ADAPSO Reunion Workshop: Big Eight Accounting Firms

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ADAPSO Reunion – Big Eight Accounting Firms Workshop

Conducted by Software History Center—Oral History Project

Abstract: The workshop members started by discussing the early issues involved in deciding whether or not the Big Eight accounting firms should be admitted to ADAPSO. Although the panel felt that the accounting firms were unfair competitors at the time and had a large percentage of the professional software services, they concluded that on the whole, the Big Eight were a benefit to the industry because they legitimized the outsourcing of these services. Andersen Consulting (a part of the Arthur Andersen auditing firm) was singled out as the most aggressive of these firms and the panel discussed Andersen's business practices. After talking about the characteristics of the accounting department customers at the time, the group covered software capitalization rules and practices. They finished by talking about how the accounting firms helped validate the industry but how their taking unfair advantage of their special relationship with their customers eventually led to problems.

Participants:

Name	Affiliation
Dave Campbell	Innovation Advisors
Jay Goldberg	Hudson Ventures
Doug Jerger	Jerger Associates, formerly Fortex Data Systems
Phil Frana	Charles Babbage Institute
Thomas Haigh	Univ. of Wisconsin, Milwaukee
Ron Palenski	ADAPSO Staff Counsel
Mary Jane Saunders	Attorney, former ADAPSO staff
Elizabeth Virgo	Consultant

Introductions

Dave Campbell: Our charter here is to record observations or thoughts or experiences related to the topic. I haven't thought much about recording my thoughts for a hundred years from now, but that's what we're here to do. I also have one good takeaway for you. For years we lived with the term "The Big Eight" and then the number went down and we didn't have a good term to replace it. I think we now can adopt the term "The Final Four." [*Laughter*] That's your takeaway for the day.

We'll go around the table and have everyone introduce themselves and talk about their perspective on CPA relations. And then I'll speak a bit to the leadership questions that were provided.

I'm the Managing Director of a company called Innovation Advisors. During the late 1970s and early 1980s, I was running Computer Task Group and chaired the ADAPSO CPA Relations Committee. We entered into direct negotiations with some of the Big Eight firms which we'll talk about in some detail. Jay?

Jay Goldberg: I run a venture fund called Hudson Ventures. I was chairman of ADAPSO in 1987 and I ran the Professional Services Section of ADAPSO during the period when it was negotiating with the Big Eight. At that time, I ran a company called Software Design Associates.

Mary Jane Saunders: From 1983 to 1989, I was on the staff of ADAPSO and I'm now a lawyer in private practice.

Ron Palenski: I was on staff as counsel to ADAPSO from December of 1978 until October 1994, and CPA relations was one of my responsibilities.

Doug Jerger: During the 1970s and 1980s, I was with a company called Fortex Data Corporation and served as the Chairman of the CPA Relations Committee, working with Ron. I ended up in that position because I was mad at Arthur Andersen, which is where I started working directly out of school. I was with them for ten years and I was bothered by the fact that they did consulting work for companies and were auditing those same firms.

We testified in front of Congress on this issue on August 1st, 1979. Ron and I spent a lot of time talking to Congressional staff and to the SEC. When we talked to the SEC in 1979, we said, "This is a problem." And they said, "Do you have any egregious examples of it? Or any examples at all?" And we said, "No, we don't, but when it hits the fan it's going to be terrible." It did. It is. Later I was on the staff of ADAPSO, but that was in the 1990s.

Haigh: I'm your historical co-moderator. I think we should try to cover the chronology of ADAPSO's involvement with the issue and how it progressed over time.

Beyond that, one question I'm really interested in is: What was it like competing against the Big Eight accounting firms and why have they been so enormously successful in this area? I have some figures here that show that in 1977 they had 70% of their revenue from audits, 18% from tax-related services and only 11% from management advisory services. Today, obviously, the consulting side in most of the firms is more profitable and shows more growth than the auditing and other traditional areas. So one of the things that I'm not able to explain as a historian is what it was they were doing that let them compete so effectively in consulting services and grow their revenues from them so successfully.

Elizabeth Virgo: I'm a consultant. I worked with Burt Grad for a long time on valuations and we had quite a few brushes with the Big Eight on behalf of our clients. And, ironically, I was asked by Deloitte Touche, as an independent consultant living in Bermuda, to be their consultant. So I had plenty of opportunity to bug them about this whole issue of independence.

Phillip Frana: I'm the National Science Foundation's Software History Project Manager at the Charles Babbage Institute and another historian.

Campbell: Larry Schoenberg of AGS Computers was active on this issue and I think Mike Nugent of the ADAPSO staff also worked on it.

Including the Big Eight Firms in ADAPSO

My own experiences working on the issue were at the time when we were deciding whether to try to keep Arthur Andersen out of the business and/or out of ADAPSO. It was several years after Doug got involved and we were working with Jack Chesson, who was the staff guy for Congressman Dingell. Dingell may have been a nasty guy but he was our nasty guy. So we supported him and the same issue that was raised by the SEC came up: Can you find a smoking gun? Can you find a place where an audit was done inappropriately because of a consulting services contract?

We raised money across the various sections of ADAPSO and did a survey to provide a response to the smoking gun question. Candidly, in my assessment, we were not able to come back with a smoking gun. We went to every ADAPSO member and said, "If you know of a suspicious situation, just send in a name or a place and we'll try to research it."

The people we were working with were John Fairfield and Robert Prince from Andersen. We were negotiating to keep them out of ADAPSO and they were negotiating what they would do if we let them in. As always, economics was part of it. They were willing to come in as full dues-paying members and they were large companies. Since dues were proportional to revenues, they were going to be making large dues payments. And they added that they would run educational programs at ADAPSO to share their expertise in project management and a whole variety of things. My sense was that we had raised money, taken our best shot, tried to find a smoking gun, and did not find anything that was going to be legally enforceable. And we caved.

That's my sense of what happened in the mid-1980s. Do you have any different recollection, Jay?

