification has to do with it though. I mean, the PC commodizies certain aspects of computing. For example, my son is in audio post-production. He started in that field in the late 1980s when, in order to be able to do his job, he needed very expensive equipment. He got his training out in Hollywood. He tried to set up a studio during the late 1990s, but he found that in the end, Macs were taking over his market, because a bunch of kids who wanted to cut a CD could use Mac software in their basement studio. It was good enough for them, right? He winds up needing high-end equipment to do the kind of job he's doing, and then finds his market eroding because this commodity has come on the market. It's not only the hardware but the software that has been commoditized. It's home studios in the basement.

I'm wondering to what extent that is happening with some of this market we're talking about. That is, the customer in a sense takes over because the software tools and the hardware are now inexpensive enough to do the job as well as the person needs it to be done.

Grad: Mike, an interesting point. That ties in with what Bruce Ray said. As the hardware goes down in price, the software seems to have to follow, even though it's the same functionality, same capability, and so forth. Now, one could argue, as your market expands, it gets 10 times as big; you can afford the reduction in price because you're selling to a broader market.

Mahoney: Then, of course, in the last decade or more, it's not only that the software that has declined in price, the price has disappeared. If you're working on a Linux system, and you go out into that open source software market, you could get software to do just about anything. I have a Linux box on my desk. I refuse to pay for software for it, and I don't have to.

John Phillips: We'd like you to leave the meeting. <laughter>

Grad: John, just boycott his books.

John Phillips: Somebody throw holy water on him.

Software Pricing

Hines: I'm not so sure there's a different class of software that's coming along where the money is all going. I'm working with a client now that's about to spend a couple million dollars on some software from IBM that's SOA? EAI? SOA? What is it? Service oriented architecture? Real-time stuff? They're spending millions of dollars on that, and they spend a lot of money on their BI [business integration] tools. They're Informatica and MicroStrategy and things like that.

I think maybe there's still expensive software out there, but it's not the kind of software we were selling. I don't know about the ERP [enterprise resource planning] vendors that switched to a new mode of pricing that's like by user or something. Didn't they do that? In order to continue to sell and make money as a company, you just had to change the way you price

Mahoney: Well, the computer industry is the poster child of evolution. That's the way it is. The example you gave is to me just evolution. Some of the other examples we gave are about losing money because this is moving, or the Microsoft example, or take a classic, the chip example. Somebody's still making more money than we ever made.

There's something happening out there. <laughter> You have to figure out that this is going down. That means this is going up, or that is more valuable. For example, if somebody's a very high-priced person in the film industry, and all of a sudden their tools are getting less expensive, that may be bad for the tool guys, but it's not going to change his price or her price. She's still going to have more opportunity, probably, to make more money than you made before.

The problem we have is this: it was always easier back when we were doing it, because there were fewer choices. Now, the choices are staggering. The problem is: who can figure out the way to stay on the front of the evolution or find the niche pockets in the evolution? Not even the front. But there are pockets in the evolution where people are doing very, very well.

Rate of Change in Tech Industries

Grad: Let's ask the question: are we now going through the death knell of the independent software vendor?

Mahoney: It seems like what you're talking about is a combination of change and rate of change. Let me give you a couple of examples. A slower change is evolving in the grocery industry, where we're seeing more people moving to organics and more people moving to sustainable. The way groceries are being marketed is changing. The Winn-Dixies of the world aren't adapting to change, and they're disappearing. But you know, we've lost one Winn-Dixie, maybe one Lucky's in the past 10 or 15 or 20 years.

If you look at the rate of change within the computer industry, it's a whole lot faster than it is in the steel or the grocery industry. That rate of change is the reason we're having people who are very successful in a certain timeframe not being successful when you get a wholesale change like moving from mainframes to some other platform.

I don't know whether we lost a lot of vendors going from mainframes to minis. We can probably go back and find that out. Then we lose a lot of vendors when we go from minis to the distributed world. The rate of change is a whole lot faster in this industry, so we get to see a whole lot of companies go out in one person's lifetime instead of the steel industry or the automobile industry where it happens over four or five people's lifetimes.

