



## **Timesharing/Professional Services Workshop: Session 3: Marketing and Sales**

Moderator:  
Burton Grad

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## **Table of Contents**

INTRODUCTION.....	4
ONLINE BUSINESS SYSTEMS – INITIAL SALES AND MARKETING OPPORTUNITIES .....	6
TYMSHARE – INITIAL SALES AND MARKETING OPPORTUNITIES.....	8
INTERACTIVE DATA CORPORATION – INITIAL SALES AND MARKETING OPPORTUNITIES .....	15
GE INFORMATION SERVICES – INITIAL SALES AND MARKETING OPPORTUNITIES .....	18
ROSS SYSTEMS – INITIAL SALES AND MARKETING OPPORTUNITIES .....	24
COMSHARE – INITIAL SALES AND MARKETING OPPORTUNITIES .....	26
NATIONAL CSS – INITIAL SALES AND MARKETING OPPORTUNITIES .....	28

## Timesharing/Remote Processing Services Session 3: Marketing and Sales

**Conducted by Software Industry SIG – Oral History Project**

**Abstract:** The participants in this session described how each of the TS/RPS companies tackled specific markets and presented its capabilities so as to get customers to use this new service and to win against their competitors. Topics covered include:

- What were the economics of timesharing and remote processing services versus in-house operations?
- Who were the first customers and why did they use these services?
- What were the in-house MIS practices which opened the door to the use of outside services?
- What were the particular language compilers, applications and usages which were most likely to make a sale?
- Was there a formal marketing organization and, if so, what functions did it perform?
- How were sales organized and how were sales representatives compensated?
- What were the most serious marketing and sales challenges and how were they overcome?
- Who were the primary competitors?

### **Participants:**

<u>Name</u>	<u>Affiliation</u>
Burt Grad	Moderator, SI SIG co-chair
Dick Bayles	National CSS
Frank Belvin	Interactive Data Corporation
Chris Brook	GE Information Services
Rick Crandall	Comshare
Ann Hardy	Tymshare

Norm Hardy	Tymshare
Mike Humphries	Tymshare
Gary Myers	Tymshare
Dick Orenstein	National CSS
Nick Rawlings	National CSS
Ken Ross	Ross Systems
Dave Schmidt	Tymshare
Jeffery Stein	Online Business Systems
Mike Wyman	Interactive Data Corporation
Thomas Haigh	Historian, Univ. of Wisconsin
Chris McDonald	Historian, Princeton University
Doug Jerger	SI SIG member
Luanne Johnson	SI SIG co-chair

## Introduction

**Burt Grad:** We're starting the third session. Rick, you had a comment?

**Rick Crandall:** Well, we were having some discussion during lunch about an untold story. There's a side to this story having to do with what we had to do to get networking to happen, which was so critical to the business model and the deliverables of the timesharing industry, which was how we coped with the opposition of AT&T. And what we don't know is what was going on inside AT&T. Was this a typical case that we now hear about in the US auto industry where once you get so dominant and you get relaxed and you get controlling and if something new happens, you just push it away instead of treating it as an opportunity and so forth? So it's not only a Joe Markoski view, which is really our view, the combatant's view. You would've thought by now you could dig up some inside people from the telephone industry side of things and how purposeful was this game? How many different places was it fought and so forth? Because beating it was absolutely critical to our industry succeeding.

**Grad:** You know, you raise a point. We have not worked with AT&T. My ex-boss at IBM, Archie McGill, went there and was trying to build a business there and he was totally out of character for AT&T. Luanne [Johnson] interviewed him, and we have that, but we never have been able to reach him to get a clearance on it.

**Luanne Johnson:** We're still working on finding him.

**Grad:** But the other part of that story – again, it's by a combatant, though – is from Sam Wyly. You know, Sam formed Datran and tried to buy Western Union so that he could set up a national network [BG note: because AT&T would not cooperate with him to provide digital communications in the 1960s]. Western Union was the only ones allowed to have a national network [besides AT&T] and he tried to buy them. And, of course, Datran eventually sued AT&T and got \$50 million from them. I'll talk to Kirsten Tashev and John Holler here [at the Computer History Museum] and see whether they have any of that access or have done any of those interviews. That would be a very interesting balance.

**Crandall:** There's got to be a very good story buried in there.

**Johnson:** Yes.

**Grad:** The question is whether you can get anybody there to talk about it. First of all, are they alive? Because remember, the senior executives were senior then, and that's a lot of years ago. You were kids at that point. Seriously, it was a different level. But I think that you raise a very good issue. Sam is, of course, very vociferous. We have an oral history done of him some while ago by [David Allison] from the Smithsonian, and he feels they were vicious, that it was conscious, that it wasn't an accident, and that success [in forcing AT&T to cooperate] was thanks to MCI.

**Crandall:** Well, I just going to say I don't know if Jack McGowan's still alive, but he would be a fount of MCI information.

**Grad:** Okay. Anyway, your point is well taken. Communications was central to your eventual operations in every form and manner. We have a session tomorrow where we're going to talk about the infrastructure and what the effects were and what the problems were and how you overcame them. But without that, you didn't have a business, and AT&T, from what all of you have told me, was not a cooperative party. I think that's a fair statement.

**Gary Myers:** Much worse than that.

**Grad:** Yes, a lot worse than that. You know me – understatement is my approach to everything. Any other general comments or things that you think we should pick up? Look, we have two days. I can add and change the agenda and change what we're covering if there's other things you want me to do. Oh, cell phones off, everybody, incidentally? Okay.

If you have nothing, we will continue as we've been doing. This one is on marketing and sales, and again, we're talking about the first 10 years. Who did you sell to? What did you do? How did you organize to market? What kind of advertising did you do? What were you doing to get people's attention to get them to see you as real companies instead of just little bitty outfits,

which some of you were at that point in time? It's amazing to me the size of your customers. They were big companies who bought from very small companies, and it is fascinating that you were successful in doing this. So, again, we'd like to go through each of the companies and talk about your experience, and we'll do a different sequence this time. What were the initial marketing approaches you took? How did you present your service capabilities so that people would see the value, to see what it was worth to them? Who made the actual presentations? And how did you even get the appointments to get in the door for someone to listen to you? So those are some of the things we'd like to start with from a marketing and sales standpoint. And, [Jeffery] Stein, since you've not started one before, we're going to start with you this time. How did you get people to listen to you, other than your good looks and commanding presence?