Goldberg: Well, my view of the association in those days was that it should be inclusive. I always felt that having the Big Eight as members of the association would be an advantage in that it would at least allow a dialogue to take place. So I was very much in favor of having Andersen join. I think what we had hoped was the other seven would follow them and, if I remember correctly, they didn't. But Andersen became pretty actively involved and engaged.

Jerger: Yeah, Fairfield, whom I had known when I was at the firm, was the guy that we were dealing with mainly. We had a luncheon one time at one of the clubs in Chicago and he said, "Look, the only reason you guys are opposed to our doing consulting is you're concerned because we are better than you guys are." And I said, "Keep it separate from your auditing and from the Andersen name and we'll compete with you on any basis at all. And, by the way, why don't you join ADAPSO." Of course, he said, "Why would I? You're telling us you're going to attack us." So we gave him IBM as an example of a company that had been attacked by ADAPSO but thought it was beneficial to belong and that it could lead to a better understanding all around.

<u>Competition from the Accounting Firms</u>

Campbell: In response to your questions, Tom, I'll throw in a little bit of data since the issue of independence of the audit function is so much on the floor today. Literally. This is Saturday, the 4th of May, 2002, and on Monday the Federal Government starts its trial against Arthur Andersen. And it really will end up with the demise of the firm. The firm probably won't exist by the end of this year.

The *Wall Street Journal* did a survey on this issue earlier this year. They surveyed 300+ of the S&P 500 and every one of the firms bought some non-audit services from their auditor, and the non-audit fees were three times the size of the audit fees. One other set of facts for the record is that Accenture, which is the new name of Andersen Consulting which was spun off from Arthur Andersen, has about a $20 billion market cap today. I think the amount that CAP Gemini paid when they bought E&Y's consulting practice was $10 billion. For KPMG's practice, I think the number was about $2.5 billion, and I think Price Waterhouse expects about an $8 billion valuation when they complete their IPO which they filed for last week. We will see the separation of these firms, but it's interesting that the troubles that befell Arthur Andersen happened after the separation of the consulting unit. And, frankly, if you are being paid $25 million to do an audit of a company, is that not inherently a fairly significant conflict?

Goldberg: Non-audit work is more than IT consulting.

Campbell: Right. There were a variety of other kinds of services. I flew in this week with an audit partner from PW. His comment was that having responsibility for the audit is the equivalent of having a hallway pass in high school. It allows you to go anywhere in a company and be treated with deference. And that is enough of an advantage in a competitive capitalistic system.

I think that they really did things that were pretty significant conflicts of interest. They would be on the assessment panel for a software product, for example, even though they might have a similar software product. How could a company like Doug's submit its software for assessment and give a Big Eight firm that was creating a competitive product access to the code? What protections were there? I don't know that we thought that any code had actually been stolen, but it certainly made people nervous at the time.

Jerger: I don't think they stole anything, but they got all the work because of that hall pass they had. After Arthur Andersen spun out Andersen Consulting, John Fairfield said, "Well, we separated the consulting business from the audit business. Jerger, you were right." And then I went to their offices. Arthur Andersen has brown doors as their logo, everyplace in the world. When I played on their softball team, we had brown doors on our T-shirts. So if you went to three floors of this building, it said Arthur Andersen on the brown doors, and if you went to the fourth floor, it said Andersen Consulting on the same brown doors. They made a big deal about the Chinese wall between the two identities, but that just wasn't the case.

Goldberg: To put it into a context, it's important to understand the era when this was taking place. In the early days of the software industry, most of the systems being sold were related to accounting. In today's world you don't think of it that way. You think about software as games or engineering or medicine. In the early days, the vast majority of software was accounting software. It got sold to or through the CFO, so the CFO was the decision maker in the acquisition of most software. That was the case even for system software because the data processing department typically reported to the CFO in a large company. And Andersen or KPMG had a relationship with the CFO to begin with. To me that set the stage for a conflict because the market was so centralized. In today's world I think it's probably less of an issue than it was in that era.

Jerger: Even if a CFO didn't have a close relationship with the accounting firm, let's say he had two competing bids, one from Jay's company, SDA, and one from Arthur Andersen. Let's see, there are big dollars involved and a lot of risk. Hmm, I think I'll go with Andersen because no one can criticize that decision. They were covering themselves, right?

Campbell: It was also true in those firms that their economic model was based on bringing young people in, getting very significant effort out of them, and then moving those people out in an aggressive but supportive way into their client companies. To this day they manage very strong relationships with an alumni network which is very active. None of our companies had that model. We were bringing young people in and keeping them because we were growing our businesses. So their normal business model populated the customer world with their alumni, very deliberately, because the ratio of people in the firm who would become partners was fairly small and the rest would be exported to their customers. Those were the people that helped influence buying decisions.

Jerger: At Andersen, you knew even before you started that the rule was it's up or out. So if you didn't go up, you went out quickly, and the alumni group was terrific, worked very efficiently.

Virgo: That hasn't changed, really. That is still what they do.

Campbell: Part of the issue is, what were the long-term impacts? They've grown, but our industry has also grown dramatically, so it's hard to measure it exactly. We'd have to go back to the late 1970s or early 1980s and measure the total amount of third-party professional IT services done by the Big Eight compared to that done by all other companies combined. And then compare that to the percentages today. They have grown dramatically, as you can see by their revenue, but there are now many multi-hundred-million dollar companies that didn't exist in 1975. The company I was running, Computer Task Group, went from revenues of $3 million to $300 million in the 25 years from 1975 to 2000. Andersen's revenues didn't grow a hundred-fold. They were much larger than CTG then and they are still much larger, but you'd have to measure a whole set of companies and their growth rates to determine the impact.

