



## **Service Bureau Pioneer History Meeting: Financial Management and Growth**

Moderator:  
Burton Grad

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# Service Bureau Workshop: Financial Management and Growth

Conducted by Software Industry SIG – Oral History Project

## Abstract:

This session is called "Financial Management and Growth." The attendees constitute pioneering founders in the computer services business -- that is, processing services, custom programming, and the various services that new users turned to in the early days of Big Iron computing. Because it was a new kind of business -- providing computer services for the first time to many business -- the tenets of pricing, marketing, labor and capital allocation and so much more was left to seat of the pants decision-making. The surprise was that so much of what they imagined worked, and continues to this day. The session will discuss how service bureau companies were financed in the beginning and over all of the early years. It will also examine what pricing models were used, along with the cost structures. It will look at whether profits really existed or did not. The discussion also will expand to include the focus on growth: What were the things companies did to build customers and profits? Was it geographic, spreading out? Was it applications? Adding new ones? Was it markets? Changing the structures? And how was information for change gathered and processed?

## **Participants:**

<u>Name</u>	<u>Affiliation</u>
Burt Grad	Moderator, Software Industry SIG
Frank Casey	Custom Data Services
Gideon Gartner	Gartner Group
Jim Houtz	CyCare
Doug Jerger	Software Industry SIG, Fortex Data Systems
Luanne Johnson	Software Industry SIG, Argonaut Data Systems
Jim Mann	Dynatax
Stu Miller	Accountants Computer Service (later ACS Data Services)
John Rollins	AZTECH Software
Oscar Schachter	Co-founder, Advanced Computer Techniques (ACT)

Bob Tessler  
Thomas Haigh

Data Processing and Accounting Services (DPAS)  
Historian, Univ. of Wisconsin

### **Raising Start-up Capital and Organizing for Growth**

**Burt Grad:** Let's start with you, John Rollins. You actually went out to raise money. Tell us about whom you raised money from, how you raised money and what kind of a financial model did you present to the people when you tried to raise your first financing.

**John Rollins (AZTECH):** Well initially we had the business plan I mentioned earlier that showed we were going to break even in month ten and we certainly didn't follow the prescription exactly but we did break even in month ten. We used up all but 3,000 of what we'd raised which was double what we thought we would need.

**Grad:** Who provided the money?

**Rollins:** It was provided by friends and family. Doug Fisher, my partner, invested a little bit from his family, and I invested a little bit from mine. I didn't have very much because I had just spent all my money going to graduate school. In fact I invested \$400. That was all I had in my bank account at that point. But we networked through other people and found a couple of wealthy investors who put in big enough amounts that we invited those two to join our board of directors and used them as advisors. They were both independent businessmen and were good advisors as well as investors.

**Grad:** Let's stay with this. You raised \$90,000?

**Rollins:** Right.

**Grad:** How did you split up the ownership when you raised the \$90,000? What did you do?

**Rollins:** The AZTECH stock was sold at one dollar per share. It was all based on the money you put in. I had been working without pay for stock options and eventually through the stock option alternative, if you want to call it that, became the major shareholder later on.

**Grad:** You mean you had over 50 percent?

**Rollins:** Yes. Actually when I sold the business eventually, I had over 90 percent.

**Grad:** How about Fisher?

**Rollins:** He similarly got stock options. In fact, we brought in a third executive later on whom we gave options to and he did very well.

**Grad:** So the initial people who put the initial \$90,000 in did not end up with primary ownership?

**Rollins:** They did when they put the money in, but once the stock options were exercised later on downstream, they got diluted.

**Grad:** You had earned your MBA very legitimately. I can tell.

**Rollins:** There was another point about the early investors. Because AZTECH was a privately held company, we felt obligated to investors, especially to families that had put in money that they probably had no business investing as much as they did. We offered to buy back the shares at a higher price. We had a tender offer after about two or three years at three dollars a share so they could triple their money if they wanted to sell back at that point. A couple a years later we had a five dollar a share tender offer, bought back some more. And at that point we decided because we were pretty profitable, we had about a 40 percent EBIT, Earnings Before Interest and Tax every year, and we were paying a lot as a C corporation in federal income tax. And anytime we pay a dividend to the owners which we did that a few times before we realized that the total tax being paid because of the double taxation problem was something like 75 percent. Remember, personal income tax rates back then were like 50 percent or more. And so we decided after much consultation that our long-term strategy was to try to grow the company organically, maintain profitability, make distributions, and not sell the business right away but to grow it over the long haul. We were having a good time and I in particular was having an especially good time. I was in my element. So we converted to a Sub S corporation which avoided the double taxation problem and then we could start making distributions liberally and only be taxed at one level instead of two.

### **Money Management in a Sub S Corporation**

**Grad:** So that was your primary initial financing. What was your next level? When did you go public?

**Rollins:** We did not go public. We just stayed Sub S and kept growing. Our long-term plan was to be acquired someday. It took longer than we thought, but we got to be a big company. We were the largest in our industry with over 700 associations, but we did have to raise more capital along the way.

**Grad:** Did you have some other capital requirements?

**Rollins:** Yes, the first capital requirement was we used the model that many of you described before about using excess time that was available on somebody else's IBM S/360, in our case. We found an association called the American Trucking Association just four blocks from our office that only used the 9:00 to 5:00 shift on their S/360 model 30. Once I figured that out I made a deal with them to buy the other two shifts and eventually filled them up with processing. And at that point we figured we needed to buy our own computer and that raised a need for more capital because a 360/30 was not cheap.

**Grad:** You needed the money for a computer? Not for buildings or for office space? You were renting that?

**Rollins:** That was our biggest requirement. We did buy an office building later on.

**Grad:** Did you need capital for that or had you generated enough cash?

**Rollins:** We generated enough so that we paid it off over a period of four years.

**Grad:** What puzzles me is when you went to a Sub S or whatever it was called then. But that never leaves any money in the company. So how do you make your investments?

**Rollins:** It does if you only pay out about half of your profits and that was our formula. Every year we'd pay out about half of our net income and dividends so if we made 40 percent net income we'd pay out 20 percent in cash dividend distribution to the owners. And that was enough that they could have something left after they paid their taxes. And the value of the shares was going down.

**Grad:** I thought with a Sub S all of the money was basically taxed but you know about taxes. Am I wrong on this?

**Mann:** Well, with your Sub S you pay individual tax on 100 percent of your profit but you don't have to distribute 100 percent.

**Grad:** Ahh.

**Rollins:** And so we distributed about half of our profit which was enough that they could cover their taxes and have something left over. That was our formula pretty much. So the other half of the profits we would keep in the company for internal growth.

**Grad:** Any of the others you go to the Sub S model? Bob you did? Anybody else?  
Interesting.

**Rollins:** Today that would be an LLC. It's similar, they eliminate the double taxation. But when we wanted to buy our first computer after we outgrew the American Trucking Association's time they weren't using, it was a major investment.

**Grad:** So the stock was never publicly tradable?

**Rollins:** That's right.

**Grad:** So you made the tender offers to these other people if they wanted to get out.

**Rollins:** And we'd buy their shares and put them back into our treasury basically, which would increase everybody else's ownership share proportionately.

**Grad:** Did you start with a board of directors? You said there were two other people plus the founders.

**Rollins:** Yes, we had a board of six. I had those two major investors, our attorney was on the board, and a guy who helped me start the business that introduced me to most of the other investors, a guy named Terry Aiken who was on the board and then my business partner Doug Fisher and I. So we had two insiders and four outsiders and the four outsiders were all basically, except for the attorneys, CEO level people who could really give me good advice. I was 25 years old and I figured I needed outside advice when I started AZTECH from more adult level types.

**Grad:** Did you keep good business records that you actually have in minutes and all those kind of silly things?

**Rollins:** I have all my minutes and all my financial statements, yes.

**Grad:** You still have them?

**Rollins:** I do.

**Grad:** Doug? Talk to him to see if he would donate them.

**Doug Jerger:** I heard that.

**Grad:** Some of the people here have thrown things away.

**Rollins:** But the big need for capital was that we wanted to buy the 360/30; we went to a broker in Texas and I can't remember the name of the firm in Dallas that was the 360 dealer, but they were doing deals all over the country, used 360s and instead of paying \$1 million to IBM, we actually negotiated a deal where we bought Wells Fargo's 360/30 for \$195,000. It had 64 K of memory. We got five 23/11 disc packs, we got four nine-track tape drives, and a 1403 N1, 1,100 lines per minute printer, all for \$195,000. It wasn't much by today's standards.