### **Online Business Systems – Initial Sales and Marketing Opportunities**

**Jeffery Stein:** What era do you want me to talk about?

**Grad:** Let's start with when you first started up your operations. How did you get marketing calls? How did you get to the first customers? What did you do?

**Stein:** Well, for the first 10 years, I mean we really bootstrapped an awful lot. We had no capital and we had no customers, and so in order to have a staff, we went out and got job shop contracts, contract programming. I remember we had just two employees and went to the Bank of America and did contract programming for \$12.50 an hour to get in the door, and we showed them the good work, and then we raised the rates, and they knew we were going to raise them. That gave us an employee base, and we ended up having about 20, 25 contract programming employees. And then we had a few employees that were not on any contracts that were doing research to get ready to offer our online transaction processing.

**Grad:** Now you've got the product, were you able to bootstrap into Bank of America, for example, because you had already done contract work for them? Did that help you?

**Stein:** No. What we wanted to do was take care of the overhead of having the employees there so when we got the transaction processing business, we could do the implementation and have the staff there because once we got a contract to do transaction processing, we needed to design the system and develop it, program it and implement it and operate it and maintain it. We needed a staff to do that, too, even though we had the core to do the transaction processing. And, also, in a sense, a lot of transaction processing systems were great excuses to do a lot of batch processing at night. So we were operating for about a year, year-and-a-half with contract programmers, and then, actually, I remember working for many, many weeks sending out form letters to many of the data centers around the [San Francisco] Bay Area to see if we could do some kind of a sharing arrangement using an IBM MT/ST. Remember that?

**Grad:** The Magnetic Tape Selectric Typewriter ?

**Stein:** Right. So we would do form letters but personalize them. We used our lawyers' MT/STs, and so we got a nibble and got a contract.

**Grad:** Tell me, who nibbled?

**Stein:** It was called ISI, Investment Securities International, something that.

**Grad:** Was it an IT person there?

**Stein:** The guy in charge of the management information department. He was going to either lose most of his computer center or reduce his staff or both if he didn't find some way to cover his expenses. And so we were brought in as an expense reduction.

**Grad:** That was your sales pitch?

**Stein:** Right. That was our sales pitch.

**Grad:** Did that continue with other customers after that?

**Stein:** Oh, they weren't really a customer. We finally had a data center. And then when we got the data center, we ended up getting our first online transaction customer, and that was Princess Cruises, where we built a passenger reservation system for them.

**Grad:** You built it, but then you ran it for them, as well?

**Stein:** We ran it for them, also, and maintained it, right. And they had an IBM 360-30, full data center, systems programmer, the whole thing, and they closed the whole thing down.

**Grad:** And used your services exclusively?

**Stein:** Used our services totally. And then the contract programmers that we had out at B of A and Wells Fargo and all those other places, PG&E, we started bringing them in to build and maintain this system, and then we added a bunch of other transaction processing systems. And then we did a larger data center for a company called Pacific Far East Lines. We actually built the data center, we ran the data center, and then we eventually got our own data center.

**Grad:** But this is sort of like a facilities management kind of thing, in effect, for them?

**Stein:** Not really. In a way, they looked upon it as a way they could have the perception of having an in-house computer at half the cost.

**Grad:** Okay. Who did the marketing, you?

**Stein:** Yes, I did, and we had other people, too, but a lot of our business was by referrals. A lot of it was.

**Grad:** Did you have to make formal proposals?

**Stein:** Of course, yes, we did.

**Grad:** And did you have competition on those proposals?

**Stein:** Not really. And, also, too, they were in a sense maybe buying me. The fact is that we were a small company of 30, 40 individuals. The fact that the president of the company was dealing with them, and they knew that I, in my title, was speaking for the company.

**Grad:** It wasn't just a salesman talking is what you're saying?

**Stein:** Right, yes. Well, not only salesman, but I represented the whole company. But, again, this is only the first 8 to 10 years, and then in the tenth year, we had about 120 employees, and then the year we sold, we had 225 employees.

### **Tymshare – Initial Sales and Marketing Opportunities**

**Grad:** Yes, we'll pick up what happens there, but [now we're] looking for the start-up stories. Who would like to speak for Tymshare about the marketing and sales side? Gary [Myers], is this where you start to pick up?

**Myers:** Yes, I'd certainly be more than happy to do that. Maybe Ann [Hardy] and Dave [Schmidt] and Norm [Hardy] can augment the observations that I can share with you. I joined the company in late 1967. I was the 13<sup>th</sup> employee, but there were only three marketing [people] – Ron Braniff and [John] Jerrehian and then myself and then Dick Greene. Dick Greene and I both worked in the same IBM financial office in the city, and we joined the same week, but we didn't know each of us was talking to the same timesharing company. But when we joined, we knew each other, obviously, and continued to work together and still to this day are good friends. But I guess at the time, I was 13<sup>th</sup> employee, and if I was the third marketing guy, you can see the real heavy emphasis was to have technical people, and Norm and Ann and Dave really built a cadre of strong technical people. But we didn't give a lot of thought to



marketing per se. As a matter of fact, I would suggest it's not marketing that we were doing at that time, it was sales. Braniff had Dick and I go out and buy at Sears a two-suiter suitcase into which we put a KSR, and we would haul that KSR around...

**Dave Schmidt:** KSR is a Teletype [Model 33], keyboard, send/receive.

**Grad:** Thank you.

**Myers:** I presumed everybody knows what a KSR is.

**Grad:** The people who will read this don't know what a KSR is.

**Myers:** Yes, right. So we'd bring our no paper tape reader Teletype in, we'd open the suitcase up, and we'd put it on the desk of an engineer at Lockheed or Bank of America or PG&E. And we would demonstrate by letting them supply their program. Usually it was a FORTRAN program. And we would bring that up real-time, assuming the computer was operating.

**Grad:** A big assumption.

**Myers:** That was a big assumption, and that was our biggest enemy. You're talking about competitors! Those were the early days, and I think there were only at that time, what, one or two machines, maybe one machine.

**Ann Hardy:** I think there were more than that....

**Myers:** And they were doing development at the same time we were doing demos.

**A. Hardy:** Yes. Same machine.

**Grad:** Who got priority?

**Myers:** It was a tough, tough slog. But the way we would sell is to demonstrate real-time the fact that we could run these FORTRAN programs. And several people have mentioned here this morning the alternative was to take your cards and tape into the computer room, wait [for an] overnight turnaround. It was just a pain. And now all of a sudden, they could play with the program and shorten the lifecycle of their development dramatically, and that was really what we were selling. We talked a little bit earlier about optimizing mainframe time or optimizing the investment. The real secret here is to make better use of the computer and software to save the customer's time. The real benefit, I think, for timesharing was not that we could share

resources but that we could shorten the customer's use of a computer so that they got more productive work in a really short period of time.

