Timesharing/Professional Services Workshop: Session 9: Customer Service and Support

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Timesharing/Remote Processing Services
Session 9: Customer Service and Support

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Abstract: With customers geographically dispersed and computer usage taking place 24/7, how did the various companies handle customer service issues? Topics covered include:

- What kind of training was provided and where and how was it conducted?

- What kind of support was provided pre- and post-sales?

- How did they charge for these customer service and support functions?

- How did they recruit and train personnel for these functions and what was their career path in the company?

- Did user groups play a significant role in supporting timesharing customers?

- Did the companies submit proposals for work to be done?

- What kind of contracts did they enter into with their customers?

Participants

Name	Affiliation
Burt Grad	Moderator, SI SIG co-chair
Dick Bayles	National CSS
Frank Belvin	Interactive Data Corporation
Chris Brook	GE Information Services
Ann Hardy	Tymshare
Norm Hardy	Tymshare
Mike Humphries	Tymshare
Gary Myers	Tymshare
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Nick Rawlings	National CSS

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Doug Jerger	SI SIG member
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Ed LaHay	SI SIG member

Introduction

Burt Grad: This is Session 9 and we've got two more after this one. And, again, we're readjusting a little bit. I'd like to talk about what some of you were calling service or support. You talked a lot about sales support the other day, sales specialists, people who had knowledge about your particular applications or areas. You also used the words "technical support." I'm not sure how different that was. I don't think I've heard the word customer service or customer service reps in this whole discussion. And so I'd like to explore what you did. Did you have user groups? We didn't talk about that. We're talking about what you did in relationship to the customers other than sell to them. How did you provide support and service for them? This is a general discussion. It's not per company, per se. But any of you can start with what your experiences were and what you did.

Customer Support at Interactive Data Corporation

Frank Belvin: Well, early on our marketing department realized that we needed something. And our VP of marketing created the help desk. He put in the help desk a male who had no technical background, but had a wonderful attitude, and a female, although that's irrelevant, who had some technical background. And they were constantly available at the end of the telephone. The fellow, whose name was Russ Brown, developed tremendous rapport with customers. I remember one time I happened to be there in the help room and someone called and I answered and identified myself. And they said, "Oh no, I need to talk to Russ Brown," <laughter> which showed me how effective he had been in really providing the support that we needed.

Grad: What kind of questions was Russ getting?

Belvin: Well, they'd run the whole range. I set up a weekly meeting, getting together the help desk, the programmer of the week, the so-called "mother" of the week – the person

responsible for the control CP. One person was designated for a week's duty of each of those two. Later on we might have had – no, I guess we never had product managers, but the people in charge. And we'd sit down and talk about what happened during the week. One of the games would be for the help desk to describe some problem and the rest of us would try to guess what was going on. And I recall one that went something like the customer said, "I'm not getting any response from your system." And the help desk said, "Well, why don't you look at such and such." And they said, "Just a minute, let me get a flashlight, the power's out here." <laughter>

Grad: So did you keep it at about that level, did you add people? What did you do over time?

Belvin: Well, the marketing department, I think just kept the two people there. They would maybe rotate a technical consultant through – I don't remember that. But on the system side we always had a programmer of the week available and that person could get help from anybody in the department.

Grad: So the help desk would go to that person and then they would get whatever help they needed. Mike, were you ever involved with that aspect of IDC?

Mike Wyman: Yes, certainly from the beginning I participated in the weekly meetings and also did a tour of duty as the programmer of the week. Most of the customer service was done by the local branch office. That changed as time went on and it became more centralized. And in the 1980s and 1990s, we had for the most part a centralized customer support organization because we had a much more standardized product offering. Initially it was totally unpredictable what the customer was trying to do, so you had to have a fair amount of local expertise in terms of helping the customer.

Grad: Did you have support people for your sales people, tech support or whatever you might have called them, sales support, people who knew the products?

Wyman: The technical consultants provided the sales support.

Grad: Were they free or were they charged for?

Wyman: They were free. The only thing we charged for in terms of consulting was the professional services.

Grad: That was the differentiator. Okay. Did you have a user group?

Wyman: Yes, I believe we did. And I don't recall too much about the specifics of it.

Belvin: I don't either.

Grad: So you weren't directly involved with it.

Belvin: No. There was a fair amount of interaction. I mean I used to have to provide members from my department to go out on sales calls. And I typically would pick Mike because he didn't have a beard. He wore a three-piece suit. He was very presentable.