**Grad:** Did they finance that for you?

**Rollins:** No we had to finance it on our own and actually we had enough cash that we'd accumulated by then. This was five years in; 1973 was when we bought it. And we started in 1968 so we could pay for all but \$90,000. We got a bridge loan from our bank for the \$90,000. We wanted to pay it off quickly because in the early 1970s the prime rate was 12 percent when we bought it and we paid 14 percent. We were two over prime as a private company and paid off over a period of three or four years on that \$90,000 bridge loan.

### **Changing Shareholders in Order to Grow the Business**

**Grad:** We'll come back to your cost model and pricing models later and we can do that around the table. Okay, let's talk with you Stu. Where did the money come from for initial financing and growth? Let's go through it.

**Stu Miller (Accountants Computer Services, or ACS):** Initial financing was from the five CPA firms. They bought the first IBM 360/30, paid cash for it.

**Grad:** Did they become stockholders?

**Miller:** The stockholders were only the five CPA firms.

**Grad:** The firms themselves.

**Miller:** The firms themselves. They had formed some kind of shell corporation so that the PC did not own it but the subsidiary did. Within after a year and one-half, after eighteen months, the company was cash flow positive, and it was not just from doing applications for their clients, but it was because we were also taking in a lot of data entry work for other companies. We would do the key punching. We would give the cards to these other companies.



They'd do it on whatever computers they might have. I failed to mention earlier that we were a member of a group called ACUTE. Are you familiar with ACUTE?

**Grad:** No.

**Miller:** Accounting Computer Users Technology Exchange. And through that we would actually gain some clients, but the financing was not an issue, was not a concern of ours, because we were flowing. We were doing very well until 1977.

**Grad:** And what happened in 1977?

**Miller:** 1977 is when we made an offer to the CPA firms to buy them out. Part of the problem was that the CPA firms could not solicit business, they could not advertise, and we were kind of stymied as to where the growth was going to come from. We had some good connections for a vertical market with mining companies doing mining company payrolls. And it is an unusual kind of payroll for a couple of reasons. First is the complexity of it, and second is you cannot be late. If you're late with the payroll, they go on strike.

**Grad:** Immediately?

**Miller:** Immediately. You know within an hour. You need to be at the face of the mine with the checks. Because those guys didn't believe in direct deposit, but anyway we approached the CPA firms. By this time, one of them had already gotten a System 34. They said, "Okay, well we can do some stuff in-house. We understand your problem. You can't grow this way with the constraints. We will sell to you." Now what were they selling? They were selling an asset base primarily. They were selling the customer base and some equipment. We went to a local bank in Nashville and we had no problem raising money based on our financials because we had been profitable for almost ten years at that point. There were four of us who were the principals of the company. We were able to close this in about six months. The money required to buy it, the CPA firms were almost saying, "Here, take it." It wasn't much. We only had to pay \$50,000.

**Grad:** How much were you generating in the way of cash at that point?

**Miller:** We were generating a little over \$600,000 a year.

**Grad:** And they took \$50,000?

**Miller:** They took \$50,000. They just wanted to be out of it.

**Jerger:** They didn't have you to advise them.

**Grad:** I would have done a valuation of your company at a hell of a lot different price, but you would never have hired me.

**Miller:** As I say, it was almost a favor. "Here you guys want to take this? Take this. We want to be out of the computer service bureau business."

**Grad:** Incredible. When you got \$50,000, who were the stockholders? Who owned the company then?

**Miller:** Four of us.

**Grad:** Equal shares?

**Miller:** Equal shares.

**Grad:** So who are the four people? Name them quickly.

**Miller:** Bill Gray, Tom Newman. Terry Higgins, and myself.

**Mann:** Terry Higgins at one point was in charge of my tax return development. And we retained the DynaTax franchise during that time.

**Grad:** Were you licensing DynaTax?

**Mann:** Yes, we had a license for firms around the country. I was familiar with franchising because of my association with Pizza Hut and we had an upfront fee that was fairly stiff and then a charge per return as I recall.

**Grad:** You were charging per return no matter how many returns they prepared?

**Mann:** As I recall.

**Grad:** And you trusted them to give you an accurate report on that?

**Mann:** I think we had some way to keep track of it but I don't remember.

**Grad:** I assumed. <laughter>

**Mann:** I mean these are professional accountants.

**Grad:** Would they cheat you?

**Miller:** Well we were dumb because we weren't professional accountants, so we didn't cheat them.

**Grad:** Did you need more money later on and, if so, how did you get it?

**Miller:** We did need more money later on, but we opted to sell the company.

**Grad:** So before you actually had to raise more money you sold instead.

**Mann:** Who did you sell it to?

**Miller:** Hickory Financial.

### **Bootstrapping Into the Business**

**Grad:** Bob, how about yourself? How about raising money for you and DPAS? Where did the original money come from and how did you do it?

**Bob Tessler (Data Processing and Accounting Services, or DPAS):** I think we had four liquidity prices. I think the first one was a startup. I didn't have a job and I didn't have a lot of money, but I was able to start a business. It was all with savings and that was the first in 1971.

**Grad:** Ballpark the amount of money \$5,000, \$10,000, \$2,000?

**Tessler:** You know I never set aside a certain amount of money. I just wrote checks and we cut back our living style and it was all the same.

**Grad:** It was your personal money?

**Tessler:** Yes, yes. Then in 1977 a business broker came to my office and said there's a service bureau for sale in San Francisco and it kind of fits with what you want to do, and they do about a million dollars a year in sales. I think we did about \$300,000 so obviously it looked like a

good match to me. So I informed the broker that there was a potential opportunity. I didn't have any cash, and the broker informed me that the seller was desperate. And of course that's one of my favorite words during acquisition. So I did buy the business. It was financed almost all by the seller. I put up a little cash myself and I think I went to my folks and borrowed some money from them and got a small bank loan. But what was interesting is that this business had, at that time, about 100 employees, mostly data entry, and then it came time to make the payroll. Well in my brilliant calculations I forgot that I had to make a payroll before any money came in from customers. So I went back to the seller who financed the payroll and as it turned out he had more money in the business after he sold it than he did while he owned it. But it was fortuitous and I think that was the second activity. Several years later we went into an expansion mode. Our largest customers were retail inventory so we were a two-month a year business.

**Grad:** Clarify that a little bit, Bob.

**Tessler:** Alright. So we were a two-month a year business, July and January, and we had been promised a large inventory. Of course they staffed up. One of our strengths was being able to add and subtract staff so we added about 200 people for a month for the inventory that didn't come in. It was the gap as I recall. So I now had a liquidity crunch and of course not separating business from personal I ended up selling my house to pay for that experience. The fourth one came in the early 1990s and that was when both of my boys -- part of my succession plan was for my two sons, to get in the business. One boy said he wasn't going to work that hard. And the other boy said that he didn't want to live in California anymore. So my succession plan went down the drain. Now at that time data entry again was our primary source of revenue and we had completed converting over to scanning and other technology. So I either had to get into a different business or get out of the business and do something else. So I decided at that point that we were going to try to do something else and whatever it was was going to be a liquidity crunch and I was just going to bet everything at this time in 1994, 1995, 1996.

And the rest of the story goes that one of the highlights of ADAPSO was I got introduced to some fairly major players in the industry through IBM and ACS, Affiliate Computer Services and some of the others, and there were two fellows that came out of Dallas who were trying to start a rollup and they weren't sure what industry to do and they approached ADAPSO. And I'm not sure what happened from their end, but I got a call that these folks were going to do a rollup. And I did not discuss my desperateness. <laughs> So as it turned out they did a rollup. We were part of it. So I was suddenly a founding member of a public company.

**Grad:** What time period are we talking about?

**Tessler:** This is 1996. Those were my four liquidity crises.

**Grad:** But most of the time you were cash flow positive then?

**Tessler:** We were a two-month company is what I call it because we did the major inventories which was we did 80 percent of our revenue in two months.