They had an extraordinary competitive advantage. It may not have been a hard conflict of interest in the sense that it influenced whether they gave a clean audit opinion or not, but they had a significant advantage because if you were a major public company, you effectively had to have one of those eight firms do your audit. That was just the tradition as it evolved. The SEC said you had to have a public firm audit your books—that had been mandated since 1934—and, as it evolved, you really needed one of these eight firms for all practical purposes. So, if you were a major public company, you were going to have one of that set of companies as an auditor and they also provided this other service. We all know how easy it is to add another service to the sale to the same customer. So they clearly had a competitive advantage. I don't know whether that constitutes a hard conflict of interest.

<u>Impact of the Accounting Firms on the Industry</u>

Goldberg: It's also possible that they enhanced the growth of the industry. We tend to look at it from the standpoint of competitive issues, but the fact is that a lot of large companies might not have embarked on major development projects had those efforts not been done by accounting firms. So, to some extent, I've got to believe that large companies had the confidence to do the stuff that they did because it was done by a Big Eight firm rather than a small independent software firm. We always looked at the negative aspect of it but I think there were actually some positive aspects in terms of legitimatizing the business, giving it a more professional appearance. If you were a consulting firm back in the 1960s and early 1970s, you were looked on as being a lesser form of life. It was like we were just temps, like Kelly Girls. The fact is that Andersen, and some of the larger companies like EDS, gave the industry much more of an air of professionalism and much more stature.

Campbell: I'll tell you a true personal story about my business strategy. One of the things that the SEC did in the mid-1970s was to require firms to report how much they spent on their audits. I was running a company that was about $4 - 5 million in revenue and I got the 10-Ks of my two largest clients, Bethlehem Steel and Marine Midland, to find out how much they paid their auditor. It turned out that they paid their auditor about the same amount they paid me to do information systems. The services were unrelated but the dollar amounts were the same. I had one office in Buffalo, New York, and said, "Hmm, Price Waterhouse is a $400 million dollar company and we're a four million dollar company, but I get just as much money out of these clients when I'm in the same city they're in. So if I'm in all the cities that PW is in, then I'll be a $400 million company." And on that very tenuous bit of logic… [*Laughter*] ...I thought, "What the hell, let's build the company. I can get money out of these big companies just like they can." And, frankly, it worked pretty well.

Goldberg: And here I thought you had a strategy. [*Laughter*]

Campbell: It is interesting for those of us on the professional service side of the business that these guys were great economic models. I mean, they were a model of how you could have a human resource-based company with a ratio of junior people, medium people, and senior people, charge certain rates for different levels of people and generate a sustainable profit and cash flow. Those were the models that we used when we became public companies. It wasn't a perfect model but it helped us know a little bit how you could grow and create branch office networks and so on. So I think in that way, too, they provided a useful sort of model.

Jerger: There were also some benefits to the software product companies because when the Big Eight started coming out with products—Andersen had some software products early on—it created credibility for buying software products. But, generally, you could beat them competitively because their products weren't that good.

Campbell: I had an interesting relationship with Andersen that I didn't think about as being related to this, but maybe, in a way, it reflects on it. I started a joint venture with Andersen Consulting when I was at BBN. We launched a company called ServiceNet.

Haigh: Could you give the timeframe, please?

Campbell: This would have been in 1996. In a way, it might have been one of the first ASPs—Application Service Providers. BBN was a technology company that had launched its own networks, and Andersen was seen as controlling the client and having great application expertise. So we started a joint venture called ServiceNet to bring those two things together. It failed. It got to $100 million in revenue almost immediately because Andersen turned over all its internal operation of Notes and data management and so on to ServiceNet to give it a running start. But we couldn't get their client business. The word among the Andersen partners was that everybody would be willing to be the *second* partner to have their clients go on to this new service.

In one pivotal meeting I had with George Shaheen, who was the managing partner of Andersen Consulting, I said, "George, you've simply got to tell your partners to..." And he said, "Stop. A partner doesn't tell partners anything. I can't tell them to bring their clients onto this application. They won't do it." In my mind, if they didn't have that level of influence over their customers, then it wasn't going to be successful. Because I thought *we* did. If we had the customers, we could have pulled them onto the service but he didn't feel he could influence his partners sufficiently to make it successful. And something interesting came out about the Andersen partners' relationships with their clients. That personal relationship would not allow a partner to do anything that would benefit the firm unless he thought it would provide certain benefits to the client. We ended up folding the joint venture.

What should happen now, relative to CPA relationship conflicts of interest? How does it get fixed? Ron, what experiences would you like to share from the past?

Palenski: Originally, I was hired to pursue some form of litigation against one or more of the Big Eight firms. There were other models within the association, other areas where there was concern about using leverage of some sort of government monopoly or government franchise to gain competitive advantage against competitors who didn't have the same thing. That was certainly the case in telecommunications which was, I think, the model for many of the programs—the theories, as well as the solutions—within the association. When Doug was running the committee and I was supporting it, the solution that we proffered to the SEC wasn't to keep them out of the business but make them run the business through an arm's length separate subsidiary with a different name and a clear firewall between those people who were providing management advisory services and the auditing function. Let them compete but compete on an equal basis.

As Jay said, for a number of years in the early 1980s, we broke our pick trying to find the smoking gun. But, as Dave very clearly explained, what was at stake here wasn't so much some overt wrongful act but the free hall pass and that's just the way the chips fell. There's nothing wrong with having a relationship with your customer. That's a good thing to have. So, at the end of the day, it was Jay who led the association to the realization that we were busting our pick and not getting anywhere. If we weren't able to keep them out of the tent, maybe we'd be better off to bring them all the way into the tent. When I left the association in 1994, Arthur Andersen was a very good corporate citizen of the association.

Goldberg: I think you could look at this both ways. You could look at these as issues that independent companies had with the Big Eight being in the industry in those days, or you could say that the Big Eight's activity in this business enhanced the industry and helped make it grow. And I think they are both true.

Campbell: In the material that Doug put together for this workshop is a reference to two guys, Edward Pringle of Coopers & Lybrand and Russ Peppet of Peat Marwick. Those were two of the firms which agreed to adopt codes of policy relative to fair competitive practices in software and to propagate those standards within the firms. At least three of the firms did that. They agreed how they were going to communicate with their own people about their policies on competitive practices. They still had a hall pass and a substantial unfair advantage, but it seems to me they tried to do things to eliminate blatant conflicts of interest.