Wyman: I cleaned up well.

Belvin: And especially if we had a sales call in Manhattan, he was the right person to do it. But there was a real attempt to get people from the programming department to support marketing and get exposed to what customers needed.

Customer Support at Tymshare

Grad: How about Tymshare, what did you do as far as customer support, customer service?

Gary Myers: It was all decentralized to the branch office. The branch office was really organized into sales reps and what we called application consultants. The application consultants [AC] had their own manager at the local branch office. And the branch manager managed the AC manager and all of the sales people. But all of the support was really supplied at that level so the AC's would call on and would usually personally know all of the users that were using the system. So when there was a problem the customer would call into the local branch office and they'd get help. Now, there were many times when the branch just didn't have the technical expertise to be able to handle a problem, in which case we'd rely on the tech division to give us that.

Grad: You went directly back to the tech division.

Myers: We'd do a phone call, usually not to Norm [Hardy], but we'd call some other people. Ann [Hardy] was very easy to get to.

Mike Humphries: Gary, we eventually had a designated group to do that. Do you remember, Ken Bedell?

Ann Hardy: Yes.

Humphries: And Mike Cohen.

Myers: You're right. Mike, elaborate a little bit more on the AC support structure.

Humphries: I think that was kind of our secret sauce, certainly at Tymshare and maybe for the other companies that did it the same way. Application consultants were pre-sales and post-sales. And since our business was recurring revenue, having that relationship and the continuity was really, really important. So application consultants were some of the most important elements that we had. They had to be knowledgeable. They had to be personable. They had to be very patient. And for a while, for at least, a couple of years even after I joined, which was after Gary did, we had application consultants whose career path was to go into sales. Well, after a while we realized that if we took all of our really good ACs and we made them into salespeople, we just kept creating this huge problem for ourselves of where are we going to find the next really good ACs. So we created an application consultant's path to management and other things that worked. So, for instance, when I was in Palo Alto, my territory grew. When I was selling, carrying a bag, my territory really grew. I ended up having two ACs because the ACs were actually like account managers.

I think I mentioned in yesterday's session, it was also like a paper route as a salesman but also as the AC; you had certain intervals when you'd walk physically through your account and see what the people were doing because you got a chance to answer a question they had never asked. They may be doing something in an inefficient way and you'd say, "Show me how your sales analysis application is working right now." They'd show you and you might say, "Well, we've got this new capability that you probably haven't seen yet and maybe this is what you should try to do." Or they'd ask you a question that they were embarrassed to ask earlier or whatever. So the process kept improving. And you got this bonding that took place. I think the fact that we hardly ever lost customers and that the customers would refer us internally to other departments within their companies, most of that could be traced back to that very valuable role that the ACs played in the company. A big problem that occurred later is we kept adding product after product after product. It became almost impossible for a single AC to have a super broad knowledge of all of those products. And then things had to start to change a bit.

Grad: So your ACs were actually connected with a particular client, not with a particular functional specialty.

Humphries: They were normally assigned to a salesman. But they had an AC manager that made sure that they were proficient in their training and all of that stuff. Plus, when you'd call the office for help you had designated days [to respond] if you were an AC. The AC manager

decided when your day was and made sure you showed up. But you were tied normally to a salesman and that salesman had his set of accounts. Remember, there was an installed base of old business that you were trying to maintain and maybe grow and then new business.

So that freed the salesmen up to go out and do new sales calls, although you often took your AC with you to do prototypes and answer questions, but it was very different than sales today. Because when I joined Oracle, I found out there that the salesmen didn't know anything about the product. Your SE [Systems Engineer] had 100 percent of your knowledge about the product. You were just there to try and close the deal or whatever at Oracle. So it was a different world. And today it's a much more complicated and broader world. I think it would be almost impossible to find people that could function as application consultants at the level that we expected those guys to.

But as a bag carrying salesman a large part of my success was due to how good those ACs were. I think Gary mentioned earlier our [100%] clubs eventually said you could invite whoever you wanted so you normally invited your AC. They also had their own event because they didn't seem to find our events to be all that much fun. <laughter> So they had their own annual event that they went to. I believe today that in software as a service, which most us are involved in now, that this AC type role is going to be really, really important in the future, if nothing else to make sure that you keep and grow your clients just like we did in those days.