**Grad:** Tell me again why that was so.

**Tessler:** We did retail inventories and they take their inventory in January and July. And we did Macy's, Nordstrom's, Federated, May.

**Grad:** So it was all that key entry that was going on.

**Tessler:** It was tons of key entry. I mean we did it. We subcontracted, we had facilities in Asia and India, Maquiladora in Mexico; we used prison labor. We did everything possible but the point being financially that we would have ten months of losses and two months of huge profit so the key was not to spend our profits in the five months before the next inventory.

**Grad:** Jim, talk briefly about your financials, after the beginning with your \$1,500 of your ten shares of IBM stock.

**Jim Houtz:** Fifteen hundred dollars, one of the things we did which has really helped is we set a deposit fee for all clients. For every contract we signed we'd get an upfront payment with the contract of just under \$3,000 and that really helped when we started selling. In our early days there were plenty of times we had to sell something this week to meet payroll by the end of the week and that puts a lot of pressure on you. But we discovered that industrial revenue bonds, we raised about- started out to raise \$2,000,000. Ended up raising one and one-half million for industrial revenue bonds.

**Grad:** And this is what year, early 1970s?

**Houtz:** Early 1970s; it was in that period when the interest rates were pretty high, and a seven percent industrial revenue bond was really a good deal.

**Grad:** So that was a fairly large chunk of money that you raised.

**Houtz:** Yes.

**Grad:** And what was the reason you needed that money?

**Houtz:** Computer equipment. It all went for computer equipment.

**Grad:** This seems to be a common story; if you needed equipment that's when you needed cash. Is that a fair statement?

**Houtz:** Right, right.

**Grad:** It wasn't to hire staff or do things like that or buy buildings. It was mainly equipment was the driver.

**Houtz:** Yes, it was for us.

**Grad:** I gather that's a fairly consistent story here.

**Houtz:** Right. We just had good cash flow. We always could use more. That took us up to about 1981 when we had an IPO.

**Grad:** Your IPO you said was about \$5 million?

**Houtz:** About \$5 million, yes.

**Grad:** And then there was some further secondary offerings?

**Houtz:** We did a secondary, then we did a private placement. We sold \$10 million worth of stock and a year later we bought it back for \$6 million. Those were the best financial deals we did.

**Grad:** How did you drive the company down that fast?

**Houtz:** Everybody went down at that time.

**Grad:** Oh, it wasn't just you?

**Houtz:** And we helped, too. Not intentionally but we helped. So that was it for financing.

### **Smart Partnerships and a Little Serendipity**

**Grad:** Frank? How about your financing stories? Then I'll get to you, Jim Mann.

**Frank Casey (ADP Custom Data Services):** Well in the very beginning I didn't really have to worry about the financial things because with UNIVAC and Remington Rand all I had to do was come up with a budget and meet the budget and so forth and so on. With the exception that I did find out with UNIVAC that they were having troubles at times too. I had to go out and I had to close a couple offices for them. One was the office in Saint Louis. Somebody might have bought a UNIVAC office in Saint Louis, one in Hartford, one in Nashville, and I knew that there was a downswing on the UNIVAC service bureaus. Then with management services I had financial people that were financed. I was just the Operations Manager of the data center, and it was our model to be acquired which we were by NLT Computer Services. And with NLT again all we had to do was make a budget and meet our budget, which I did for three years. I became a member of their Achievers Club for three years in a row. Then when I left NLT, I was on my own. But when I left NLT I took a couple clients with me and one of them was my favorite client and NLT said "Well, we're going to sue you." I said "Okay, well, sue us." I went to my client who happened to be INA and he says "They sue you, they sue us. End of story." They didn't sue. Then INA became CIGNA and my first monthly billing with INA was about \$1,800 and we went on a cash performance at that particular point. We put no money in the company. We went on our receivables and our profits.

There were two of us and I took my operation manager with me and we started Custom Data Services and became a corporation. And a couple of good things that I did during that regime was I put in key man insurance and my operations manager passed away on me. So I was lucky I got out of that. So then I was the sole owner of Custom Data Services. And I started, I said, with CIGNA. My first monthly billing was \$1,800. When I finished with them I was billing \$1.2 million. So we kind of progressed and that was on incremental billing based on number of transactions and so forth and so on. And I had a great accounts receivable until I got involved in multilevel marketing. My accounts receivable were paid like clockwork. I'd bill one month and within 15, 20 days I'd receive a check which made it very, very nice. I didn't need to do any financing. But then I bought equipment and the reason I purchased Burroughs Equipment is because they took the mortgage. They leased the equipment and that made it good. IBM would not do that. But in my earlier days I didn't have equipment so I went to a friend of mine who had a Burroughs computer and I rented time. I didn't pay rent; he gave me the time between 12 midnight to 8:00 in the morning, so I did my processing then. Then I showered and went out and I did my marketing from 8:00 to 6:00 -- you know, to build up the business. And we were lucky. We got a nice size revenue.

**Grad:** Did you need any outside financing during that period?

**Casey:** Not at all. Zero.

**Grad:** Let me interrupt for a minute. (Grad introduces Gideon Gartner). It's a pleasure to have you here. We'll give you a badge and stuff later on. If you remember Gartner Group, Gideon had something to do with it. I can't quite remember exactly what it was.

**Oscar Schachter:** His name lives on actually. His name lives on.

**Grad:** The name, no longer his company. Gideon, thank you for joining with us. So did you need outside financing, Frank?

**Casey:** Not at all. Zero. We financed everything through our accounts receivable. We were apparently smart enough to place our jobs so that we had a nice profit margin in there.

**Grad:** That's terrific.

**Casey:** Yes. One of the other good things I did in a small company which is now mine is I established a defined benefit plan which is my retirement plan. And we poured a lot of our profits back in to the defined benefit plan and that's what allowed me to retire.

**Grad:** Jim, talk about your financing.

**Mann (United Data Centers):** Well, it's a little complicated so bear with me. I indicated that we had put together my two service bureaus and three others in this company to go public which didn't happen because it was scheduled to go public in January of 1970. And in the aftermath of that there was a good deal of consternation because it was discovered that my two companies were the only ones that had positive cash flow. I hadn't learned the term "due diligence" yet <laughs> and the other guys being all owned by professional accountants, they apparently had. And so the company had a half a million-dollar negative net worth and was losing \$50,000 a month -- that was where we stood when this thing failed.

Before that I'd had no capital needs at all because Fox & Company, the accounting firm that we were affiliated with, was also on a growth by acquisition mode. They had tremendous cash flow, tremendous lines of credit, so it wasn't an issue with me at all. But we had a little bit of a problem with this \$50,000 a month negative cash flow and a negative value balance sheet. So at that point I called a meeting of the guys running these centers and did my first turnaround, part of it of my own making. And how I went through it was very simple. I had everyone bring in a forecast of their revenue and I looked at them and I scratched off everything that said "new sales" on it. Scratched it off. Discounted it 100 percent, and I then added it up and looked at the bottom line and if it was negative for one of them, I figured out their average employment cost per year, divided that into the negative net worth and said "Okay you're going to get along with this many fewer people." And of course they all went crazy. <laughs> But I finally convinced



them, though, when they realized it was either that or lose their jobs and their investment. So we actually got the negative cash flow solved in about 60 days, but the half a million-dollar balance sheet problem just wasn't going to go away.

And there were only, the owners of the business now, there were really only two of them that had any kind of pockets at all, let alone deep pockets, and that was Fox & Company the accounting firm that I had come from and a fellow named Bill Young down in Lexington, Kentucky who was an investor in that center and who was an early investor in Kentucky Fried Chicken and an old horse-owning family in Kentucky for many years. And so we were sitting there and then all of a sudden I got a call from Bernie Goldstein out of the blue. I hadn't even yet started to try to figure out how to solve the balance sheet problem, and he sent Al Eisenstat up to talk to us. <laughs> And Al and Bernie were attracted to the business because they too believe in specialization and they actually liked the tax return business and they liked the financial statement preparation business. And Bernie and Al figured out a plan, but it required the people with deep pockets in our group to cough up between them a half a million dollars to cure the balance sheet problem. What we were getting in return was stock in United Data Centers. So anyway, the deal got done and as it were later three or four years later when United Data Centers was sold to Tymshare. Lo and behold all the investors in my business actually made money. Not a lot but they made money and it was particularly important in my case because when we formed the separate corporation with the accounting firm I had borrowed \$120,000 from a local bank and given it to the accounting firm for my share of the business. So I had absolutely no way to repay that at all had it not been for the Tymshare acquisition. So I've only had one liquidity crisis. In fact, at the time I was having it, I didn't even know what a liquidity crisis was. I just know we didn't have any money and we were spending more than we made. <laughs>

**Grad:** So that helped convince you that cash flow planning was what you needed.

**Mann:** Yes. I became a cash flow devotee.

**Grad:** That would be great. Thanks so much. Gideon Gartner, you have a tent card to put up so if we get you on camera people will know you're there. Have I covered all of you? Let's talk about the pricing. How you priced your products, how you priced your services, and talk about cost. Is it correct to say that for all of you your primary cost was your machine time or is that not fair?