**Grad:** Is this primarily for engineering and technical people then?

**Myers:** Yes. Initially, it was all technical people. And it's kind of interesting to see how we got in to see them. It was hard to get through the secure operations. Lockheed has a sign-in procedure that just makes your head spin. But once we could get in and get one group to endorse us, we could get a pass, get a badge, and then we could walk the halls. Once you started walking the halls that was carte blanche to doing a lot of work. And then, of course, we had to get a contract, and once the contract was signed for all of Lockheed's mission in space or Pac-Bell or whatever it might be, then we had an operation that could really be supported by what I think is the next most important group, the ACs, the applications consultants. The applications consultants were junior salespeople but very much more technical. They knew how to code FORTRAN. They could write BASIC and SuperBASIC programs and CAL programs. CAL was an interactive language that we had that was very, very good and very effective for people who were non-computer users. And once people got their fingers dirty with the keyboard, they were a customer for life. We didn't market it per se. We didn't have an advertising campaign. We didn't have ads and that kind of stuff. We did selling, personal selling, and that was really how we broke into those big customers.

**Mike Humphries:** It was called cold calling.

**Myers:** Cold calling, yes, that's right.

**Grad:** Mike, when did you join, did you come with Tymshare?

**Humphries:** I joined in 1972, but I was a customer in 1971, so I saw it from the other side, which was kind of interesting.

**Grad:** Tell us about it.

**Humphries:** The value proposition that Gary was describing is exactly what I encountered. I was at Fairchild Semiconductor, and I was in product marketing for MSI [medium scale integration] digital circuits, and a guy came in one day from market research and planning and said, "Does anybody in here know how to program?" And I said, "Well, I do." I'd taken a couple courses in school. Back then, they didn't have computer science as a major. I was a double E [electrical engineer]. But next thing I know, I'm over in market research and planning, and the idiots in market research and planning had laid off a guy who was halfway through a system that was reporting market share and average prices and all so it was a really important application.

It goes to what Gary was talking about. The executive committee at Fairchild took this market data, so they had all the data from all the rest of the association, which were all the semiconductor companies, and we knew our data that we'd sent in. So we had the aggregate. We could do market share, stuff like that really quickly. But the cycle time was 30 days for us to be able to input the data, send it off, get it back, produce reports, and now it was time for another cycle to start. So this application was half written in Tymshare SuperBASIC. I knew nothing about SuperBASIC. I'd taken ALGOL in school. But in six months' time, we had the whole thing done, and here's what was interesting. We cut down the cycle to about 10 days. Part of it was the delay that it took at the association to collect everybody else's data and get it back to us. But, also, there was the really other valuable part, which is once you started getting these reports for your company and for the executive committee, all the departmental guys and the guys that ran each part of the business – there was TTL [transistor-to-transistor logic] and there was MLS [multiple line scheduling] logic – they all wanted reports, too. Now, we didn't have a report generator, so that meant that you still had to fool around with this stuff and generate reports, but our MIS guys wouldn't even talk to you in a six-month period of time.

**Grad:** Now you joined Tymshare at some point.

**Humphries:** Yes.

**Grad:** How did you apply that experience when you went there?

**Humphries:** Well, that was the easy part because I'd lived it so I knew what these people that I was calling on wanted. What we skipped over here is we had the aerospace crash that started about 1970. Does everybody remember that? So that scared everybody to death, including Tymshare. So we started really focusing on things that the business community wanted. Well, I understood when I talked to somebody on the business side what they were probably living with, so you'd ask them the questions, you know, can you get the changes that you want from your MIS guys? How long does it take? I didn't sign them up as an initial customer, but I inherited Varian, and we expanded it. The head of the financial office at Varian sat in on board meetings and would interactively answer questions and do what-iffing, which there was kind of no other way to do at that point in time. He had one of the early portable terminals. He'd sit there in the board meeting with this portable and crank out answers to questions that the board members had, projections going forward, what-ifs, all that kind of stuff. As Gary related and the comment I made, it was all cold calling.

As I recall, in the entire history – and I left there the very last day of 1978 – I think we ran one ad in *Business Week* and one in *The Wall Street Journal*. Ron Braniff, was notoriously skeptical about marketing even though marketing was our euphemism for sales. <laughter> The marketing part of marketing was something he didn't believe in, so we didn't know it, but we

were getting to be really tough and competent because we were doing all cold calling, which makes you one of the most enduring salespeople you can imagine.

**Grad:** Let me ask a question of both of the two of you. Was it a formal organization structure? You all reported to Ron? Is that how it was set up? Did you have territories?

**Myers:** Yes.

**Grad:** How did you know who to work with?

**Myers:** Braniff was the vice president of marketing, I guess, for lack of a better term, that and VP of sales. I don't know exactly what his title was.

**Humphries:** He was sort of like a COO for the entire operation.

**Myers:** Yes. Everybody except the technical people who reported to Dave worked for Ron, and that really consisted of just two of us, Dick Greene and myself, who were the first two sales guys. So we were salespeople working for a sales manager, basically, and Ron worked for Tom [O'Rourke], so the organization was pretty skinny. And I think it was only later on that the Southern California operation started with Ray Wakeman that we added more people.

**Grad:** So you were strictly selling in Northern California?

**Myers:** Northern California.

**Grad:** And when does it spread to LA?

**A. Hardy:** 1967, we put a machine in LA.

**Myers:** Yes, because, again, we didn't have a network, so you couldn't service Southern California. We felt it was a good market we needed to exploit, but the only way we could exploit it is to have a machine down there because otherwise, the long-distance charges would chew up the value. So at that time, we started another machine, put Ray Wakeman down there. He started another marketing organization, but he wasn't really a marketer per se, so I don't think they were as ever as successful as those of us here in Northern California just because they hadn't had the experience.

**Grad:** Let's move ahead to 1970 to 1974 period. How big was the marketing and sales organization at that point? Do you know?

**Myers:** All of the documents I had, including the telephone directories and the manuals and everything, I turned over to Tom's sons when I moved out of this area. I hope some of them got to the Computer History Museum.