Grad: You had a Tymshare user group as well?

Myers: Yes, we did but it was not very significant. Mike, one of the other things that I think you can comment on is how the AC would set up classes on the customer site. And would really get all of the users for a particular company together, share their ideas, so they were almost self-supporting in that sense because one guy would know something the other guys didn't know about. Talk a little bit about that because I think the secret sauce of Tymshare was the AC and the support that we would give to the customer through that level of the organization.

Humphries: You know, I had forgotten that's how we conducted classes. So we had set classes in things like SUPER BASIC, SUPER FORTRAN, EDITOR, all of that stuff, Exec, which was our operating system for the 940. We'd have those scheduled in our branch offices and the ACs taught those classes. So we didn't have guys from corporate that flew out or regional guys. The ACs taught it. And then, as Gary said, at our larger accounts, we would do classes there. And we didn't call them seminars at the time but some of them took on seminar-type qualities. You'd attract people from departments you weren't doing business with and some of them would become customers. So without ACs I don't think much of our business model really would have worked for Tymshare. And it seemed super successful at the time.

Grad: Very interesting. You say your user group was not as significant.

Myers: There was a TUG, a Tymnet users group, and as an inter-organizational effort that was more successful than anything that Tymshare did because we had such a lot of contact with the customers at the local level, it wasn't necessary. We didn't think to have an umbrella users group at a corporate level or a high level.

User Groups

Grad: Go back to IDC. You had a major product FFL [First Financial Language]. Did you have a user group for that?

Wyman: No, we didn't. Actually FFL, I think, probably started dying off by the mid 1970s.

Grad: Okay. So it wasn't a big factor. Nick, was there a NOMAD users group?

Nick Rawlings: Well, two things. Yes, there was a NOMAD users group. It was very successful, very important in sales. A lot of sales were reference sales. If it was the second copy with a sister company or if we found somebody, they were much more interested in buying if they had a friend they knew who had been successful with NOMAD. So user conferences were very important. We had two national user conferences, East Coast, West Coast, once a year. And we also had international [conferences] in Switzerland and Italy and Spain.

Grad: And this was true before NOMAD was a product?

Rawlings: No, when it was a product.

Grad: The user group seems to be critical when you have a product business.

Bayles: Yes, but we also had a general users group called CSS SHARE which was modeled after the IBM SHARE organization.

Grad: Was that significant?

Bayles: We had good attendance for probably four or five years, from I would say 1970 through 1975.

Rawlings: Yes, our head guy at the time, Dave Fehr, hated it.

Bayles: Right.

Rawlings: He tried to kill it as often as he could because he was afraid of customers because they were going to complain. You get a bunch of customers together and they're going to complain but it wasn't the case.

Bayles: Well, obviously, there were suggestions. There were issues that came up. I mean I attended most of them. And it was always helpful to hear what is it they're seeing that we're not hearing about.

Rawlings: But often they would talk to each other and say, "Oh, I didn't know you could do that."

Customer Support at National CSS

Bayles: And our model for tech support, what we called tech reps, was probably very similar to Tymshare's, with a couple of exceptions. All at the local level, we had a tech rep of the day and then it was his day to be in the box and not leave the office. We didn't assign them to salesmen per se. For very large accounts, we would have assigned them to an account which is, in effect, assigning them to a salesman. New York Telephone, Bank of America, SoCal, had their own tech rep, but that was a relatively rare situation. The tech reps were in a pool and not associated with any particular customer, necessarily, unless they were a very large customer. Now, of course, some tech reps got to know certain applications in use at certain customers better and the customer knew who to call. And the back stop for that was calling somebody up in Connecticut, if there's a problem. But we had a local model and what would you guess the average sales rep to tech rep ratio was?

Dick Orenstein: Close to one-to-one. Maybe not quite. It was probably 1.3 salesman for every tech rep as a guess. That's strictly a guess.

Grad: Were the tech reps involved in the sales calls?

Bayles: Yes. Absolutely.

Rawlings: Yes.

Bayles: The same thing, the prototyping thing.

Rawlings: Same thing as Mike did.

Orenstein: I remember we had a sales meeting once and there were a bunch of salesman at the dais and I remember standing back – I don't remember who I was with – and said, "What qualities do these salesmen have that make them 'the best that we have'?" And number one on the list was they knew the least about the product. <laughter> But they had resources to get knowledge.