**Tessler:** Payroll.

**Miller:** Employees.

**Grad:** Really?

**Miller:** Yes.

**Grad:** Doing what? What were the employees doing? Data entry?

**Miller:** Data entry, computer operations, programming.

**Rollins:** Marketing.

**Grad:** I was talking to Jim yesterday and his comment was that when he did his first analysis -- see if I got it right, Jim -- that 70 percent of his costs at the time was for machine-direct machine related, computer related costs.

**Houtz:** Computer center related.

**Grad:** Which included the operators.

**Houtz:** Right.

**Grad:** What kind of percentages were all of you running in that area?

**Tessler:** I'm running 70 percent or more because our largest revenue generator was data entry, so we were totally labor intensive.

**Grad:** Your model is different though. You weren't running the things for people. You were entering data so you had to be very labor-intensive.

**Tessler:** Both but our focus was more on data entry, particularly at the beginning.

**Grad:** So you're a service bureau but the service you're providing is not running other people's applications so much as preparing the data for them?

**Tessler:** It is, but it's more data entry-dependent. Names and addresses primarily, So we're creating data bases of names and addresses so we may have a small revenue account in terms of processing revenue but large in terms of data conversion.

**Grad:** That's a very different model, isn't it? Any others have a model that was comparable to that?

**Miller:** Well, ours was primarily data entry as well because we were entering time cards if we were doing payrolls. We were entering check registers so that we could do general ledgers for the accounting firms. And again, remember the CPA isn't paid for the computer, so what we were paying for was some maintenance, okay, but we did not have the big outlay of the assets so ours were primarily people.

**Grad:** You, Jim were sharing a computer.

**Houtz:** We were sharing. We had a little data entry function, but it was by mistake more than anything.

We didn't do data entry for our clients. They did their own data entry and keying tapes and transmitted it to us.

**Grad:** This is an interesting difference because I think of the service bureaus in terms of running programs for other people. Their programs are your programs for them and the machine, the computers are the major portion of your value added. How about you, John, what was your model?

**Rollins:** I just looked back at an income statement from 1978 and it looked like about 60 percent of the costs were for people payroll for data entry, computer operations, some overhead for marketing and sales and management, about 60 percent. The other 40 percent is for computer maintenance, depreciation of the computer equipment that we owned and materials; so it was heavily on the people side, but again many of those people were involved in computer operations and data-- about ten percent it looks like was data entry specifically. We had three shifts a day of eight on a shift, eight data entry operators so that would be 24 people just on data entry.

**Grad:** And that was to capture these membership lists and things like that?

**Rollins:** Actually updating the data. The capturing would have been done using OCR, Optical Character Recognition, but the routine updating, address changes, dues payments, all the routine day-to-day stuff was done with 029s and 129s until we converted later to key-to-disc on an Entrex Data System so we could improve the productivity and have more accurate tracking information on strokes per minute and that sort of thing for each data entry operator. But it was originally 029s and 129s, key punch and key verification equipment.

**Grad:** Frank, talk only about the Custom Data Services part. Did you have a major computer cost?

**Casey:** No, the computer cost was fixed. We kind of knew that. That went along with the maintenance. It was the programming, the data entry and the associated payroll expenses, taxes and so forth which were the major expense. And our big thing was programming. Programming in those days was starting to grow. Programming salaries were starting to get completely out of hand, and they wanted all the fringe benefits. They wanted college credits, doo-dah, everything you could provide for them, insurance benefits and so forth and so on. But that programmers were needed in order to drive the model.

**Grad:** That's what I want to explore here. The models again are quite different among all of you. Now in your case, Jim, you were doing packaged applications at this time.

**Houtz:** Right, our model was our percentage, 70 percent. That wasn't our goal. Our goal was to get the computer center cost down. Our accounting was quite a bit different from the others. We wanted to get the computer center cost down to 40 percent, which we did over a period of years.

**Grad:** But you were investing considerable development money in building these standard applications.

**Houtz:** All standard applications.

**Grad:** Yes, and so you were investing money upfront.

**Houtz:** Right.

**Grad:** So it was like a software company in a sense, is that correct?

**Houtz:** Right.

**Grad:** So that would again change your cost model quite a bit.

**Houtz:** Well, we tried to keep our development cost to about ten percent.

**Grad:** I visited with you at one point in time. And you had a tremendous amount of equipment for printing enveloping, and things like that going on. That must have cost a lot of money.

**Houtz:** Right.

**Grad:** To print all these insurance documents and things like that.

**Houtz:** And we wanted all of that stuff to be within 40 percent of our revenue.

**Grad:** So that when you talk about computers, you're also including all this mammoth amount of printing equipment and stuff and all those kind of things.

**Houtz:** All the printing equipment, the laser printers, sorters.

### **How Manipulating Assets Helped Cash Flow**

**Grad:** Did any others have that kind of output volumes?

**Mann:** I suspect so. I don't have the numbers in my head and, unlike Frank, I have burned all my old records. I can't be prosecuted. <laughs> But I believe our numbers would have been pretty close to John's because labor was the big factor in the computer operation. If you bought your computer and depreciated it long enough, that shrunk down to a pretty low number.

**Grad:** One of the things I was also told was that many of you in the service bureau business, whether you did it or not individually, kept the computers way beyond their lives. I was told there was no such thing as a five-year life, or even a ten-year life if it kept running? What the hell. I don't care if it's slower than the new computers. Is that true for many of you?

**Casey:** I might just put that into proper perspective. My first computer from Burroughs cost \$150,000, which they handled the paper on. Paid it off and all that. Then came in the AS/400.

**Grad:** How many years later?

**Casey:** Ten, twelve years later.

**Mann:** Was the Burroughs equipment still running?

**Casey:** Yes. And I also say too that one of the expenses you had for these big computers was that you had to have air conditioning under the floor. You had to have electricity. My electricity bill was considerable, which was totally unexpected, but you had to do it to keep it

running. When we got the AS/400 it didn't need anything. Just put it in the corner and it performed.

**Grad:** How long did that last?

**Casey:** It's still around.

**Grad:** Today? It's still running?

**Casey:** Still around.

**Grad:** Jim you had a comment you wanted to make.

**Houtz:** We had a model 360/65 which had replaced 650s and we replaced the 65 with the 4341. Yes, and when we did that our electrical bill went down 800 bucks a month. <laughs>

**Grad:** So the people costs were a central part of it.

**Houtz:** Absolutely. Right.

**Grad:** Now let's talk about two different kinds of people costs. I'm going to leave the data entry out for the moment. You needed operators to run the machines to take care of whatever paperwork, whatever else you were doing with it. Did any of you have significant programming that you had to have?

**Multiple Voices:** Yes.

**Grad:** So all of you. Frank, I believe that you were still doing custom programming. And so were you Bob?

**Casey:** Yes.

**Tessler:** Yes.

**Grad:** Jim?

**Mann:** We weren't doing any custom programming but the tax business required you to rewrite the system every year to pick up the changes in the law so we had a lot of programmers.

**Grad:** So programming was still a significant part of your costs. I remember when I was doing valuation of companies and doing consulting, I created sort of standard models for the software companies, for the professional services companies and some for the service bureaus. Or the way I was thinking about it -- not including data entry. Did any of you have a standard model? You said 40 percent for hardware? What was the other 60 percent going to be?