Goldberg: If I remember right, some of the things that we wanted them to do, our own people wouldn't agree to do. For example, we asked that they not be both a selector of software and a bidder on the same project. Some of our members said, "Well, if I get the opportunity to do that I'm going to do it." [*Laughter*] Clearly there was some element of envy here which was not really rational.

Jerger: Pringle and Peppet were two upfront standup guys. I was impressed with the way they kept after their own companies on behalf of the opposition.

Problems with Andersen

Goldberg: But the problem really was primarily with Andersen, if I remember right, because the other guys were doing consulting but not as much of it was IT-related. Wasn't Touche the one that wouldn't do IT consulting?

Jerger: Yeah, I think it was Touche. Andersen had the blackest hat from our perspective.

Campbell: Coopers & Lybrand and Peat Marwick really weren't the problem. Andersen was. People would, you know, roll off the school bus. They would hire hundreds of young people as programmers and they would bid on major projects. They were a direct competitor to those of us who were trying to build our own service companies.

Palenski: They had that whole facility at St. Charles, Illinois where they would literally bring in people from around the world for training. They still do, by the way. Everybody within the

Andersen organization went through there at one point. I know the time that I visited there, they were up doing computer science projects into the wee hours of the morning.

Jerger: And then returned to their monks' stalls to sleep. [*Laughter*]

Campbell: The scale of their projects—where they'd have fifty or a hundred people working on them—was also sort of incomprehensible in the early stages of the industry. For us, five or ten people on a project was a large project. Then we'd hear that Andersen had a hundred people working on an implementation for a client, and maybe it helped us all expand our thinking to some extent.

Haigh: One of the things you identified as distinctive about their model was their practice of hiring large numbers of smart young people whose tenure with the company might be relatively short. It seems that a lot of the actual work on a project was going to be done by bright, motivated, but relatively inexperienced people. Do you think that had any implications for the kind of work that they could do effectively or for the quality of the work that they produced? Or is this something that other companies had to copy in order to compete successfully with them?

Goldberg: In the early 1980s when Andersen was really expanding robustly, there was a feeling in the software industry that you could build your business around following their failures. They had any number of very, very large projects with big companies fail. I think most of us felt that the reason was that they would lead with a partner, somebody very, very smart, and then follow-up with dozens of people fresh out of their training program. So there were many instances of projects at large companies that did not go well. Customers spent tens of millions of dollars and then would bring in other firms to try to clean it up. I think the problem was probably excessive growth, and maybe a lack of standards and tools back in the early 1980s. They corrected it over time.

Their model was a pyramid model and it was based on the premise, which we didn't have in our companies, that, in a partnership, because it took so many years it took to make partner you had to have a large number of junior people at the bottom of the pyramid. It was an accounting business model that they tried to implement in a technology business but it really doesn't work very well in a technology business, where you need many more senior people supporting a fewer number of junior people. I think that they changed that model over time but, in the early days, that was the model they used and it really didn't work very well. So they definitely had a quality problem although they had enormous demand for their services and enormous growth.

Campbell: It's interesting looking back on how people did large-scale software development projects because the schools didn't teach it. We got hired into the industry in the early 1960s, most of us with math degrees or something like that, because there were no programming degrees. And even when universities started cranking out computer science graduates, they were trained in obscure languages and trained to teach other people how to teach obscure languages. Or people were trained to write compilers. No one got a college degree in how to build a better accounts receivable system, yet thousands and thousands of those were built. Building a huge, complex, multilayered, multiroutined, multicurrency, multinational, multilanguage system is a very complex endeavor. I don't know when it was that people started getting actual degrees in serious commercial software project development. Andersen started doing their own training very early on. We started doing some training at CTG in 1977. It wasn't easy to get people at the time who had any kind of formal education in how to do commercial software development.

Goldberg: One of the speakers this morning attributed a degree in computer science to Joe Piscopo in the late 1960s. That didn't happen, because computer science degrees didn't exist in the 1960s and didn't really exist in the 1970s.

Haigh: I did his oral history and, when I quizzed him on that, he said that his degree was technically in applied mathematics but when his brother took the same courses two years later, they called it computer science.

Goldberg: But it was in the statistics department.

Haigh: Stanford had one of the very first freestanding computer science departments. That was in 1965.

Goldberg: But I would bet that was a graduate-level department.

Haigh: Stanford was graduate only until 1980. However, the very first department, at Purdue, was founded in 1962 and began a separate undergraduate degree program in 1967.

Campbell: However, computer science was numerical analysis, compiler design, parsing, string processing, algorithms and so on. Nobody cared much about what has ended up being a multibillion dollar business. I still can remember when IBM announced OS 360 and Watts Humphrey had two hundred programmers working on the software. I thought it was incomprehensible that you could have two hundred programmers build something that would work. Which I guess is still an open question thirty-eight years later. [*Laughter*]

How do you think the conflict of interest should be resolved now? It's a tremendous challenge. Accounting is complex. Accountants get paid a certain fee to attest to numbers that are management's numbers and the system's not working well. Has the system gotten too complex to make it work well?

One of the things that happened, I suppose, is that the investment community has gotten so much more attuned to the relative change in a quarter's performance that a decision has a much more dramatic impact than it did, than it should. As people keep trying to fine-tune things they get down to a gradation where they find the new rule doesn't work in application. For example, the revenue recognition rules of last year which said if there are any words in the agreement that say the customer doesn't pay until they are satisfied means that no revenue gets recognized. The cost gets recognized as it is incurred and then all the revenue gets recognized at one time. That is not the way any of us ran our businesses or managed them or reported them. I can understand that kind of reporting but it's not really quite right. It's not matching revenue and expenses. Someone tries to create rules that they think are better but they're not.

Jerger: So you have an over-engineered rule which causes confusion.