Grad: Interesting.

Orenstein: Another point I would make – I thought about it as we started to talk about this – was I remember being in meetings very early and a customer would call and we would get up from the meeting to answer the customer's problem. It became a cultural thing. That getting a response to the customer was much more important than anything else you had to do. And I think for a long time that was way high on the list of how we behaved. There was nobody who was too busy or too high up or whose job it wasn't to handle a customer problem. Although we eventually wound up with some structure and some organization, I think that cultural thing was significant.

Rawlings: It was what Mike said in terms of a spreading of the products that meant that sometimes our tech reps had to learn an incredibly vast set of products and applications and lingo. We tried to bring them in for training and we'd bring them in on financial training or bring them in on RAMIS or bring them in on ISPICE and they were just so very different, it was tough to get it right. So we did have central support for a lot of those, but we also counted on the local.

Humphries: I'd like to add something since you mentioned ISPICE, just because it's funny and it also goes back to your three-piece suit. So ISPICE was so specialized that most of our ACs couldn't really support it and it wasn't a super popular program but we had a guy back in the tech division who owned the product. Unfortunately, I've forgotten his name now but I had a big customer somewhere, I don't even remember who it was, and I had to go out [to see him]. I would have taken an AC but this guy said he would go, and I had known him for a year-and-a-half or something like that. So we agreed to meet at the office and then I was going to drive him out in my car to see the customer. Well, he shows up in the office, he was wearing a suit all right, but it was green velour. <laughter> Fortunately, he was so good at the product, nobody really cared. And, in fact, for all I know, the customer might also have had a green velour suit at home too. <laughter>

Customer Support at GE Information Services

Grad: That's a good story. What else, GEIS?

Chris Brook: Yes, we were the same way. We had the main customer service group and then there was EDI, which we called time services for marketing reasons. There was a client service group just for EDI, there were EDI specialists within that. The customer service group, or the client services groups, were by country because we obviously had a language problem, so we had one in London, one in Paris, one in Amsterdam and so on and so on. They were their own set of people. They were within sales, but they were a department within sales. They had the same kind of thing, they were expected to answer all of the questions. And if you had an EDI question, you'd be passed off to an EDI person.

One of the interesting things we used to do to penalize the techies was to make them sit in customer service for a week and answer questions. And they had a very fine appreciation of customer problems after that, as you can imagine. And no longer cursed out the customer service people or the customers for being stupid and idiots and whatever. When you have to answer the question yourself, it's definitely a humiliating experience.

We had a user group, though I wasn't too familiar with it. It seemed to come and go as far as I could see, though I did attend a couple of them. We also had a fair amount of people from the engineering group who – knowing from bitter experience – went out into the field. So when there was a high level sell then someone like me or whoever would go out there and talk to the customer to back up the salesman, especially if it was some new product or very high profile product or high yield product.

Then there would be specialists, again usually from the engineering group, who would go out and give training classes. And often to our own people at their customer service meeting. They'd have meetings once a year usually and somebody from headquarters would go out and give a spiel on something new or the network and how it works or EDI and how it works, et cetera, et cetera. So there was a lot of interaction between the customer service group and the engineering department. Not everybody, obviously, just a select few would be exchanging information.

And then we had tech reps too and they were in the branch. They were not quite one-to-one but it was the same general level. And they were pretty skilled. They knew the user applications very well and they had all of the contacts back in headquarters they could get to from whichever country they were in to get the information. So it was fairly similar to what everybody else was doing. But the one thing that wasn't mentioned, but it was certainly an issue for us, is the local language issue, because that was a big problem.

Grad:　　　　What did you do other than have local people?

Brook:　　　　Each country had its own customer service group.

Grad:　　　　You didn't force the customers to learn English?

Brook:　　　　No. It wouldn't have worked too well, especially with the French. <laughter>

Customer Support at Online Business Systems

Grad:　　　　Jeffery, you're on as usual, last. I'm going to start you first next time just to set the stage.

Jeffery Stein:　　So I should just keep on talking, then.

Grad:　　　　That's an idea. What did you do about customer service and support?

Stein:　　　　Well, we had many different types of services we were offering, but in the remote batch RJE [remote job entry] and time sales products and services we were offering specifically we had tech reps and they worked with the sales staff. And we probably had maybe one tech rep for about every two sales persons. And, of course, we were very heavily technical, the whole company, anyway. If they didn't have enough support they could call three or four levels down and have a lot of technical support available. It was very important because the customers that we were dealing with were technical in nature anyway, so we had to have not only people to speak the same language but to speak the same dialect. It was important for us to do that. And we covered as best we could.