**Houtz:** Ten percent for development and a percentage for marketing and sales. And we always screwed administration down as low as we could. It was always around six to eight percent and hopefully we wanted to get a ten- to fifteen-percent profit. The ten to fifteen percent profit was the hardest to get.

**Grad:** Pretax or after tax?

**Houtz:** Pretax.

**Grad:** Fifteen percent pretax is what you were aiming at?

**Houtz:** Yes.

**Grad:** Did you achieve it?

**Houtz:** In the 29 years, the last four years we did. <laughter>

**Grad:** It took you 25 years to do it right?

### **"Never bought a new computer from IBM"**

**Rollins:** I think entrepreneurs like to keep their costs to a minimum and that includes running computers as long as you can. For example consider that computer I described earlier that came out of Wells Fargo Bank. We bought and used it in 1973 and we would only upgrade modularly as things either broke or got out of date or we needed a faster CPU. It went to an IBM 360/40 and then later to a model 65. We'd upgrade the tape drives, the printers, would add a second printer, would add a laser printer. It was all done modularly and you'd just try and get

the most out of it and we literally did not replace that 360 for one decade. It was 1983 when we finally decided to replace the whole thing with a new 370 series computer.

**Grad:** Did you ever buy anything from IBM directly?

**Rollins:** No.

**Tessler:** No. <laughs>

**Grad:** Did anybody here ever buy anything from IBM?

**Houtz:** We bought the 4341s brand new.

**Grad:** Why?

**Houtz:** Because like I said, 800 bucks a month on electricity and what we were going to pay for those three computers together on a lease was less than we were paying for the maintenance.

**Grad:** Couldn't you have gotten them from somebody? Oh, there weren't any new ones available that early.

**Mann:** We also bought the first 360 from IBM and the reason was this was just when they had been forced to start selling them and it hadn't been out long enough for any used ones to be on the market.

**Grad:** Some of the leasing companies did get the early machines on a buy basis. They used a different leasing model since they were assuming a seven-year life instead of a five-year life or a four-year life like IBM did; this make that they could price differently from IBM. Would you talk about your cost model please?

**Rollins:** Let me just relate one story, Burt. When we needed to buy the 370 in 1983 to really upgrade and save power and do all those things that we needed to do at that point, we didn't have the money to pay for it. But at that time the tax law was such that you would get an investment tax credit, so what we did was we set up a separate partnership. We called it Leasing Company Partnership and several of the owners of AZTECH, five of us, invested in that leasing partnership. I think it was about a \$200,000 purchase and we put up I think 20 percent of that in cash among the five of us. We got the investment tax credit, borrowed the rest from the bank, it was like an 80 percent loan from the bank secured by the equipment only,



not by us personally, and then over a three to five-year period we leased it back to AZTECH. And actually, the price AZTECH paid was less than it would have been if they'd leased it on the open market. But the internal rate of return that we got on that partnership with the ITC and the leverage was close to 30 percent. It was a great deal thanks to the tax laws.

**Grad:** Let me ask you about your cost structure, your model, what were your percentages in various elements of yours? How much on operations? Your machines, marketing?

**Rollins:** It was as I said before: about 60 percent was the labor which included about 10 percent was for data entry.

**Grad:** When you say labor, does that include marketing people?

**Rollins:** Every kind of labor.

**Grad:** I'm trying to break that out. Separate it, please.

**Rollins:** Account managers were a big expense for us in managing our hundreds of association clients; we'd have an account manager on top of each group of clients and they would have a real personal day-to-day relationship; and then PL/1 programmers at a junior level could go in and modify code if necessary

**Grad:** They weren't marketing and sales people?

**Rollins:** That was separate. The marketing and sales people captured the new name accounts while the account managers worked with the existing clients on a very hand-in-glove basis. They would go visit them and have a very close relationship and take all the orders. You know your revenue day-to-day was all the orders from the customers.

**Grad:** You claimed you had a 40 percent earnings before taxes.

**Rollins:** That's right.

**Grad:** How the hell did you do that? That's a great margin.

**Rollins:** Keeping lean and mean. Now that went down later on when we got into turn-key systems and other businesses later when we extended the life of AZTECH beyond the service bureau. But the service bureau was a great business model.

**Grad:** That's what's interesting because models that I've seen very seldom have gone much above the 15 percent level unless you had a bluebird kind of thing. But you were consistently doing 30 to 40 percent then over a period of time.

**Rollins:** That's right, and actually one thing that contributed to it, Burt, was that at one point this five-story brownstone that we started in, we had expanded into two or three floors of it. The owner of it wanted to sell it. And so we actually made a deal with him to buy it for a small down payment and pay it off over a period of years. Cut our costs tremendously by owning the building, and then when we sold it ten years later the Washington D.C. metro subway system had gone in with a stop right across the street, and we had a large capital gain needless to say when we sold it after a decade and that helped finance more growth later.

**Grad:** What kind of margins did you run, Bob?

**Tessler:** We looked at it a little differently. We were more concerned with a revenue line at first. For our revenue we budgeted 50 percent of one-time revenues which is non-repetitive and the one time we looked for a 50 percent gross margin and on the repetitive 50 percent, which we called repetitive sustainable revenue, we looked to get 20 or 25 percent -- although there was a three-year period in which we had three large accounts that our margins were 33 percent pretax.

**Grad:** You're talking of all costs?

**Tessler:** Yes, everything. Everything. I think at that time the three big accounts were Apple, and the U.S. Treasury Department contracted with us to do the '86 Olympic coins. And I think Bank of America came through. I think that was huge for us.

**Grad:** Frank, when you had your own business, what were the margins?

**Casey:** The only margin that I know of or was really concerned about is the profit and we were running about 20 percent.

**Grad:** Pretax?

**Casey:** Pretax, yes. As to equipment, once I made my initial equipment acquisition from Burroughs we went to third-party vendors after that for everything else for additional memory, additional storage and so forth. The only thing I couldn't cut down on was the maintenance. I had to go to Burroughs for maintenance. So that was an item that I had to really concentrate on to keep it at a bare minimum.

**"Price, quality, service: Pick two"**

**Oscar Schachter (SI SIG):** I had a question for John Rollins (of AZTECH). Because the disparity in the margins is really dramatic, did you have much competition in doing work for the associations? I mean that was your focus.

**Rollins:** No, initially there was no competition when we started it, but yes, we did have competition that we attracted along the way and had several competitors so as time passed our margins were compressed somewhat.

**Schachter:** Forty percent is not very much of a compression.

**Rollins:** Well that was in the early days; that was in the 1970s. Later on in the 1980s and 1990s the margins were lower because we got into selling turnkey systems and other things, which was extremely competitive compared to the good old days of the batch processing services of the early 1970s.

**Grad:** I'm fascinated by this. I've always thought about the service bureau business as a relatively low-margin business. A lot of the business is repeat business, right?

**Rollins:** Yes.

**Grad:** Seventy, eighty percent or so depending upon your growth rate would be repeat business?

**Houtz:** Right.

**Grad:** But your cost of running that business, the marketing cost, wouldn't be high. But your operations costs continue on for that repeat business, right?

**Miller:** For us there was a sea change in the way we were charging. In the earlier days we would not charge for the programming. All we would charge for would be the operations. As we got later into the 1970s we started charging for the programming as custom programming became a tremendous revenue item. The other thing was we weren't exactly a one-trick pony. We were a two- or three-trick pony, but we had a payroll system that was highly customizable and it could be used for a mining company. It could be used to pay a zoo payroll. It could be used to do utility company payrolls. And they paid for the modifications and that was just a gravy train. And we were about 20 to 25 percent margin.

**Grad:** ADP wasn't a tough competitor to you because of your specialization, is that what you're saying?

**Miller:** Correct.

**Grad:** They were doing more vanilla payrolls and you were doing more specialized?

**Miller:** At that time. ADP of course is doing a lot more customizing, but we were just a custom shop and known for it.

**Grad:** And your margins again?

**Miller:** About 20 to 25 percent over a 15-year period.

**Grad:** Jim?

**Mann:** We used to shoot for 20 to 25 percent, in that range. And usually hit it.

**Grad:** That's very interesting. Of course, the applications investment was significant if you had to pay for it yourself. Let's talk about the pricing models because that's another whole dimension on how you billed the services. Any sequence we want to start? How did you price, Jim?