Hines: One comment about companies going out of business and some still being around. I think if you look at the ones that are still around, you'll see they're adapting to change. Even IBM. IBM is very different now than it was back in the days that we're talking about. Granted, it took them a long time to make the change, but they were paying attention and they made the change. You could say that about Ross too. I looked up Ross. It's called Ross Enterprise within china.com, so it even still has the same name.

If you read the oral history that Ken Ross gave, he will tell you that we were different than a lot of timesharing companies. We started out as timesharing because we looked and looked at how we needed to adapt to change. Even some of the early leading companies are gone from the computer manufacturing business, like Texas Instruments and AT&T. I mean, some of these companies are doing this. They're not doing computer manufacturing now, but they're still around.

So it's a human thing. It's adaptation to change. If you're in the computer industry, you've got to be more adaptable than maybe other industries, like the grocery industry, because change happens a lot faster. But I don't think that a lot of these companies went out of business because the business changed. They went out of business because the business changed and they weren't paying attention and then trying to change themselves.

Gustafson: It's not necessarily that they're not paying attention; it's a question of what do you pay attention to. It's easy to sit here in 2008 and look back and say about the client-server revolution, "My god, why didn't McCormack & Dodge catch on?" At that point in time, you didn't know you were in the process of something that big. You're just thinking it could be noise. It's just like Web 2.0. I mean, it may be that 20 years from now, you look back and decide that you should have been doing all your applications in Web 2.0, that if you're not embracing a collaborative-type environment, that basically all of a sudden, next year, you can't sell anything. But standing here right now, it looks like it's an emerging trend. Yes, we're going to embrace it. We're going to move at a certain pace. But when you historically look backward, you say, "I should have moved at a faster pace because I didn't realize."

John Phillips: Actually, IBM is a good example of that and the point that you made earlier about how you deal with the present versus the future. I remember the numbers in IBM, in terms of the profit on the mainframe. It was something like 80-some-odd percent. It was an unbelievable number. It funded everything they wanted to do.

All of a sudden, they're looking at the mainframe going away, and they've got to transition the business. They had people there who couldn't even contemplate it until Lou Gerstner came in, and he contemplated it. He did, in a sense, what had to be done. Or one version of what had to be done. It was clear, if you have a business that's making this much margin, and you're going into a business that makes this much le margin, it's going to take 10 years. You're lucky if you can hold on to that. And I think they still do have a reasonable margin out of the mainframe business.

Mahoney: Yes, they still get almost the majority of their income from the mainframe business.

John Phillips: So that worked out very well. People thought the mainframe business was going, especially in the golden age of VAX. A lot of us thought the mainframe business was going to collapse and all that high-margin revenue was going to disappear quickly. The fact that it took them 10 years is still pretty impressive.

Mahoney: An interesting thing there is the main purpose of mainframes now is to act as servers for the net.

Hines: Right.

Mahoney: Talk about adaptability.

John Phillips: Well, I was at a conference when I worked for John Diebold, who was a famous consultant who coined the term "automation" and was on the cover of the *New York Times magazine*, on the cover of *Time* magazine. He had a group called the Diebold Research Group. He actually got Fortune 1000-type companies to pay huge sums every year to go to a couple of sessions. At one of the sessions, there was a famous husband and wife who were talking about these PCs. I think they were called micros then. I don't think they were called PCs then. I remember laughing and thinking, "What a stupid idea, taking the data processing out of the central processor and giving it out to users."

DEC and Data General Change of Ownership

Grad: I'm going to switch topics now. DEC is sold to Compaq in 1998. And in turn, Compaq was sold to HP in 2002. My question is, for those of you who were still running on either DEC or DG equipment that late in the 1990s, what effect did that have on you ftrom the sale of the companies? You weren't there, Luanne.. Were you still involved in any way, Paul, at that point?