**Luanne Johnson:** Yes. Tim O'Rourke donated a bunch of materials to the museum. Unfortunately, a lot of them had been water-damaged, so we were unable to scan them, but a number of them are in the archives.

**Myers:** Okay. But to answer your question, I'm not sure how many people, but I think at that time, the marketing people or the salespeople probably outnumbered the technical people because the transition was about that time.

**A. Hardy:** By the end of 1971, annual revenues were \$12.5 million, and there were 24 sales offices.

**Grad:** Twenty-four sales offices? Wow.

**Myers:** Well, that's a little bit misleading because in Southern California, for example, we had an office in Colton. Happened to be just a multiplexer office.

**A. Hardy:** Exactly. It wasn't necessarily populated.

**Myers:** And we had an office in the East Bay, but it was really not an office. It was not populated with people. It was just a multiplexer site.

**A. Hardy:** It's the multiplexer. We had to call them sales offices, but they were just multiplexer offices.

**Grad:** Why did you have to call them sales offices?

**Myers:** Sounded good on the annual report.

**Grad:** Luanne, what happened with Tom's papers and so forth? Were they all brought here [Computer History Museum], or what happened to them?

**Johnson:** They're here. Whatever Tim O'Rourke still had is here.

**Grad:** So the assumption is that those papers are here.

**Myers:** Well, there was a wealth of manuals and annual reports and rosters and things like that that could more directly answer your question about the population of the company.

**Grad:** Well, but we're looking for your recollections of these things.

**Myers:** But I would say that it was at that point, in the early 1970s, it really shifted from a technically-oriented company. As a matter of fact, let me quote Dave because I think it's prophetic that he made this quote, and he said, probably in the late 1960s, "We must develop Tymshare's culture of success so that when we no longer have a superior technical solution, the company will continue to succeed." And at that time, in maybe the early 1970s, we knew that the [Scientific Data Systems] 940 was a baby machine compared to many of the other machines that were available, so we knew that we couldn't continue to rely on a technical solution that didn't have the firepower of larger machines, and that's why I think we really focused more on how to sell a system and on the service of those clients that were using the service.

**Grad:** As an individual salesperson, did you have a geographic territory, an industry territory? What did you have?

**Myers:** Geographic. I had Northern Bay Area and Dick Greene had Southern Bay Area. I had the East Bay and Lawrence Livermore Lab.

**Grad:** When you came in, Mike, what kind of territory were you given?

**Humphries:** It stayed geographic. We added overlay people, so we started having specializations like in personnel. I remember we had personnel applications. We'd have a person who had the whole country for that application that then worked with the people who owned the territory. So if you had the territory, you had it.

One comment I'd like to make that I think was a real secret, and it's one that companies are starting to use again today, he mentioned ACs, application consultants. Well, a lot of people think it's the same as an SE [systems engineer], but it wasn't because the application consultant eventually became the position you had to take first before you became a salesman. When Gary came in, they hired people directly out of IBM that, as an AC, had to understand the products and you were the guy that accompanied the salesmen. And when the selling took place, you would do prototyping for them, demonstrations, and things like that. Our salesmen knew how to do that, too. But in the process, you learned the products much better than you would if you were just going through some kind of a little sales school.

And we also had a two-tier support organization although we didn't think of it that way at the time, so our customers would call the local office for support. They did not call a national support center. So if you were an AC, you had your time in the tank each week where you sat

in the office and you answered the phones, which made you even sharper. And then you had a number you'd call back to a guy at corporate if there were questions you couldn't answer, and usually that guy wasn't there or something, so you had to get really pretty good, and so you learned the products much better.

Here's the other part of the secret, though. After we sold somebody, remember, we were on a recurring revenue basis like everybody in this room. When you closed an account, they weren't really closed for the most part, except maybe you, Jeff. It sounds like your business maybe had some forward-going contracts. We had to keep people happy every single month, or they could go away. So our ACs also became the people that would go out. It was like a paper route. They'd go out anywhere from once a week to every six weeks, stop in at a customer and say, "How's it going? What are you up to?" and you'd see the things they're doing, and you could tell if they needed more training, if they needed some professional services, and I think that was really a very valuable part of what we delivered at Tymshare so that the customers always felt like they were special but they were getting real value delivered at the same time.

### **Interactive Data Corporation – Initial Sales and Marketing Opportunities**

**Grad:** Okay. Let's switch over now. Let's do IDC. Who wants to speak?

**Frank Belvin:** I don't think either of us wants to speak because neither of us was in the marketing department.

**Grad:** But tell us a little – you must've known something about it.

**Mike Wyman:** Why don't you let me start because the marketing and sales organization originated [with White Weld] and it was transferred. In 1968, I think, Joe Gal hired a gentleman by the name of John Thompson and charged him with building a sales organization, and he went out and hired four individuals who were assigned different geographic areas.

**Grad:** All in the New York area?

**Wyman:** No. There was one in New York, one in the East Coast primarily focused on New England, one in Chicago, and one on the West Coast.

**Grad:** Were there physical operations at each of those location, machines?

**Wyman:** No, no, definitely not. This is when I think we had one or two 940s.

**Grad:** Okay.

**Wyman:** But these people were charged with the sales. We also hired or had already on board probably two sales consultants. I forget, what did we call them, just consultants?

**Belvin:** Technical consultants.

**Wyman:** Technical consultants. And these were the people who were responsible for handholding the customer, who understood the technical aspects of what it is was they were trying to do, and this was in contrast to the salespeople, who were strictly responsible for selling the product.

**Grad:** Did you have a VP of sales or anything equivalent?

**Wyman:** Yes, that was John Thompson.

**Grad:** So Thompson was the VP, and these were his people?

**Wyman:** Correct.

**Grad:** Cold calling – how'd you get to the customers?

**Wyman:** Primarily cold calling. We eventually set up branch offices in various locations around the country. It was all direct sales.

**Grad:** Did you focus on particular industries, or did you stay in the financial community primarily?

**Wyman:** There was always the focus on the financial community, securities industry, and then anybody else who might have money that might be able to use our services, I think we called on. And then we started getting into the business of selling application development capabilities, and there you start calling on the IT departments.

**Grad:** So you did go to the IT department as well then?

**Wyman:** Correct.

**Grad:** Frank, did you want to add something to that?

**Belvin:** Well, we built the sales force fairly rapidly, and like Tymshare, the sales force outnumbered the technical staff fairly early in the process, not just salesmen but also the



technical consultants. A big part of the business was handholding. The technical consultants would try to develop a real rapport with a customer and try to build up usage within a company. We also did some advertising – *Wall Street Journal*, *Institutional Investor*. I guess Joe Gal and John Thompson really believed in giving a good image, and they hired public relations type people to put some fancy ads together.