Split of Tech Support Time Between Pre- and Post-Sales

Grad:　　　　Of the effort and time spent by these technical people, whatever you call them ACs, or tech reps whatever, customer service, what percentage was spent on making the sale versus support after the sale was made?

Wyman:　　　　In our case I would say probably a 20 percent before and 80 percent after.

Grad:　　　　So it's mostly afterwards?

Wyman:　　　　Yes.

Grad: The rest of you similar or not? Mike Humphries has given me a little different impression is why I was asking.

Brook: It was probably 40/60. Most of it is on post sales, getting the thing up and running and handholding afterwards.

Grad: You make a good point. I'm sorry. I didn't ask my question right. Making the sale, installing it and getting it operational, educating the people and then for problem solving after, maybe that's a better breakdown than the one I expressed.

Wyman: It was hard enough breaking it down into two categories, now you want three. <laughter>

Grad: You guys are bright, you can handle it.

Orenstein: I don't think we could make that distinction. Going back to Mike's comment, it was ongoing revenue. Every month.

Grad: Ah, that's right.

Orenstein: So you might be dealing with that customer for two years after you've made a sale, okay, and how much does a phone call every couple of weeks count?

Grad: Let me try one more approach on it. We speak of customer support, customer service in the products area as being something where a guy's got a problem, he's got a contract, it's installed, it's operating, he's got a problem. We fix it whether it's a bug, or 90 percent of the time, it's not a bug, it's that they didn't read the manual. But I guess I'm trying to differentiate how much of this was because there was a problem versus there was an opportunity, there was something new. You were helping to get some additional stuff going. Did it matter, maybe not significant?

Humphries: It could be a bug. It could be a lack of knowledge, which it more often was. So somebody would call up and they were using something wrong. Because, remember, the really unique thing about this versus a lot of enterprise sales is that we were selling to people that didn't normally program for a living. So they were business people or they were scientists or whatever. They weren't necessarily as expert in it as what the IBM guys were selling to. So we got different kinds of questions, just like somebody mentioned about the thing being unplugged. Actually, when I was an AC and had to do my stint, I was sitting there one day and went through the process with somebody that wasn't connecting and I finally said, "Lean over and

look at the cord from your modem, it's not plugged in." And the guy said, "You're right, how did you know that?" <laughter> Well, you know it's simple logic because it took me about five questions to ask that, but that's the kind of thing that we were facing.

Grad: But that is clearly problem solving after they're using your product.

Humphries: Yes.

Grad: And what I was trying to say is I gather in your business that was not as significant. In the software products area, this became a horrendous expense, this after-sale support. That's why everything was done online eventually because we couldn't afford to put enough people in. I remember at WordPerfect, I think, the people that were handling the phones outnumbered the rest of the people in the company. It was just horrendous.

Bayles: Again, you have to look at what your customer base is. In NCSS's case, and a similar kind of thing at IDC, our original customer set were programming people by and large. They grew into NOMAD stuff and they grew into Infotab, financial spreadsheets and stuff like that, and RAMIS. But in the early days there could have very well have been bugs, as opposed to the user not understanding. I mean the first two years. And actually in those times I would probably say it's 10 percent pre-sale, and 90 percent after sale.

Now go ahead five years to where you're selling RAMIS or NOMAD or Infotab, ignoring ISPICE which was never a big deal. Then you were more heavily involved in the presale because you were showing how NOMAD could do something. The guy would say, "Here's our problem." "Well, here's how NOMAD will fix it or will work on it." But the salesman couldn't do that. And often times, there'd be post sales issues because the guy didn't [cover it]. I'm not sure how well NOMAD was really documented or how well the classes were really taught, but they would follow up afterwards. But then after that, you stayed in touch more to make sure that there wasn't anything going on you didn't know about.

Grad: Okay. Fair enough.

Bayles: So I think it became more of a 30/70 or maybe even 40/60 the further on you got.

Grad: You had to have people with the knowledge, but fixing bugs or the correction of things wasn't a dominant issue with the company?