Gustafson: Only in PeopleSoft, and we were on HP Unix hardware then too.

Grad: So you weren't affected by anything. Karol, anything there?

Hines: No knowledge.

John Phillips: I don't remember any. It was still behind the application.

Grad: So it was a non-issue to you.

John Phillips: It was a non-issue. It might have affected P&L [profit and loss] but I don't know because, as I say, at the worst time in our relationship with Digital, it gave us a lot of revenue and profit. Maybe it had some effect, but not much.

Grad: Did it affect the sale of new DEC equipment? Had that basically shut down before then?

John Phillips: I don't remember pushing DEC equipment once it had that problem. I don't remember if we sold any. It just wasn't a major issue.

Grad: How about with DG?

Ray: DG changed in 1999 and 2000, so you had the convergence of two very bad forces: DG going away and the Y2K fiasco. In one way, it hurt because everyone was having to do something because of management and because of the Data General change of ownership. People were more likely to move from Data General. They said we're going to do something because of Y2K, whether Band-Aids or a real solution. And DG's going away. We had no real incentive to stay with Data General. If someone else could promise us something or give us a magic bullet, we'll do that. If we were dependent upon DG as our revenue source, it would have been a pretty bad situation. Since we were vendor neutral, it didn't affect us as much as it could have.

Grad: So it turned out not to make much difference by this point in time. They'd already declined and already had changed, and that didn't make a difference.

John Phillips: I think part of it, in the years after that for vertical organizations, was that more and more people were interested in the front end. They were interested in the PCs. They were interested in the GUI. And then, ultimately, we had the same process when they all insisted on the Internet. You know, the Internet was going to solve every problem so quickly, so they insisted on that. More and more the discussion was about the front end and less and less about what the box happened to be in the back end. It looks like nothing much to pursue there as far as I can see.

Revenue Models in the Software Industry

Schachter: We see these organizations now becoming very, very interested in ASP [application service provider] services, rather than having the bigger box themselves. They're very interested in not having that equipment.

Grad: Was that a sine wave issue again? It's going to change and then come back to products? Or is it the product? I have this funny feeling that there is no longer any way to make money out of the software product business per se directly. You can make money on running it on maybe an ASP basis or something, but I'm very concerned that the standalone software product business has real problems.

John Phillips: I don't think so. I think CSM probably makes a higher percentage out of licenses and maintenance of their revenue than they ever did before. I personally think the users, even the worst users, are becoming more sophisticated. When computers first started, it was hard to talk about computers—the brands, the operating systems, and so on and so forth. I think more and more, they're interested in the sophisticated front end, so to speak, and how the application runs.

Grad: Why do they need their own boxes since they make money on an ASP basis. You're saying on the software itself.

John Phillips: It's less important.

Schachter: The company also makes money on the license of the software. ASP has a disadvantage, just as IBM went through that period where they suddenly were leasing hardware rather than selling it, where suddenly their cash flow changed dramatically.

Grad: It's actually reversed. They had been always leasing and then the lease switched to sales.

Schachter: Right. Then they switched to sales.

Grad: It affected their revenues dramatically.

Schachter: The same thing will happen, to some extent, with the software companies as they move to ASP models: the large upfront license fee goes away, and the ASP software fee is now spread over four or five years.

Gustafson: They can't stomach it. I saw this at PeopleSoft, Oracle, and I see this at SAP. Basically, it puts these vendors in a legacy position, because it's against their total culture in the way their financial models have been built historically, where the license fee is all up front. That ASP approach spreads out a recurring license fee, and I don't see how they're going to make that transition.

Grad: You're still in the business? You're actively working with a current company?

Gustafson: Right. Which is a software and service solution. Again, on a monthly basis, enterprise applications.

Grad: Bruce, you're still in the business. What is the niche you've cut out for yourself?

Ray: Data General.

Grad: Oh, my goodness.