**Grad:** What was the theme of the ads? Do you remember, either of you?

**Wyman:** I remember one *Wall Street Journal* ad that we ran. One of our first applications that we developed was a portfolio appraisal system, which we called TOPAS, for Timeshared Online Portfolio Appraisal System, and when we were introducing this, we bought a half-page ad in *The Wall Street Journal* – it must've been outrageously expensive – saying "This is TOPAS," and it had a picture of an [IBM] 2741 [terminal] with a Portfolio Appraisal Report on it. And the morning that it ran, we got a call from Mr. Topas, the owner of Topas Computing Corporation – somebody screwed up <laughter> – so we rapidly had to come up with a new name for the product. So we thought and thought and eventually somebody came up with the name that nobody possibly could be called, and we called it XPORT, and that was the genesis of practically all our product names beginning with the letter X. So then I think our next ad was, "This is XPORT."

**Grad:** Do you have any idea how many salespeople you might've had by the 1972 to 1974 timeframe?

**Belvin:** Fifty.

**Grad:** That many?

**Belvin:** Seventy.

**Grad:** Again, were you national by that point in time?

**Belvin:** Oh, yes. I mean, as Mike said, we started with offices in New York, Boston, Chicago, San Francisco, and then we chose the financial centers to begin with, and then we went out further. And after our friends at National CSS got so aggressive in selling COBOL and debugging and everything else, our salespeople and our technical consultants would knock on the doors of program developers and tout our program development capabilities, and then they'd come running back to Waltham and say, "Frank, can you implement this?" <laughter> But that was a lucrative business. We also put a lot of emphasis into training of our technical consultants and started a monthly newsletter, sent out to all the customers. A lot of emphasis on handholding, support.

## GE Information Services – Initial Sales and Marketing Opportunities

**Grad:** Okay. Chris [Brook], do you know anything about the marketing and sales side [at GEIS]?

**Chris Brook:** Yes, similar to them, I guess, we didn't have any marketing to any intensive purpose, but we had very intensive sales. We were lucky in that when Mark II came along, which was the era we're talking about, Mark I had already been established, and we had centers running the equipment for that in London and we had two or three in the States, and so on. So there's a sales force out selling Mark I, so they essentially got transitioned immediately, and Mark I continued to run purely and simply as, "I'm providing services. I've got all these customers. Keep paying me money, and we'll leave the box running," and that was about it. Warner Sinback used to run the Mark I operation, and he eventually transitioned over to operations on Mark II, or Mark III, as it was by then.

**Grad:** Let me ask a question that was raised before. Did you have separate salespeople from the people who were selling GE Computing at that point in time?

**Brook:** We never shared. We had our own sales force.

**Grad:** You always did?

**Brook:** Yes, GE Computer was a whole other thing. Early on, they were our parent organization which we were spawned out of, but that was very short term. After we got going separately, we became a separate department within the Computer Division and then very quickly after that, went to ISD/ISBD [Information Services Division/ Information Services Business Division]. We became our own business division, which meant we had our own P&L, the whole thing, and we reported directly to Fairfield [GE Corporate Headquarters].

**Grad:** Were you selling professional services at that time?

**Brook:** No, professional services started as a line probably mid-1970s.

**Grad:** That late?

**Brook:** Yes. We had all direct sales because they were distributed internationally, so we were selling, obviously, US and globally, as well.

**Grad:** Frank, let me ask you while I'm thinking of it, until you solved that inexpensive communications issue, did you have to have a system locally to support your customers or not?

You seem to indicate that you didn't have machines at all those locations, yet you were selling in Chicago. What did you do for the customers you got?

**Belvin:** Porting, moving from their in-house systems?

**Grad:** I'm asking the wrong question. It was said before that because of the high expense of communications, if you didn't have a computer at the location or near where they were, the economics were no good, yet you were selling in Chicago and San Francisco. Did you have machines there?

**Belvin:** No. Everything was done by telephone.

**Grad:** How did you cover the communications costs?

**Dick Bayles:** The fundamental difference, I think, is that the expense of the machines that NCSS and IDC were running was very high on a monthly basis, so the communications costs, while they were significant, paled against the cost of replicating a machine in every office. I mean you're talking about a machine that cost \$100,000 a month and a big computer room to run, and it cost \$3,000 for across-the-country phone line, which you could multiplex and maybe get 10 or 15 users on. The difference is the size of the machine versus the cost of the communications line.

**Grad:** Rick, do you have a comment on that?

**Crandall:** They were a bit later. We were already starting to network by the time they're talking about.

**Grad:** So that by 1970/71, we have the multiplexers in place and we have the network...

**Crandall:** Right. As Ann was saying, we already starting contracting data centers by then.

**A. Hardy:** Right.

**Dick Orenstein:** Actually, we were more like the airlines. We had the star thing. Maybe you didn't go across country, but you could go out from Chicago.

**Grad:** So you're saying that by the early 1970s, that model had already shifted?

**Brook:** Oh, yes. We started that in 1968. We started concentrators, which you take them out and then bring them up, and you have two layers of concentration, and, well, to us, 80% of our cost was in communications, so we had to get that down. We ran super centers. One of the things we did, for instance, we had service in Japan, and you run that over in Amsterdam, so you pick up a time zone difference.

**Crandall:** The story I told with Bell in Pennsylvania was in late 1967, so we started networking in 1968.

**Grad:** Okay, I'm sorry; I had missed that point.

**Johnson:** Here's a comment from the GEIS timeline in the Corporate History database, that in 1970, with the successful implementation of the network, they began closing their 17 computer centers, condensed it down to 3.

**Grad:** So in other words, the number just multiplied like crazy in the late 1960s, but by 1970, the change in technology allowed you to consolidate centers.

**Brook:** Right, because we were able to get faster lines, and we could buy concentrators, which we often designed ourselves or got somebody to do for us through our design.

**Grad:** Now, the concentrators caused no problems as far as AT&T was concerned?

**Crandall:** Yes, they did initially.

**Grad:** By 1970, this was resolved?

**Crandall:** You had to make them intelligent. They couldn't *just* split the line up into pieces. That was reselling telecom.