**Mann:** Well, two aspects. In the little custom work and in the financial statement work we did, I used a combination of analytically figuring out how much labor we would get into and what kind of margins we wanted to have; and to a lesser degree I was looking at the competition but we didn't have a lot of competition in that area. In the tax return business, it was totally driven by competition because CompuTax was number one, and we could be a little over their rates because one thing we did as a marketing tool was to guarantee 24-hour turnaround at the end of the tax season. And I mean that wasn't a big guarantee when you think about it. If you don't turn the stuff around when it comes in, pretty soon your backlogs are going to fill your building. But it was a good marketing gimmick so we were able to charge a bit more. But I don't remember how much of a premium at all. Do you remember?

### **The Sorcery of Pricing**

**Grad:** Tell me about the model? What did you charge? Per return? Per what?

**Mann:** It was a base price plus a certain fee per schedule. We used a tax return schedule like Schedule A, Schedule B, Schedule Z, you know? So it depended on the complexity.

**Grad:** And how did you figure out what to charge for each of those schedules?

**Mann:** What CompuTax was charging. <laughter>

**Grad:** You can see the technical acuity here, the financial skills.

**Mann:** I didn't have an MBA, for crying out loud.

**Miller:** What Jim did do is require some pretty stiff record-keeping from us as franchisees. And there was a different charge for personal returns versus commercial returns, not just for the schedules but for the type of return. And we kept pretty good records.

**Grad:** Did most of your money come from the franchisees?

**Mann:** You know I'm struggling to remember that. I think we still generated over 50 percent ourselves but the franchisees were a significant part of the revenue. We couldn't have afforded to develop the system without them. It worked out to be a good idea.

**Grad:** Bob, your pricing scheme?

**Tessler:** Our pricing scheme was not very structured. It was all we could get. <laughter>

**Grad:** You don't need an MBA for that.

**Tessler:** That's one of the things -- I did get an MBA. Our motto was price, quality, service: pick two. <laughter>

**Grad:** I think that's the best comment of the morning,

**Tessler:** Based on our position in the market and in the fact that in Northern California, we were the largest data capture shop by far anywhere in the area, in fact probably in the Los Angeles area also. So, we pretty much had a lock on the market so if a firm has a union strike or a union issue they're going to contract with us so that their business is not interrupted. The other thing we found out which I learned during my MBA experience is that there's an inelastic demand for this type of data entry services. In the scheme of things, the data entry costs

compared to the entire project is very small. So we could double our prices without a significant impact on the market place. This is a segment of the industry that is the grunt work. Nobody wants to do it. In an in-house situation it's demeaning to have to do data capture, so our motto again was, "We Made Heroes" because we performed the data entry experience and did a good job and on time. But our pricing was opportunistic, we'll say.

**Grad:** Frank, how about pricing at Custom Data Services?

**Casey:** We tried to establish some prices for data entry, some prices for programming, some prices for computer usage. And we tried to analyze exactly what steps it would take to complete the job, how much programming would be involved and how much computer processing and that's the way we priced it. The bluebirds of the industry were when you got a cost plus and you just went in at a price and you didn't have to put a fixed price on it. You just billed whatever came up. I did a lot of the work in the federal government area in that way. We bid some federal government contracts where we could bill for all the hours that we spent, plus an overhead, plus some profit, which was great, and we put a lot of people on those projects.

**Grad:** You had a lot of record keeping as a result of that approach?

**Casey:** Oh yes, and we were audited a couple of times and fortunately escaped pretty good.

**Grad:** That's an interesting point though. Did any of the others of you go after federal or other government business? Because I was told it was very onerous, some of the government reporting that was required.

**Casey:** it was a lot of reporting, yes.

**Grad:** Okay. How did you charge?

**Rollins:** At AZTECH everything was pretty much unit priced.

**Grad:** Which means?

**Rollins:** The only thing that we'd charge for on software would be if they wanted special custom modifications made up front; but our business strategy was to keep that to a minimum because we wanted to capture them as a client so we could begin billing them for the routine outputs that they would order every week, 52 weeks a year and also we got into online terminals that we'd put in their offices so they could do their data entry remotely. We used

Entrex terminals and I think those were three or four hundred dollars a month per terminal plus the cost of the dedicated phone line for each one, 1200 baud phone lines, remember that?

**Grad:** That was high speed. I had 300 baud.

**Rollins:** <laughs> So it was unit price either per month on the terminals or per unit like on mailing labels which we did a lot of for associations at around five dollars per thousand so if the National Parks and Conservation Association wanted to print a set of labels to mail their magazine, 500,000 labels, that's 2,500 bucks. It would only take a couple hours to print those off on the IBM 360 mainframe. So you're literally doing millions of labels per day. Same thing for other printed outputs, everything is unit priced.

**Grad:** How did you know five bucks a thousand was going to make money for you?

**Rollins:** We actually did some cost accounting on that and looked at the competition too. We were able to get their pricelist and they provided a nice high umbrella for us to come in under. We did annual retreats where we would review all our pricing and all our business plans and that sort of thing, and for those retreats we'd gather as much information on our competitors as we could, including prices.

**Grad:** Jim, your pricing scheme?

**Houtz:** When we were local it was trying to estimate cost. But we talked about limited competition, what was specialized in the industry, healthcare, we went after group practices. All of a sudden we're in four states in the Midwest and we had some fairly tough competitors, so we always tried to look at their prices. But we set our own based on our own costs. Our biggest success was when we had our distributed system and we would use a mini- computer. We started out with Honeywell, but we ended up with HP; we'd have four to two hundred PCs hooked up to it. And they would do all their registration, all their patient scheduling, all their daily accounting in-house and all their data entry in-house. Then their retrieval of account information would be from the system that they had in-house. Then they would transmit to us on a weekly basis all of their insurance reports, which we would give them all in one format that we then converted at the clearing house to one of four hundred different formats, either paper or electronic and send them on to the insurance companies.

**Grad:** Did you charge them per report or per document?

**Houtz:** We'd charge them per insurance report, we'd charge them per statement. And software, the standard module for software was you sell software for \$100,000 and then you get 20 percent a year in maintenance or \$20,000. We didn't do that. Instead of \$100,000 we'd

charge \$80,000 and then we'd get about \$60,000 or close to \$80,000 a year for software maintenance and we priced our software based on the number of physicians that you had.

**Grad:** So you were "selling software," but on the basis of a recurring revenue stream based upon volumes, usages.

**Houtz:** Right, right.

**Grad:** I don't know of many of the software products companies that ended up in that kind of a model.

**Mann:** SunGard has been migrating all of its software products to that model over about the last eight years and it's been far more successful than I thought it would be frankly. They've gone from about 20 percent software revenue to about 10% in eight years through converting people from perpetual licenses to software rentals.

**Grad:** What's amazing to me that during all those years, 1970s, and 1980s and so forth, that the software company product model was consistent; we raised the upfront price annually and we also raised the maintenance % of the upfront price frequently. We started at 10 percent, went to 12 percent, made it to up to 15% and then to 18% and sort of finally to 20%. That was the recurring revenue stream instead of doing what you guys did. Your recurring revenue was almost equal to your first year's revenue.

**Houtz:** Right.

**Grad:** And it made it an easier buy for them because they didn't have to come up with as much money upfront.

**Houtz:** Yes.

**Grad:** And yet somehow almost all software companies that I knew with few exceptions followed the front load model. I guess Syncsort was one of the few that did it differently. They had a three-year license kind of a deal and therefore they didn't have to fight the battle about the maintenance since to continue using the customer would have to sign another 3-year license.

**Houtz:** And the healthcare industry, the physicians' side, most of the companies converted to the method we were using. Then when they did that, we changed again. We wanted to keep it as confusing as we could. But one thing we did is we took our group -- and



maybe this gets into another section you wanted to talk about -- but we took our clearing house which we were using for our own clients and we stripped that out and made that into a clearing house product. We took it out and sold it to most of the major companies and there were about 300 of them that were doing packages for physicians.