Ray: Bless their Cobol little hearts. They sell licenses to ex-Data General users in Cobol and Web and Java-based environments. We do more virtual machine work now, because the people who haven't moved from Data General—yes, there are many of them—to open systems are the hard-core cases that couldn't move with the simple flip of a switch or software from Radio Shack or CompUSA. The best way to migrate at this point is through virtual machines or hardware emulations.

Grad: Interesting. You're not in the business any more, Joe, if I remember correctly.

Hensley: I've moved into no tech.

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Grad:	You're not in the business any more, John?
John Phillips	: I do a small amount of fun consulting, but that's all.
Grad:	Oscar, you still have clients in the business?
Schachter:	Yes.
Grad:	You expressed some of your feelings, that things are changing.

Schachter: Things are changing. I agree with Paul, who said that some of these larger companies are going to have major, major problems in transitioning from the license model to the ASP model. I think SAP has been trying to do it now for two years, and they haven't been quite succeeded in putting their first ASP model system out.

Grad: Karol, you're not in the business any more?

Hines: Only as a consultant working with clients. This one client there is spending all this money on SOA [service-oriented achitecture] implementation and a BI [business integration] implementation. They have PeopleSoft running in-house, and they also are signing up with an ASP for a customer interface. It's a power company, so rather than build that system or buy that system, it's a hosted system that's going to let you pay your bills, collect information, and do energy conservation. They're doing all of it. I don't know if they're typical. It's in Nevada and Nevada is a very big, very small state. A very big state with a very small number of people. They've got a little monopoly there. They're only 5,000 people.

Industry Publications and User Groups

Grad: I promised John he could talk a few minutes about the VAR section of ADAPSO.

John Phillips: I think we covered most of it. It all happened at a certain period of time when "VAR Magazine" was taking off. It used to be an insert in "Computer Systems News." I don't know if you remember that. Then, little by little, it became a magazine. It was very well run. At the same time, ADAPSO was just talking, "Let's try to do this with the VAR," so we kind of worked with both of them. They helped each other. There were even some conferences that took place with a lot of involvement of the ADAPSO people. I think we reached a point where all of the known hardware manufacturers were there. It took awhile to get in Digital Equipment and IBM, for example. It was very useful. It worked out very, very well.

Grad: How many members were there?

John Phillips: How many members on the VAR? Well, the members were, first of all, up to I think about 20 of the manufacturers. At the time we were doing that I don't know the number of VAR attendees, but I would say the sessions were very highly attended by ADAPSO in general because most of the people in ADAPSO, other than pure service bureaus or something like that, were all interested in either getting into that marketplace, selling to that marketplace, working out joint agreements. It was also like a hot bed of business opportunities. It went very well for a while.

Grad: How long did it continue?

John Phillips: It was about six years, I think.

Grad: That's all?

John Phillips: Yes. About six years. And "VAR Magazine" kind of disappeared around the same time.

Grad: Interesting.

John Phillips: The nature of the business was changing. Right after that, Sheldon Adelson, who had made all his money building up Interface and Comdex, sold it to the Japanese. I think it disappeared about two years later.

Grad: Mr. Adelson is the third richest man in the United States behind Gates and Buffett. I talked to people at the Museum here about raising money from him. They said, "We've never heard of him." Kind of interesting.

User groups. Do they still exist? Is there a DEC user group still? Anybody know?

Walsh: DECUS was reformed. It has a new name, but they do still support DEC products. Now they also support HP products.

Ray: DEC has one of the best hobbyist licenses for preserving and using DEC legacy software. That is available through, as you were saying, the new DECUS group. Data General, on the other hand, has not been as cooperative. No, they've been outright belligerent, but hopefully within the next couple of months, after eight years, we may have a similar agreement, releasing Data General software for noncommercial, educational use. The official DG group

folded in 2000, and Wild Hare is the official legacy preservationist for that. You can still get all their materials from our website.

- **Grad:** That's terrific.
- Walsh: It is now known as Encompass.