**Brook:** That's pure marketing. Intelligent by definition is some sort of store and forward.

**Grad:** So this is the store and forward model that comes in at that point?

**Crandall:** Correct.

**Grad:** Why don't you go ahead then with the marketing and sales discussion for GEIS.

**Brook:** So, like you said, we consolidated everything. We closed the data centers and converted them to what we call network service centers or network transmission operations. Obviously, the NTOs were the big things where the main second-level concentration happened, and then we go down to what we call the NSCs, the Network Service Centers, where the third level concentration happened. Then there'd be unattended MUXs [multiplexers]; the whole thing was unattended, but the MUXs would go out from there. So we were down to at least four levels of concentration at that point, and then we'd take the central concentrators, the big beasts that were the processor controllers I was talking about, and then tie those together with switches. And at the next level, we finally ended up concentrating the switches, which is a whole other discussion.

**Grad:** We're going to talk more about that in another session. Tell me about the marketing and sales.

**Brook:** At that point, it was sales. I don't remember doing advertising. [George] Feeney didn't like advertising at all. He thought it a waste of money, which for us, it probably was. I think we finally advertised, sometime in the late 1970s. Some strange advert came out showing the world with GE all over or something – I don't know – but we never advertised.

**Grad:** Did you work with the marketing and salespeople at all?

**Brook:** Indirectly, yes, I made a lot of sales calls because the people always wanted to know how did the network work, and we had to go and explain, so they dragged me out there to explain how the network worked and why it wouldn't fail.

**Grad:** Because you had the GE name, was that an assist in getting in the door to companies?

**Brook:** Oh, yes. A lot of the problems that they [the other Timesharing companies] had, we had none at all, especially in the 1960s. I mean "We're here from GE. Would you like to buy something?" "Sure." You had an automatic entry, which is part of the 40% [market share] thing. You talked about in the early days because in 1968 was Mark I was switching over. So the GE name is a huge play.

**Grad:** Good point.

**Brook:** I mean the credibility was right there.

**Grad:** Mike, did you have a comment?

**Humphries:** Yes, there's another tack to the sales that I think maybe's worth throwing out in case people remember it. What we called MIS [Management Information Systems] then, IT [Information Technology] today, MIS back then, we were their enemy. So as a sales force, when we went into a place wherever it was, SRI or Lockheed or Varian or anyplace, if the MIS guys found out about it, they had various ways to try and block us to make us look bad, or all of a sudden they would give attention to that department that we were calling on that before they wouldn't give the time of day. So it made for an interesting atmosphere, and I'm not sure that it handicapped us enough to make a huge dent in our business, but it was something that we were all trained to do and know that if we encountered those guys or if they were coming in after we'd made a sales call, we had certain sales techniques, some things that we would use on that. And I'm pretty sure you guys must have, to some degree, encountered the same thing. Did you?

**Wyman:** I think it depends on what you were selling. If you were selling an application, a turnkey application to an end-user department, you're definitely going to get push back from the MIS department. If you're selling a service to the MIS department to make their programmers more productive so they can keep their end-users happy, you didn't get that push back.

**Grad:** Well, let me push further on that question. By this point, the 1970s, there was timesharing software available, VM/CMS was available from IBM. Why wouldn't they put in their own timesharing and provide the same service to their programmers that you could provide?

**Orenstein:** Customers always tried to. I mean the big customers tried to do that.

**Grad:** So, therefore, you have that in-house competition regardless.

**Orenstein:** Exactly.

**Grad:** If I'm depicting myself as an MIS director, I've got my shop, I'll use my own machines to provide the support to my programmers, wouldn't I?

**Wyman:** That's a significant expense not only in the hardware, okay, but also in the personnel in terms of running that.

**Grad:** That's my budget, though. I'm increasing my budget. Isn't that good? You had a comment?

**Brook:** Yes, because I think that didn't happen. What we saw a lot of, the MIS manager would be a hero – somebody brought this up this morning – by saving costs. He'd run the application a lot more efficiently, it's distributed around the country. He's got immediate global

access to the application, right, or national access, whichever it is. He spends his budget on his own people, and he doesn't have to worry about the distribution. He can do a lot more with the same amount of money. That's what we found. It was a pretty easy sell in the early days.

**Ken Ross:** But, of course, this was actually the business that we were in, and every time somebody tried to run these computers in-house, they were never able to provide the same kind of service level that the outside providers could provide. They just didn't have the support, the motivation, or the economics. And so a lot of times, the people in the company were really dissatisfied with whatever the MIS manager provided.

**Humphries:** And you just hit on another really important point, another dimension in this that I've forgotten. I don't know if you're going to cover it somewhere else, Burt, I've forgotten, but it's that if you're selling IT capabilities to an IT professional, the stuff you've got to do is vastly different than if you're selling to a person that's in a business department.

So because of that, the terminology we use, the documentation, the training courses, the way we supported them was all totally different because we're selling to a guy that may be the head of finance for a division of a company. He's not a programmer. He's not been an MIS guy. So the documentation, for instance, was dramatically different. The stuff that IT guys got was that horrible stuff. It was a duplicate of what IBM did, you know, big, giant binders, pages that looked like they were typed out on the oldest typewriter you could ever possibly imagine. I guess it was probably a teletype.

**Ross:** But, you know, I'd just echo what Mike said. I mean I think that MIS departments were the enemies of timesharing companies, and timesharing companies were successful because they were solving end-user needs that really couldn't be satisfied. And, honestly, if you look at Salesforce.com's success today, it ain't a lot different, you know?

**Grad:** But wasn't a lot of your business sold to the programmer to cut down the cycle of response and so forth, and yet the programmers are part of MIS.

**Multiple voices:** No. No, not at all. Not necessarily. No.

**Crandall:** Engineers.

**A. Hardy:** Engineers.

**Grad:** So you just want the technical and the engineering people?

**Crandall:** Engineering end-users. They were not in MIS, and In fact, I can recall that I wrote a paper that ADAPSO helped publish called *The Real Cost of Timesharing* in those days because what would happen was if the bill got big enough, and they picked it up – because we used to really fit in the pencil and papers budget where it didn't even look like a computer bill – but if they picked it up and started adding it up. The next thing MIS started to do was to say, "Well, we could go in-house for this." Their cost analysis was the cost of the hardware and software and it was not the cost of servicing the end-users the way we serviced them because they never had done that before. And then you had an issue, who had the power? Was it the end user who understood the deliverable, or was it MIS, who didn't and didn't think it was necessary, and therefore was looking at a not complete analysis of what it cost to go in-house?