**Grad:** And you licensed that to them on a unit-cost basis?

**Houtz:** Usage basis.

**Grad:** Usage basis. That's terrific. Stu?

**Miller:** Kind of like John said. Unit pricing which in our case could have been per payroll check. In the case of doing utility billing it was per-customer bill. We did get into competition a little bit with Jim with CyCare because we got a package from a company called Occidental that would produce doctor billing statements and HCFA forms as they were- now it's CMS or whatever it is, but the HCFA 1500. But again it was a ton of data entry from all the charge slips that the doctor would send you and so forth. For the utility billing, unbelievable. We'd have to get meter readings which you couldn't read half the time. But it was unit based. The way we would price a payroll sometimes was interesting. First of all, find out what ADP was charging per check or per set of standard reports and be 10 percent less. But we would take a pilot, if you will, a 500-person payroll. Run it from soup to nuts, all the data entry, all the operations, all the editing, all the printing, determine what that cost was and that's how we came up with a price. We would give them a shopping list of reports. We had over 100 reports they could choose from we would charge per report.

**Grad:** There are three methods that we've talked about here in pricing. One, someone spoke of cost-based. Essentially what does it cost to do it? I've got to add a certain percentage on top of that. The CPFF, cost plus fix fee, is sort of that model in some regard; the theory is you determine your cost, you add some money. The other is the competitive analysis. What are your major competitors charging? If you have some extra value to add you can charge a little more. If you have to get under an ADP you charge a little less. The third is what I would call value-based prices. What is it worth to them? Now if you have no competition you can go there. If you have competition it sort of puts some ceiling upon what you can do in that area. Were any of you able to really do value-based pricing? Bob? You had your convicts doing the work? We've had two other guys who have been working with convicts doing programming and data entry and so forth.

**Tessler:** Actually I found that a very successful and rewarding personal experience in terms of contribution to society and providing education and training to an inmate. We employed between 50 and 100 inmates at one time at San Quentin, so this was very successful

and we certainly got a lot of publicity out of it. Some good, some not so good. But I think back to value pricing, yes, we charged based on value and it's interesting because I learned that from our CPA firm.

### **The High-Tech Flinch School of Guesswork in Pricing**

**Grad:** How did you determine what the value was to the customer?

**Tessler:** We guessed. We guessed.

**Mann:** If they screamed you knew it was too high?

**Tessler:** If we had more business then we could handle our price was too low. And if we had people sitting around our price was too high, so it was more matching the resource with the revenue than it is with a price per click or something of that nature, and many of our projects were fixed price for the entire turnkey rather than, you know, with ranges of transactions.

**Grad:** Jim, SunGard has been in a wide range of businesses, speaking of that. Not from the acquisition, not from the previous company that was acquired by Tymshare. Did you do value-based pricing or you try to?

**Mann:** It's hard to answer that in general because SunGard as of last count had acquired 220 businesses, mainly in the field of providing huge systems for investment bankers and exchanges and investment accounting. So it's hard to answer in general but the basic answer is yes, we try to do it whenever we can.

**Grad:** How do you determine? Pick any example you want to.

**Mann:** I think probably about the way Bob does. If you quote a price and the guy starts clutching his chest, you know it's too high, and if you quote a price and he doesn't blink then you say, "For phase one." <laughs>

**Grad:** I learned that one at IBM.

**Houtz:** I think it has a little bit to do with your contract length. If you're selling one-time services or a three-month contract, I think value pricing probably has a place. If you're selling five-, seven-year contracts or longer, value pricing is kind of tough.

**Grad:** What would your retention level be on the clients? If you got a client, what percentage do you expect to lose each year of your clients? Two percent? Five percent? Twenty percent?

**Houtz:** Six percent.

**Rollins:** At AZTECH we didn't lose any client for the first seven years, and then we started getting threatened by mini computers and changing technology and that sort of thing, so it went up to probably ten or fifteen percent from that point on. But I've got one story about value pricing that I think you'll enjoy. This occurred in the 1980s and 1990s when we had huge data bases and among other information in the data base you'd have the members' phone number and fax number. And if you recall they started splitting area codes, phone number area codes when they'd run out of numbers in a state. In Maryland the whole state used to be 301 and they ran out sometimes in the late 1980s or something so they split it. They said the western half will stay 301, the eastern half will become 410. That created a huge amount of data entry and work for customers either from their online terminals to try and update it or for our keypunch department, whatever. So I contacted Bell Labs and someone told me they were the ones that were sitting on top of this and I negotiated a deal to buy from them a tape every two months which would have the formula on it for the new area code splits and it was based on the three-digit exchange. They didn't tell anybody publicly what those exchanges were but for a very modest price we bought that. We created a software module called the area code adapter and would sell that at an exorbitant price. That was value-based pricing. They saved money by buying our adapter compared to doing all the data entry themselves.

**Grad:** How about the rest of you as far as the loss factors? Were you losing five percent? Ten percent? Two percent?

**Casey:** Five percent. But in the value pricing particularly when you're doing competitive bidding for the government it also helps to know what the competition is bidding and then the major factor would be to know the guy that's writing the proposal. That helps you.

**Grad:** Is that legal?

**Casey:** Sure.

**Miller:** We may be the anomaly. At some point, we were losing 50 percent.

**Grad:** Why?

**Miller:** People were starting to get more of their own computers. A lot of our jobs were not huge jobs but we hoped we made sure that no individual client of ours was more than three percent of our revenue. We didn't want to get stuck where somebody has 20 percent.

**Grad:** But still you had a hell of a selling job every year to try and make up for that and to grow, didn't you?

**Miller:** We did, and that was the reason why we bought it from the accountant so we could go out and market. And the marketing department consisted of the four partners.

**Grad:** Did your loss factors change after that?

**Miller:** They went down to about ten percent. But during that period when people were getting their own computers, we were getting killed.

**Grad:** This is a very good point. We'll come back to this, but this transition, you got the machines you're running them, but now the System 3s come in, the 32s, the 34s, 38's and eventually the AS/400s. You now have much more affordable machines. A lot easier to program, you don't have to have anything underneath the floors. None of those kind of things to worry about. The other thing that's happening, I don't know how it affected you, package programs start to come out there, some good ones, some that really work and do real applications and they run on some of the smaller machines.

**Houtz:** Correct.

**Grad:** Did that impact you at all? Did that make a change? Or was it not problem because you were so specialized, for example, John?

**Rollins:** We joined them. We started selling turnkey systems starting in 1980 and actually developed some package software called AZTECHware that worked just for associations in our vertical market niche. And so we could upgrade clients who were interested in going in-house with the turnkey system.

**Grad:** When you sold in-house did you still sell on a unit basis or not?

**Rollins:** No. No, then it was a classic software licensing fee up front with the AZTECHcare package on top of that.

**Grad:** For 20 percent per year?

**Rollins:** It was at the AZTECHcare regular price which was one and one-half percent per month, eighteen percent per year, or at AZTECHcareplus, which was two percent a month or twenty-four percent a year. But we threw all kinds of services into AZTECHcareplus. Actually Gil Mintz consulted with me at a roundtable meeting when we were initiating this new service, and he understood the importance of recurring revenue if anybody did, and he said when you get into the software business, the turnkey systems business, you've got to have a strong component of recurring revenue. And that became true. Our AZTECHcare ended up being 80 to 90 percent of our revenue later on as we built a large base. And then the new sales were just the ten or 20 percent each year.

**Grad:** Jim, any recollection about loss factors where you were before SunGard?

**Mann:** Not going back to the service bureau era, but in the modern era during my twenty-five years with SunGard it was five percent, four percent something like that.

**Grad:** I was thinking particularly about the service bureau businesses because that period of time.

**Mann:** This may be an aside, but I've a terminology issue that bemuses me a little bit because I think of all of us who are still working, are still in the service bureau business, because it is the business model for what they call now SaaS, Software-as-a-Service, or Cloud computing.

**Rollins:** It is, it is. It's come full cycle.

**Mann:** It's old wine in new bottles. These 30-year-olds that think they've just discovered the Holy Grail, I think. "Oh, you old guys, you don't know shit." <laughter> There's no difference in business model.

**Grad:** This is a fascinating thing. We had a session last year with the timeshare and remote processing services people and fundamentally these were all businesses that were essentially service bureaus where someone was running the applications for the customers-- either with their application software but later either with packages or the ones that you would build for them. This is the same model, and yet they think of these service bureaus as <blows raspberry> and that the old dodos are dead.