Campbell: I don't know what the solution is.

The CPA Relations Committee

Going back to the CPA Relations Committee in the 1970s and 1980s, those of us who were in the business were young and we were leading companies fairly early in our careers. And one of the things we were trying to do was use the force of Congress to influence change. That was an amazing experience that might be worth chatting about. I can remember our conversations with Jack Chesson and all he knew was that it was good for him to attack the Big Eight. I remember him saying, "You guys come here and you're like real people and they show up in their limousines." And guys who showed up in limousines he didn't like. He wanted us to give him something he could use to attack the Big Eight. He was willing to take an outrageous stand because it would benefit his guy. It was my first exposure to the fact that if you got a staffer in support of your position, you had the Congressman. You could almost see your words in the memo to the staffer coming out of the Congressman's mouth on the floor. Wow, that was amazing.

Palenski: Some things haven't changed.

Jerger: He was like an attack dog when he got going but the good news was that he was our attack dog.

Campbell: But it was a little scary. He could turn on you. We didn't quite win. We got pretty close. Dingell ran hearings, didn't he?

Saunders: There are pictures of you testifying at those hearings on the board outside this room.

Palenski: That's the reason we got into the discussions with Fairfield and Pringle and Peppet. We at least got their attention. Maybe no regulation was changed or no law adopted but we got the accounting firms' attention, which in turn led to discussions, which led to a fairly productive relationship.

Frana: Do you think it was good or bad that they were in the business?

Campbell: I think it was good. I think it would have been better if they had had less ability to flourish. I think that they had a significant competitive advantage that we never got.

Goldberg: Clearly, they had a competitive advantage.

Frana: However, on balance...

Campbell: On balance, I think it was better that they were in the business.

Jerger: I also think that's the case. Having spent ten years with them, I think that what they are doing is wrong, flat-out wrong. But from my software perspective…

Goldberg: From the standpoint of the history of the computer software industry, I think they made great contributions to the development of the industry.

The Andersen Way of Doing Business

Campbell: From the standpoint of the investor community, can you have a firm that takes 75% of its revenue from a client for doing a variety of services, attests to the financial adequacy of that client's numbers and not be conflicted? My opinion is, in most cases, the answer is yes. I think there were some things that were somewhat unique to Andersen that made them more aggressive in this area than the other firms. I think there are other firms that walked away from business that Andersen stuck with. I think that it's not a total coincidence that Sunbeam and Waste Management and Enron happened. I believe that Andersen should not have given a clean audit opinion to the transactions that were approved at Enron. They ended up making decisions and signing documents as a partnership that I think they shouldn't have. And what led them to that? They were the smallest, I guess, of the auditing firms after the separation from Andersen Consulting. Arthur Andersen was the strongest with Andersen Consulting, and the weakest once Andersen Consulting was split off and they were vulnerable. The Enron account may have been too material for the firm and that put them in a strong enough conflict of interest that it compromised their integrity.

Haigh: Back in the late 1950s, when the accounting profession was first getting to grips with the implications of computer technology, one of the worries that they expressed was that they didn’t know how to audit computer systems. Where is the paper trail if they don't know how to program? Are they going to try and read the punch cards of the input and the output and work from that? I’ve seen a lot of sources discussing that problem and I know that somewhat later they became more heavily involved with computer services. I’m wondering if there was a connection, whether they thought they needed to be involved in this area in order to be able to continue to audit.

Campbell: They certainly had to develop computer programming skills to be able to do an audit of stored data. When it was no longer ledger books, they had to be able to go through automated systems, for sure.

Jerger: Yeah, I was with Andersen from 1960 to 1970, and about 1962 or thereabouts they came out with a computer services checklist or some darn thing. It was a checklist you went through to find out how the client used computers. It was to help you figure out what the devil was going on because you couldn’t see things the way you used to see them. So there was a tremendous learning effort within the firm to try to figure out how to deal with information that was generated in a new kind of way. They spent a lot of energy doing that and as a result they learned a lot. And they said, “Hey, we should do something in this area." Because it was clear at that point, even for neophytes like us who didn’t know much about systems and programming, that there was a lot of nonsense going on in the DP department. We could never get any reports out; it took a long time to get information. So they said, "Ah-ha, there are opportunities here."

Campbell: Why were they never successful in the software products business? They tried a few times. They never really created a successful software product.

Goldberg: Probably you should generalize and think about how many professional services firms ever did. And I think the answer is that the cultural differences are so distinct that very few, if any, professional services companies, including the accounting firms, ever were able to transition from services to products.

Campbell: Even with their scale it wasn’t possible.

Goldberg: I don’t think that their difficulty in auditing technology was the driver behind building their IT practices. It doesn’t ring true to me. Back in the late '50s, it was punch cards for the most part and the reports weren't that different. It wasn’t that hard to do the audit. It wasn’t very different from looking at sheets of paper at the end of the month when the reports came out. There were ways that people could fudge results, but it was the same process of generating journal entries and the journal entries would document it. There was a piece of paper translated into a punch card translated into a report. I don't think that's what led them to build these huge practices. I think they built some simple tools that solved that problem.

Jerger: But they did learn a lot and they are smart people so they figured…

Goldberg: And their customers were asking them for help. When you talk about IT in the 1960s, it was the CFOs, the controllers, who were the buyers. They didn't know Computer Task Group or Software Design Associates or the other companies in the business. They *did* know their auditor. They had relationships with those guys and they said to them, "Can you help me build a payroll system? Can you help me build an accounts-payable system?"

Campbell: I think the first CIO was Max Hopper, right? Wasn't he the first person to have the title CIO? I'm trying to think when that would have been.

[*Ed. Note: Hopper worked for American Airlines and received much publicity during the 1980s for his role in expanding its SABRE on-line reservation system.*]

Haigh: The first serious attempt to propose CIO as a title was in a 1981 book by William R. Synnott and William H. Gruber called *Information Resource Management: Opportunities and Strategies for the 1980's*. [*Ed. Note: New York, John Wiley and Sons, 1981.*] But before that I think most companies used a title like VP of MIS. That's the first title that brings together technology and management under one roof.