**Grad:** Let me see if I'm understanding you. The MIS was providing the application services to people, many of them batch, and the engineers sort of were standalone. Isn't that one of the reasons the minis went into so many places?

**Crandall:** Well, they were out at the end-user departments. They were out there.

**Ross:** Well, there are two things. I mean, I think, first of all, our business was based upon standard hardware and software, so we sort of encouraged people to go in-house. That was a big competitive advantage, but we sort of really didn't want them to, and we knew realistically that it was a lot more difficult for that to happen than met the eye for all the reasons. I mean an MIS department always had limited resources to service their end users no matter what, so there was always a time delay, there was always whatever, whereas a commercial entity like our companies essentially had infinite resources because we were getting paid a lot.

**Grad:** That's a good point.

**Ross:** And the other thing – I have a conference call at two, so I'll give just a quick little spiel of mine – I think the other thing is specialization. I know Ross [Systems] specialized in financial planning and budgeting applications, so we had the hardware, we had the software, and we had people that understood it. Tymshare and everybody else had their own similar kinds of applications, and so we could go in, we could understand the end users' business problems. A lot of the times, they'd pay us large consulting fees to actually program it for them, and we'd sort of provide a total solution versus MIS which never could do that.

### **Ross Systems – Initial Sales and Marketing Opportunities**

**Grad:** While I still have you, I'm going to switch. Tell me about how you did the marketing and sales.



**Ross:** When we started out, again, it's pretty similar to everybody else. I mean we started out referral selling. We were fortunate to be based here in Silicon Valley and started off in the early mid-1970s, for example, with Intel when it was a very small company. Intel grew, and we grew with Intel to where it was running most of its financial management stuff on our computers. National Semiconductor, Crocker Bank – no longer in existence – Wells Fargo Bank, people like that. So it was referral. It was word of mouth. It was providing quality solutions. And so while we were small, it moved like that. Then as we grew, we added professional sales and marketing, and we opened other offices, and I'm sure we followed the same pattern with direct sales.

**Grad:** Did you go national?

**Ross:** We did go national. We went international. And I think the other thing that happened to us, and again, a lot of our success was because of our focus on the DEC market, and the DEC market grew and was really successful. And so by the mid to late 1970s, there was a DEC infrastructure that grew up where there was marketing channels and mailing lists and magazines, and that allowed us to be really competitive in that one market.

**Grad:** Okay. You've got a comment, Jeffery? Then I'm going back to Rick. Go ahead.

**Stein:** One of the things about this competition between the MIS department and the user is that the MIS department was really, really geared for volume, repetitive, big applications.

**Ross:** Core applications.

**Stein:** Core applications. And there were a lot of peripheral users in engineering and finance and sales and marketing and the executive level that just needed some help, and they always got lost in the shuffle. Also, the second thing is that those people in those departments, they worked for very, very senior people in the company, and they could just right away sign a PO, and it's over with, done, and they'll go fight with MIS if they have to, but they just don't give a damn. They want the results, and they'll pay for it.

**Grad:** That's very interesting.

**Stein:** And the other thing, too, is that even though MIS in a sense could do the job, a lot of them really, when it got down to the point of adding up the hardware, adding up the air conditioning and the floor space, the systems programming, and also the customer support to go with it, a lot of them really kind of backed down because they didn't want to create a problem they didn't have right now. Because right now they're taking care of their core applications and to take care of a lot of small applications, they're not going to end up being winners. But those are the smart ones that didn't go in-house.

**Ross:** Gary talked about walking in the halls. You know you go to a big company, like our experience with Intel, and you get all these little pockets and you have a lot of different users and all of a sudden some bright finance guy decides he's going to add the total up, and it comes up to a significant number... <laughter>

**Grad:** It's a pretty significant number.

**Ross:** And then the decision process started about what should they really do.

**Myers:** Let me make a comment about nuances of salesmanship. We talked a lot about adding sales and marketing people, but we found that there's a real difference between the kinds of people you could add. Let me give you an example. Tom [O'Rourke] acquired a company in New York, hired a bunch of "professional" DP [Data Processing] people, and they were unsuccessful in New York City and New Jersey. He ended up firing them and moving Braniff and then Jerrehian and a couple of other inside people out. There was a culture that was really necessary, we called it a Tymshare culture. People would know how to react to a customer. Like Mike was saying, they were trained on certain ways to interact with the customer. You got the contract signed. There was a culture of salesmanship, if you will, that was really very important. And we go back and look at it again, those of us that have gotten together with Tymshare reunions, and we remark about how consistent we were, but that only happened because new people were hired in the core company, they were trained, and then they were released into new geographical areas to take that culture, and I think that was one of the single most important reasons why Tymshare was geographically successful, transplanting people that had learned the culture and then starting in a new geographical area.

### **Comshare – Initial Sales and Marketing Opportunities**

**Grad:** Rick, talk about the experiences at Comshare.

**Crandall:** Well, an interesting additional comment on that. I used to be a big believer in management training in the company, and I used to scour the country looking for programs to introduce into the company, one of which was created by the Navy. It was a daylong simulation called Looking Glass, Inc. The name of this fictitious company was Looking Glass. You'd have your whole management team go through this thing. They'd give you inboxes the night before that had all kinds of problems in it. And they had three psychiatrists watching you interact during the course of the next day and how you interacted to do whatever you were going to do. And the whole purpose of these problems that were in the in basket was to create stress. And a half-hour into this thing, and you were living it. I mean you forgot who you were. <laughter>

At the end of the day, they did this whole debrief because all we were trying to do was solve problems. It turns out that wasn't the point. The point was for them to watch the interactions.

And the conclusion that they had was that we were so phenomenally focused on solving customer problems, they'd never seen anything like it before. And they actually were criticizing us that we were over the top, we were beating each other to get the customer problem solved. And I remember standing up at the end of it and saying, "That's what *they* say. Forget it." <laughter> But I mean there was a Tymshare culture. There was a Comshare culture. But this whole business about we get paid every month, and then we could be cancelled every month, created a culture of responsiveness to the end user that was striking.