Rawlings: It was a dominant issue for the development group who were constantly being told in an accurate way about things that didn't work. Or the need for additional capability because we can't make the sale against Tymshare or whoever because we don't have this feature so we've got to add that feature. So we did have to do retraining of the tech reps and they would say, "Here are these new things, let's use this as a good excuse to go visit a customer, tell them about the new things. We know of customers who have been asking for that thing, let's tell them that they've got it" and it was a way of keeping the customers happy.

Humphries: And they loved you for it. When you showed up with that new information it was like you were bringing out a treasure chest out to them.

Rawlings: Yes, and if you didn't, they always complained about the new version because it had all sorts of incompatibilities and other things.

Humphries: So Burt, this brings to mind – I don't know if this is the session for it or not – two quick things. One is, more often than not instead of selling a product, going out for a new customer and deciding what we're going to sell them like, for example, at Oracle where people said, "I need to buy a relational database," we solved problems. So our ACs as well as our sales people had to understand a lot about how the business and the process all worked because our prospects before they became a customer usually presented us with a business problem they wanted to solve. Sometimes they had an idea, especially if we're dealing with scientists or engineers, like I want to write a FORTRAN program to do this. But with the business guys more often than not it was something like, "We sell textbooks to schools and I need to be able to configure for each kind of program how many of each kind of book we're going to package in a thing and all, so how do I do that?" And so our ACs would go through mentally all of the things that we had that they could use as to which one fit best and start to build that kind of an idea.

And the second thing I wanted to mention, is what helped our selling process and especially our ACs in dealing with these kind of people is we had developed a whole new concept of documentation and aids. So the documentation was slick. It was written in nice simple form. It had examples and all in it. And we at Tymshare had these things called the Instant series. So for SUPER BASIC, you had this fold out thing that a user could keep right by their terminal that just summarized at a top level the most important things they needed to know with like one level down. And that helped immensely. Whereas, if you were selling to programmers and you were IBM, it would be like 500 pages and you'd be lucky if you could find the right page. And it was horrible to read and it was full of typos and stuff like that.

Proposal / Contracting Process

Grad: All right. Let me switch and go into your proposal process, your contracting process. Those are two things we haven't talked about. I was looking at my list of questions and I somehow didn't get around to that. Did you write formal proposals? How about Tymshare, you had a prospect, what did you do?

Myers: We tried not to. Any time an opportunity arose where you had to submit a formal proposal that was just agonizing. I remember when I opened the Washington D.C. office, we were the 32nd commercial timesharing company to vie for a contract at NIH [National Institutes of Health]. And so you were invited to propose, but the chances of getting a contract were very, very small. So our objective was really to get in way before the proposal process, help design the spec, and just almost bid in our specs on our particular unique products. So that was the way that we did it. When you had to write a proposal, many times, we'd just say, "Kiss off."

Grad: So the RFPs would come out and it was not worth the effort.

Myers: It was not worth the effort.

Grad: Okay. How about some of the other ones? Talk proposals here and then we'll talk about contracts.

Bayles: I think that pretty much mirrors our experience. I mean dealing with the government is another whole animal.

Rawlings: We did have a big, big effort on a GSA proposal.

Orenstein: Yes.

Bayles: Just speaking of something we shouldn't have gotten involved in.

Rawlings: And we put like five man years into bidding. And somebody else got it for a stupid reason, I think.

Bayles: I mean it was pointless. Somebody else had it before the whole thing started, I suspect.

Grad: You think it might have been wired, is that what you're saying?

Bayles: Yes.

Rawlings: Yes.

Wyman: My recollection of the GSA proposal that we put together, was not to bid on a specific project. It was to be authorized to be able to offer services.

Orenstein: Authorized, I remember that.

Bayles: We could walk in and try and sell.

Rawlings: It was to be on the schedule.

Wyman: It was a huge significant effort. But, obviously, the upside was quite significant because once you established yourself as a player in the GSA it was significant business.

Grad: GEIS?

Brook: As far as I can remember, we didn't do that many formal proposals. They were more informal in terms of this is what we'll do for you. Here's what your requirements are as we perceive them and this is how we plan to solve the problem. And then it was a yes or no kind of thing. Or we'd demo it. We'd write a demo and show it off.

Grad: Was government business a significant part of your business?

Brook: No.

Bayles: Government business?

Grad: Federal, state, local?

Bayles: None of the above I believe.

Humphries: Government business became significant for us [Tymshare]. Gary started the office in Washington D.C. He got it off to a real successful start. It grew and we accumulated, like every other company, people in that office who knew how the government worked and we got a lot of business.