**Rollins:** Cloud computing is the same as a service bureau. Full cycle. It has come all the way around.

**Grad:** We're not of that generation. Luanne and I are cutting off the world at 1995 at the Software Industry SIG just so you understand, because we're doing history. I'm told history has to be at least 15 years old. Isn't that the quote on the thing I've heard?

**Luanne Johnson:** Well that's the guideline that the *Annals of the History of Computing* uses; you need to submit an article to covering something that's at least 15 years old otherwise it's not history yet. If it's 14 years old wait until next year and submit the article. But isn't that the guideline I think they use?

**Thomas Haigh:** I think that's to discourage people from writing up what they did last year and calling it history. You can write more recent history if you're an official historian but it's a kind of good filtering principle I think it makes some sense.

**Grad:** Anyway my point is, to a lot of the world, the words and names have changed but you can see these flows in professional services. There's still a lot of custom programming being done. The packages being developed by all kinds of people for all kinds of functions, and the services type operation where you're doing the work, running it for someone else and all three of those models do seem to be in existence and seem to be useful with, as Jim points out, the new dress on an old lady kind of thing. I don't think that was quite the term you used.

**Haigh:** I think also what you're hearing from them is that the model of just running odd jobs or selling time and we heard the same thing from the time-sharing people. It is not a good business to be in. it's too generic. You're not adding value, it's not as dependable. So they've all found niches and we saw that with ADP as well. They never said that they were in the service bureau business. They were in business process outsource business and it sounds like from what all the people have said that they've finished up finding niches like that where they were selling the service rather than technology. Back to your surprise that one customer didn't want to pay up front for custom programming applications, particularly in the early days. I would think also that goes with the fact that you're in the business processing outsource business, so if they wanted to tie up a big chunk of money in software they probably have got their own computer and set up their own data processing center in the first place.

### **Why Customers Bought Your Services Even After Minicomputers and PCs**

**Grad:** That leads to a question. Why would your customers use your machines to do processing instead of using their own? Comments from any of you about that?

**Rollins:** For my customers it simply was not their business. They were specialists in what they do which is being a nonprofit membership organization, serving members, holding meetings, doing educational sessions, whatever associations do for their members. They really

wanted to outsource what they didn't view as being one of their core competencies. And that way they could get it done better.

**Miller:** In our case it was purely financial. We could do it for less than they could do it. They did not want to go to their board of directors and beg for money to get a big computer. And as John said, it wasn't their business anyway. But we could do it for less than they could do it in-house. Until they got to a certain size.

**Grad:** Jim?

**Mann:** Well, the big financial institutions that SunGard deals with have figured out that by hiring someone to do it, they have a more controllable environment than turning it over to their own IT department which they view as only semi-manageable from the top. That's it. They can hammer on a vendor. They can't hammer on their own IT department.

**Grad:** Let's keep going with that. Now Ross Perot comes up with a somewhat different model with EDS, right? He says I'll take over your operation and run it for you which is exactly the point that you're saying. The customer doesn't really want the responsibility or the headache of running the IT operation and they want a controllable cost. Is that a major factor with all of them?

**Mann:** With the big institutions I think they looked at it that way.

**Grad:** Comments from either Frank, Bob?

**Tessler:** I recall vividly a prospect I spoke with who told me he no longer wanted to be held hostage by his programmers. And that was I think that was the time when programmers were in limited supply and very expensive.

**Grad:** Frank? Similar?

**Casey:** A number of my clients had their own equipment but like Bob said when their project was over they still had to maintain and keep the people if they did their own programming. But if they outsourced it to a service bureau, when the project was over that was the end of the expense. They didn't have to get rid of any people. Or as they said, particularly with CIGNA they had two buildings full of programmers but in the area that I was dealing in they had too many changes. Programmers didn't want to make these changes so therefore they went to an outside vendor like myself who thrived on the changes. We had a job shop programming system. You just write down your change, we'd do it. Perfect.

**Grad:** Jim, how about yours? Same reason?

**Houtz:** If we hadn't gone to the distributed product and put the products in a client's office like you mentioned, our business would have been decimated. Because when the mini computers came out, all of a sudden we were competing with a half a dozen shared services. All of a sudden we got the same half a dozen shared services and like 100 mini computer vendors are trying to sell into the same market we did. Because of the industry, we tried to keep all the printing, all the grunt work out of the clinic. Let them do the data entry; although that's part of the grunt work, it doesn't count because they're going to do that anyway. Let them do the data entry and all their daily work and then we'll do the volume printing in the clearing house. Even today in healthcare, think of it as a healthcare form as a tax claim only instead of having one for the state or the nation, you have 400 different forms. And for a local programming operation to try to take care of all that, you can't make it work. So the clearinghouse has become really prevalent in healthcare.

**Grad:** I have a question. A lot of the reports now are electronic instead of on paper. Paper the customer can see. Hey, you don't want to run that thing in that medical practice. You don't want those printers going. You don't want the mailers all that kind of junk, good operation. But once it goes electronic is that still the same kind of concept or not?

**Houtz:** Same concept. They came out with a standard and we were all concerned that everybody is going to go direct now. Well in the standard form, in their wisdom, there were a lot of the fields that have multiple uses, okay? And each insurance company can use the field differently so they got the same problem only with a standard form now. So it was great.  
<laughs>

**Grad:** So, effectively there are 300 or 400 forms. I don't know how many insurance companies there are but I assume that each of the states have differences and there are different [policies and that made for the variations.

**Houtz:** There's probably 60 or 70 Blue Shield forms and they still use a standard Blue Shield form but they print different things on it, maybe only a few data elements, and that's what the clearinghouse does is to get all that data positioned in exactly the right position for that state's Blue Shield computer to accept. Once we figured it out it was great.

**Grad:** What's fascinating to me again is the continuation of some of these models. I know that within ADAPSO the view was that timesharing was a much higher level operation than the service bureaus. And yet they were fundamentally doing the same kinds of things with just a lot more hardware investment. Did any of you run into problems? Were most of your customers smaller organizations?



**Houtz:** Ours were big.

**Grad:** Big by what regard?

**Houtz:** Well we started out selling only to groups that had 20 physicians, but over 15 years those 20 men groups would grow to 100, 220. They became huge and a lot of them did that.

**Grad:** I'm talking about an organization to sell to. I mean with IBM, the General Systems Division would be selling to you if they had 500 or fewer employees. DPD would pick them up if they grew to over that size. I'm talking about big accounts with 1,000 people, 5,000 people, bigger companies.

**Houtz:** A physician group that's got 100 physicians has probably 600 or 700 employees.

**Grad:** That's a pretty good size. Would any of them have been system 360 model 65 customers, model 50 customers? I think they would have been getting smaller machines.

**Houtz:** They bought a standard computer system in a group practice. It was an RPG oriented machine like an IBM System/34?

**Miller:** A thirty-four or thirty-six.

**Grad:** Before we break and have lunch think about some of your customers and what they were doing and would they have been clients for large mainframes like System 360/50 and above?

**Tessler:** My customers all had large in-house systems and I think what distinguished us is that we would take a small piece of something they did that they didn't want to bother with or it was unusual or there was a time schedule or heavy data entry; something was unusual about it, it didn't fit in to their in-house operations.

**Grad:** How about the rest of you? Your customers?

**Miller:** They were primarily small. The largest one again was a mining company that had a lot of employees but they only had one application so it was small in that regard.

**Grad:** John, certainly your customers were relatively small.

**Rollins:** Most of our association clients relatively small, average a few million dollars in revenue. However, there is the top echelon of about three percent of associations that are huge: AARP, American Automobile Association, NRA. Those were not our prospects. They actually already had their 360s in-house with their own staff of in-house programmers.

**Grad:** There is a size differentiation is what I'm saying in terms of the customers you'd tend to go after.

**Rollins:** Yes.

**Grad:** Jim, yours seems to be a different picture even during that time period? Did you tend to have some bigger customers?

**Mann:** No, in the time period we were talking about, 1960s and early 1970s, we had all small customers.

**Grad:** Yes, I always felt that that was a differentiator. For example, SBC's primary customers were almost all of them either using them for a specialty application or something odd or they were relatively medium to small size customers. We will close this session and please return promptly for the next workshop.