**Grad:** Interesting. Because your recurring income could've been cancelled literally at almost any time, right?

**Crandall:** Correct.

**Bayles:** It was like the phone company used to be. You don't call; you don't pick up the phone.

**Grad:** Yes, interesting. Talk about your marketing and sales structure.

**Crandall:** Well, the techniques were public relations, speeches, word of mouth, and cold calling. Because as soon as you showed this to an engineer that had a little bit of budget, they were going to use it because they never had this kind of a thing before. They saw the benefits of interactivity right away. They were ill served internally. They were not high in the priority list of who DP was going to provide resources to, and there was very little competition early on, other than the in-house issue. Before the networking really got going, we were focused on Michigan. We hired a local IBM sales rep who knew a lot of companies and just kind of walked around introducing it to people. We had a teletype with the two suction cups on the side, the couplers, so all we had to do was show it a little bit, and that was it, and they were customers. Then the sales reps were good at running around on the floor, digging up other end users that had little pieces of budgets here and there, and that's how it grew.

**Grad:** Did you set up a regular sales force, Rick?

**Crandall:** Yes, the direct sales force, who were both sales oriented and enough tech.

**Grad:** Where'd you recruit from?

**Crandall:** I don't recall that there was any clear one source. Some hardware company sources, some... They were young.

**Grad:** You weren't trying to pick up someone who knew a particular industry, for example?

**Crandall:** No, not early on because there were no applications. I mean it was really people using Fortran and BASIC to develop stuff, and it was engineers. They were very self-sufficient. They were very patient about system crashes because there was a ton of them. If they got a clear hour without a crash, they got so much out of that, and they knew how to save their work and this and that, so they kind of blew through. Eventually, when it transitioned to more applications that had to be accompanied with a more reliable infrastructure.

**Grad:** Now, there was a question I was going to ask. As you moved away from the engineering market or added another market which was more business people, financial people, commercial applications, did your marketing and sales approach have to change?

**Crandall:** Yes, very definitely.

**Grad:** In what way?

**Crandall:** Well, our first range of applications was financial planning, a sort of predecessor to spreadsheets, if you will, but online. So we began hiring some people who were skilled at financial planning, and they would be on call by the sales force so they were brought in as specialists. So it wasn't an application in the sense of a packaged application. It was like an Excel type of thing, but where it wasn't intuitive to them as to how you got their problem solved; they needed some help and support, and that was bundled into the timesharing rate. It was initially not priced separately.

### **National CSS – Initial Sales and Marketing Opportunities**

**Grad:** We're going to talk about pricing because your different selling models had some very different pricing algorithms that had to be associated with them. That was interesting. Let me make sure we cover National CSS before we finish this part of the session. Who wants to talk about the marketing and sales there? Dick, is that yours?

**Dick Orenstein:** I don't remember how Joe McCarthy, who was with Service Bureau Corporation [SBC] came to us. I think he had heard rumblings about us starting a timesharing business, and he called us. We had no idea how to deal with sales, so we hired him, and I mean it was one of those serendipitous things that was just phenomenal. We carried around, I think it was a DATEL terminal in a big green wheeling thing with the acoustic coupler, and we went to Red Bank, New Jersey to Bell Labs, and we went to New York City, and we basically gave it away for two weeks. We demoed the service to people. This is before we raised money. "Would you buy it if it was available?" "Well, if it was available, we'd have to see it."

We would go back and forth. The easiest thing to do was just give it away for two weeks, which we did. The first half of December, we just gave it away to people. They called, they dialed from New York City to Connecticut, and on the 16<sup>th</sup> of December, which was two weeks after we started, we started charging people. But it was all big customers. The lens designers I had mentioned earlier, they were the very first customers. They were friends from before we got started. Apropos, I think, of something Rick said, years later, AT&T would say, "How much money do you get from the phone companies?" and we said, "We don't keep track of it that way." Well, because if corporate AT&T ever knew what we were getting from all the phone companies, they would've gone crazy. So we just kept saying, "We don't keep track of it that way. We can't answer the question." <laughter>

**Grad:** Computer Associates used to say that, also, when they were being sued or suing other people. "We don't have any breakdown by the product. Why would we ever do that?" It's the same kind of thing.

**Orenstein:** That's another whole story. But Joe wound up hiring people from Service Bureau Corporation, some from IBM. We had a great guy who was selling dictating equipment that we wound up hiring from IBM.

**Grad:** Was Field one of your sales people?

**Orenstein:** Field was the guy selling dictating equipment.

**Grad:** He was superb, I gather.

**Orenstein:** Probably one of the two best salespeople I know.

**Grad:** Wow.

**Orenstein:** I'll tell you a cute story.

**Nick Rawlings:** One of our first salesmen was Doug Kuhn. He was hired to sell batch because we were going to make a lot of money in batch. And he was a total failure at that, but he was a good guy, and he ended up selling timesharing.

**Orenstein:** Bob Field was very funny because we were competing against IDC at Wells Fargo years later, and I still remember pulling the door open on the street in San Francisco saying to him, "How will they ever say no to our proposal?" and Bob Field made one of the greatest comments ever. He turned to me and said, "Dick, there isn't any rule that the customer has to be rational." <laughter> And it changed my life.

**Grad:** Many of you have technical backgrounds, don't you feel the sale ought to be rational, to be logical? Come on. That's how I always felt in those situations. Someone should make a rational decision. It's two o'clock. We didn't cover all the things under marketing.

**Johnson:** Burt, I just want to bring up something. This relates to GEIS. What I'm looking at online, as part of our Corporate Histories project, GEIS published in 1985 a 20<sup>th</sup> anniversary issue of *Spectrum*, their employee newsletter, a big special commemorative issue, and in the middle of it, they put a timeline of all the significant events that happened at GEIS. So starting in 1965, first commercial timesharing service and so on in Phoenix and New York. And they go through all these things, these highlights, several a year, and they all have to do with how the network has expanded, about one thing and another. We get to 1975, all the way up to 10 years later, and it says the big event of that year was that they announced a major sales campaign called IMPACT. So it was 10 years before they considered a sales campaign as a highlight issue or important issue of their history.

**Grad:** Wow, that's interesting. Go ahead, Gary.

**Myers:** Maybe a footnote on what she said. One of the early things that Tymshare did was develop an incentive plan so when we'd hire a new sales guy, he would get 50% salary and 50% incentive. So it was a very highly leveraged plan, and we expected everybody to make over 100% of quota. So it was a way of really tying company incentives to rewarding that salesperson. And then there were two components of it. There's you've got to keep the revenue reoccurring, so there was that hunk of revenue that you need to renew every month or every year, and then there was the new business revenue, and you got paid twice as much for new business revenue as you did recurring or renewal revenue.

**Grad:** Now, you are considered a skill because that's item number two of my coverage in the topic we're now going into at two o'clock.

**Myers:** Oh, okay.

**Grad:** So I thank you very much for doing that.