Goldberg: But prior to that it was the CFO, because the only systems that people bought were payroll, accounts receivable, accounts payable, inventory, billing, etc.

Campbell: The data processing department was obviously under the influence of the accounting firms.

Legitimizing the Outsourcing of Software Services

Haigh: So would it be fair to say that independent software services companies and the Big Eight accounting firms were both competing against the internal data processing organization to provide services?

Goldberg: Absolutely.

Jerger: Sure. One of the benefits of having the accounting firms in the business is that clients felt more comfortable going to them if they decided not to do it in-house. And once they got comfortable with the idea of working with an external organization, then at least there was a shot at competing against the accounting firms.

Goldberg: It legitimatized the business.

Haigh: And what obstacles would companies face when trying to convince the CFO that it would be better to give something to an outside firm than expect their internal data processing department to deal with it?

Campbell: The customer always wanted people who had two years experience in a not-yet-released technology. [*Laughter*] So that really was the way you would get started. You'd try to get people up to speed very fast and then move them around quickly. So that they'd be doing the first project utilizing new technology at each of several customers.

There was a point in time where the really great people couldn't advance in their careers in a typical company. Take a $500 million manufacturing company. A really great programmer is never going to go beyond being the No. 1 programmer. He's not going to become president of the company. In our companies, they could move from programmer to project leader to vice president of development to where they could run the business. So it was fun for us to give people much greater career opportunities. We were, therefore, able to hire better people or more ambitious people than the stodgy, locked-forever-in data processing department of a company.

Over time, the functions became more technical, so that you had to know database, IMS and CICS to build the application rather than just understanding the subtleties of annuity accounting. When it turned into more of a technological linkage project management activity than an understanding of the business function, we got more of the work and were able to compete better with the Big Eight.

Goldberg: These systems were all being built for the first time in the 1960s. So if you were a DP manager building your first system on a 1401 computer in 1961, an outside vendor could come to you and say, "I built five accounts payable systems in the last six months. Here are the companies I built them for, here are their references, here's how it turned out." And the people in your company had never built one before. A lot of times people would choose the outside vendor. Forgetting about the technical issues, it was an experience issue. If a software company had success in a particular piece of business, it was able to sell that experience. So, even though there was a lot of reluctance, you could create a market based on your expertise. It was selling the first one that was so hard.

Jerger: The parallel in the software products business was that it was a reference sell. You had to get one dynamite customer and then really take care of them. And then you paraded them around everywhere you could as a reference. You could also compete against the in-house staff on price. The customer would balk at paying $200,000 for a product but you could easily show them that it would cost $2.8 million to do it themselves with a big risk that the project might fail. And you'd often get the business that way.

Campbell: As I remember, the Big Eight firms tended to have strengths and weaknesses within different industries. Price Waterhouse would be strong in oil and gas and someone else would be stronger in banking. It was partly because they had a lot of people in different geographic areas that they got the benefit of people who saw across a whole industry. Therefore, they could sell on the basis of industry expertise and so on and so forth. Jay, did that affect you in New York with banking or not? Did you see that as a factor?

Goldberg: We rarely competed against the Big Eight. We've been using the phrase "competition against the Big Eight" and I don't think it existed to any great extent. We would hear that a customer was building a system using a Big Eight firm. It was never a competitive bid. Rarely did one compete.

Campbell: That's a good point.

Goldberg: So there was business being given to them and there was business that was being competed for. We used the term that we competed with them but the truth is, in any given company, we didn't.

Campbell: We just never saw that business.

Goldberg: That business never went out to bid. It was a negotiation between the CFO and the accounting firm.

<u>Characteristics of Accounting Department Customers</u>

I think putting it in the context of the buyer is interesting. Because this was before there was a VP of MIS, so you had a CFO who had grown up through the accounting profession, either public or private, who knew nothing about computers. He was technically illiterate and had a controller working for him who was also technically illiterate. And then you had this *wave* of technology coming at them. They didn't have confidence that they really understood the technology or what they were buying. It was very natural for them to turn to somebody they trusted. And the guy that they trusted the most was their auditor.

Jerger: Did you ever have a prospect or a customer that you really felt sorry for because you just knew they didn't know what was going to happen?

Goldberg: Almost all of them. [*Laughter*]

In the early 1970s, my company built an accounts payable system for Fairchild Publications. Publishing firms, then and now, are noted for being relatively tight with G&A dollars and they were relatively tight with our dollars. The VP of Finance at the time was a guy named Phil

McGovern. He and I had a great relationship. We finished the project and sixty days later I called him up and said, “Phil, you never paid us our final installment.” And he said, “Well, come on down and we’ll talk about it.” I assumed there was some kind of big problem so I went down to his office. And with this great grin he said to me, “I wanted you to be the first one that I told: Your check is stuck in my system.” [*Laughter*]

But that was the way they thought. They didn’t think in terms of the technology. It was accounts payable to them and it was cutting checks and dealing with vendors, and the technology was a necessary evil. This was stuff that they had to do because everybody else was doing it and they were getting a lot of heat from their bosses about it. We would promise performance improvements. Our sales pitches always were, "If you buy our software, you’ll need fewer people." I think even today those pitches are being made and there is very little evidence that any accounts payable department ever got smaller as a result of using anybody's software. But they certainly became more productive. There is no question about that.

Frana: Were they ever concerned about that? That the technology would make them obsolete?

Goldberg: Yes. There was *huge* resistance in those days. Automation was a new term, computers were new, and the employees within these companies were terrified. Not the CFOs, necessarily, but the people that you had to work with to get systems done thought that they would be replaced. They absolutely were afraid.

Jerger: We had an accounts receivable management system that we sold to big companies like Exxon, Hershey Chocolate, and Mars Candy. There was an automatic cash application and some reporting features that would save the companies lots of time. But one customer wasn't using it. We asked what was going on and were told that it was too hard to use. So we had a couple of guys go in and work with the people on the clerical staff and they found out that they were deliberately making it hard to use. But there was one woman who liked them and she admitted that the system worked so well when it was used right that they were afraid that some of them would lose their jobs. So they convinced her that that wasn't true and she convinced the others and from then on it worked fine. So we followed that rule from then on: Find a lady who likes you and convince her.

Campbell: In my mind, there was a linear progression of technology that was comprehensible up to a point and then we had a gap. We went from manual ledger cards to ledger cards that could be processed through a Royal McBee machine, to ledger machines, to punched cards. And from punched cards to magnetic tape, which were a different medium, but information was still in sequential sets of records that people could look at. And that was mentally linkable.

And then we went to disc systems where any piece of information could be accessed at any point in time. You were then able to do different kinds of processing and, I think, that was a step that an awful lot of the data processing managers couldn't or didn't want to make. They said, "We don't quite know what index sequential access management is or how to use it, so you guys do that stuff." I was an IBM System Engineer and IBM SE's were given away free in the 1960s. Lease the machine and you get one of these guys for a year to help you figure it out. And we were like gods to those customers. I had had three weeks of training and could do something with the software. They thought it was magic and very few of them aspired to develop that level of capability. That gap in confidence created the opportunity for this industry.

Goldberg: Thank goodness.

Campbell: Yeah, thank goodness. The new technology was tricky to use but not all *that* tricky to use. But it wasn't a natural incremental step in the evolution of the technology.

Goldberg: And there were no people.

Campbell: Yeah, there were no people trained to do this.

Goldberg: AT&T embarked on the first real major training program with women. They would hire women right out of school—my wife, Mary was one of them—and they expected that you would work there two years and then get married and have a kid. The whole premise was that they got the money back in two years by training people how to write COBOL programs. But that was in the early 1970s. In the 1960s, there was nothing. There was no place you could go except for IBM. There were some commercial schools that were trying to provide training. But big companies weren't doing it. So when the 360 came out it was just like a vacuum. If you knew something about systems and programming, you just got sucked up. It created opportunities for all these firms to develop.

Campbell: A lot of the professional service firms got started in the five years after the 360 was announced.

Virgo: Can I change the subject?

Campbell: Sure, of course.

<u>Software Capitalization Issues</u>

Virgo: We were talking in the Accounting Issues workshop this morning about the problems that the companies faced in getting financial support, especially from investors.

Where does the Big Eight fit into that issue? Is that something useful to explore right now, including the whole issue of capitalization?

Campbell: I can give you a perspective on it. While we were trying to start companies from scratch, they were sitting inside $400 million revenue, very profitable companies. So they were able to finance this expansion of service very, very easily. Because it's a relatively simple business. You hire someone and pay them ten dollars an hour and charge $25 an hour and if you do enough of it, it works out. [*Laughter*] At the time, *we* were able to figure that out. That's how bright *we* were. [*Laughter*]

But it's much easier to add a service like that to an existing revenue stream so the advantage they had, in addition to access to the CFO, was that they had cash flow to grow. And they had a distributed office structure to serve people across industries. Adding a thousand person organization to an existing ten thousand person organization is a lot different from starting an organization from scratch and going from zero to a thousand.

Jerger: And they had been practicing for fifty to seventy-five years.

Virgo: I was actually thinking more about how well the audit side helped in those situations where there was some feeling of competition.

Campbell: There was no feeling of competition in the 1960s and 1970s. The feeling of competition came up in that audit people were paternalistic towards the consulting side, while the consulting side was really more profitable because it had ballooned in growth. There is a very finite amount of audit business in the United States. You take the ten thousand public companies times the audit fee per company. It's an extremely finite market without much growth, whereas the IT market is hundreds of times larger. The problems began to come up as the consulting businesses got larger. Initially, the people on the consulting side weren't CPAs and that was a major problem because they couldn't be partners in the firm. You could be contributing five million dollars in revenue, but you didn't have the right to be a partner. Finally they changed those rules. The conflicts started when the consulting side was larger and a greater source of profitability for the company.

Virgo: But going back to the role of the Big Eight and how they helped or did not help the software industry. Did they help in dealing with the issue of capitalization and trying to make the industry more bankable?

Campbell: I don't think they did, to be honest. There was a spike of activity in companies going public in the 1960s and then that basically shut down for the 1970s. The public market had the same kind of speculative fever in the 1966 – 1969 time period as it's had in the last few years. But in the 1970s, software companies were almost unfinanceable. If you started a company in 1970 or later, you didn't see public markets until 1980. So the FASB rules weren't much of a factor in the 1970s. They were more of a factor in the 1980s. When were you having your issues with capitalization of software, Doug?

Jerger: 1978. We started in 1970, right after all those bubbles burst.

Goldberg: The Big Eight weren't in the software products business so they couldn't care less because all they were doing was professional services. The auditing firms were just struggling with the audit issues as opposed to trying to help or hurt the software products business. Revenue recognition issues, software capitalization issues, taxation issues were pretty complicated then because they really didn't understand the products business.

Virgo: Well, that's really what I expected you to say because in our dealings with them we found that if you were dealing with the audit side they had *no* comprehension of revenue recognition. And that made it very difficult because they were not going to bother about having any comprehension and so they said, "You just can't do that." And somebody like Larry Schoenberg would present an intellectually sound argument that we could and should.

Goldberg: And did.

Virgo: He did actually persuade one auditor who had been *adamant* that you couldn't do things that way.

Goldberg: But they weren't conflicted in that relationship because their firms had very little in the way of software products.

Virgo: I was looking for whether they were constructive and helping or actually obstructive.

Goldberg: Those were tough issues though, and in fact they haven't been resolved yet. If you look at the way that the pendulum has swung in those rules, even today there's the question: Should you or should you not capitalize software? It's an issue that has been hanging around for thirty years and it's a pretty complicated issue. So I never felt that the accounting firms were doing anything wrong or bad. I just think that they are tough issues.

Campbell: But new problems continue to come up. There's a new accounting regulation recently adopted which requires firms like the ones we ran to include reimbursed travel expenses as revenue. I don't know a single person in the business that thinks that is the correct thing to do, but that just came down as a new accounting rule.

Jerger: I didn't see that. Geez.

Campbell: You gross it up. There is not a single person that I know running a business that would think of revenue that way. Not one. That is now defined as the correct revenue recognition accounting treatment. Reimbursed expenses are considered in both revenue and in expense.

Goldberg: Which may not seem significant, but it reduces your margin. It makes the business less attractive to Wall Street, because to the extent that you are increasing your top line and increasing your expenses, your net margin percentage goes down. If you used to be an 8% business, now you're a 7% business. So it makes your presentation look worse to the outside world and there is no real reason to do it.

Campbell: If you've got two competing businesses both billing $2000 a week for a person, the fact that one of them has a $1000 travel expense and therefore looks like a $3000 a week person is not significant to the quality of the person. It's really misrepresentative in revenue per employee calculations, as an example. This shows that even today, with all the things we should have learned, promulgations get made which seem to be just flat wrong.

Jerger: Who did they ask?

Campbell: They may have asked the audit firms. I don't know. The audit firms aren't public companies because they are partnerships. So they don't suffer from the impact of the reporting requirements as public entities do.

Hiring Personnel

Haigh: Historically speaking, did skilled individuals ever move back and forth between Big Eight accounting firms and other computer-related services firms? Were they separate worlds?

Jerger: I think they went one direction.

Campbell: People left the accounting firms but nobody ever went to them.

Jerger: It was one direction. They went our way.

Campbell: It's unlikely that anyone ever went as a professional from one of the independent firms into the Big Eight. You went into the Big Eight as a college graduate.

Goldberg: You mean in the early days? Your question is did it happen in the 1960s and 1970s?

Haigh: Yes.

Goldberg: Today there is free movement back and forth. I can't remember losing somebody to an accounting firm. But at the same time we rarely hired people from accounting firms as well.

Campbell: CTG did. You're reminding me of statistics we had when we were doing massive levels of recruiting, five hundred people a year, a thousand people a year. And the investment community would always say, "Where do your people come from?" So we kept statistics and we had a breakdown of how many came out of the Big Eight, how many came from other sources, etc. It was a reasonable percentage but, at that time, it was one way. I don't know if they would have been invited back.

Goldberg: They were a college-recruiting business. That was their model so they rarely would hire people from outside unless they had a specific need for a very senior person with specific knowledge. That occurred sometimes.

Campbell: They'd take a college recruit and put them through the system so they would learn to develop programs using set procedures. Those were the people who could be effective on those larger projects because they were all trained to do things one way.

Okay, does anyone have any wrap-up comments that they want to contribute?

<u>Predictions for the Future and Summary</u>

What's the forecast? Since someone's going to be reading this in a hundred years, will Accenture remain the largest firm in the professional services business, do you think? If they are the largest right now in terms of what we call a straight IT consultant, do you think they will be fifty years from now?

Goldberg: I can't imagine. It's hard to picture that twenty-five or fifty years from now this business will look anything remotely like it does today.

Haigh: But in fifty years there will still be auditors, because there is a law that they have to be there. Will there still be IT services as they exist today? That's driven by market conditions and could turn into something totally different.

Campbell: I would guess that there will not be independent paid third-party auditors. I think either they won't exist or there will be federal auditors. The government will say, "We'll do it the same way we audit your tax return. You submit the data, we're going to sample, and we'll accept or deny." Because I think the current system where you pay your auditor $10 million isn't working and I don't know if it's the system you would create going forward. Maybe the companies should pay a fee into a central pool and from that pool they find an auditor. The current system is that I ask four companies to bid, and I pick one to give my $10 million to and they tell me whether I counted things correctly or not. That's a strange system, I think, so I wouldn't be surprised to see that changed. That's my forecast for 2100.

Jerger: He wants to go on the record just in case that possibly occurs.

Goldberg: You heard it here first. There have been auditors for a long time.

Jerger: I said seventy-five years. I think it's about a hundred and fifty years in the case of Peat Marwick, so they'll be around, I think.

Campbell: For a wrap-up statement: I think that auditing firms had unique relationships with the early commercial users of computers to help accelerate their willingness to use outside providers of service, which benefited the industry, and they took advantage of a unique access they had to capture a disproportionate share of the industry than they would have had otherwise.

Haigh: I think not competing directly with the Big Eight was a key issue.

Virgo: So do I.

Haigh: They may ultimately have used their access to increase the market for computer service firms.

Goldberg: I think they added a level of professionalism to an industry that wasn't perceived that well by the market in those days. I think they helped establish the market, for good or bad.

Haigh: So, in retrospect should ADAPSO have been so concerned about their entry into the field?

Campbell: Yes.

Goldberg: Yes.

Jerger: Yes. [*Laughter*]

Goldberg: They did have an unfair competitive position that was given to them, as David has said, by the government demanding that large public companies be audited. They had an unfair competitive advantage, so I think it was important that we tried to keep them out of the business. The fact that we failed, I think, is okay. I don't think it turned out so badly.

Jerger: So, we're saying it was absolutely appropriate to oppose them, but in retrospect they didn't hurt us too bad, if at all. In fact, in certain ways we benefited.

Goldberg: But I would say it's because we were lucky enough to be in an industry that had such explosive growth that there was room for all of us. In another industry with more limited growth, they would have owned it and the rest of us wouldn't have had any opportunity. The problem was made easier by the fact that the whole industry had enormous opportunity, which I don't think any of us understood at the time.

Campbell: But, I think also that their taking advantage of the industry came back to their disadvantage because of the conflicts which arose from the growth in non-audit fees. Which is contributing eventually to their demise. So, they helped create the industry, helped validate the industry, took unfair advantage of their special relationship and, at the end of the day, that's having an impact on their future.

All right, thanks everybody.