Bayles: In our case, all of our government business essentially came through defense contractors.

Grad: Through a third party.

Bayles: Lockheed.

Orenstein: But we had a Washington office.

Bayles: We had a Washington office, but we weren't selling to the government.

Grad: Okay. So we're back to commercial sales; did your commercial customers require proposals at all?

Bayles: In our case, only for professional services did we do that.

Belvin: I think our salesmen just gave them a standard price sheet.

Grad: Jeffery, how about you?

Stein: We did get into proposals for large systems but pretty much for the run-of-the-mill, we gave a price sheet. And then we had a two-page on a one-page back to back contract and that was pretty much for most of them.

Grad: He's led me into the next thing, what kind of contract did you sign once you had a new customer? What did you do?

Bayles: Well, other than professional services there was no contract.

Grad: There wasn't?

Bayles: No.

Grad: No terms and conditions?

Orenstein: No, the customer could just say no thank you and not call up.

Bayles: All they had to do is not pick up the phone that day.

Humphries: It was a monthly agreement that did say what your prices were. You guys had to have one like we did. It's like a little subscription agreement.

Wyman: It was a service agreement that we had.

Grad: Okay, that's a contract.

Bayles: I don't think we had one of those.

Humphries: I think it was a one-pager.

Bayles: Not to my knowledge.

Wyman: Oh really?

Bayles: Yes.

Humphries: Ours was a one-pager.

Wyman: No lawyers?

Bayles: Not until much later.

Orenstein: I think we'd find that we did have some kind of a thing.

Grad: Let me tell you when you sold NOMAD as a program product, you had a contract.

Orenstein: That's different. But when we sold the service, it was basically an agreement to pay these prices for what you use. And that we probably weren't liable for computer errors. <laughter>

Grad: It's a very interesting point. They didn't have access to the actual software, did they? They had the use of it, but they didn't have the code.

Bayles: Correct.

Grad: So a lot of the things that were in these other agreements were because of the code.

Brook: Well, a lot of contracts were done fixed price or volume discounts and all that kind of stuff. Especially with the big customers. I mean, if you were dealing with a trade association as an EDI, for instance, there would be agreements in there about how all of our people in all levels can come in and here's how much they charged them per transaction, et cetera, et cetera. Later on, especially with larger transaction pricing type stuff, that would all be spelled out in the contract.

Grad: Yes, I would think that would be significant. Now, GE is a very formal company as far as contracts and things are concerned.

Brook: Yes.

Grad: So I expect you inherited some of that kind of procedure, didn't you?

Brook: Except for the very early timesharing piece which was strictly a by the drink kind of thing, there was also something going on. You were always giving them discounts or fixed price for this or that.

Grad: So the timesharing business wasn't heavy on the contract and proposal side is what you're telling me.

Humphries: There were a couple of reasons for that.

Orenstein: The customer could just stop using it. There was no obligation.

Grad: Someone was mentioning, though, you tried to get multiyear agreements, you tried to get some minimums, things like that.

Orenstein: That's different. That was different. He [Jeffery Stein] mentioned it and that was different.

Bayles: That was not the timesharing business.

Grad: You just didn't try and do much of that.

Bayles: Not the selling cycles business.

Orenstein: I think later at the end we would talk about doing that and we may have done that with a few customers.

Bayles: Well, we had a contract with B of A. And we had a contract with SoCal.

Orenstein: Right, but that was different.

Bayles: We were running their computers and we provided the software. But those are the only two instances I can think of other than professional services, where we actually had a proposal and an agreement.

Grad: And just to close that out, there was no charge for customer service, customer support. There was no maintenance fee. You just charged something for the cycles. Luanne, you had something.

Luanne Johnson: I was just going to say since Ken Ross isn't here now, we do have online an agreement for timesharing services that Ross provided [reading from http://corphist.computerhistory.org/corphist/view.php]. It says here, "By acceptance of this agreement, Ross Systems agrees to provide computer timesharing services for the above named customer," but it was really a commitment from Ross that they were going to provide these services at these prices.

Grad: So it's a price thing.

Johnson: Yes. Just some conditions here and warranty issues and so on.

Humphries: Remember, Burt, in the 1970s there weren't many attorneys. <laughter>

Bayles: Not as many as there are now.

Rawlings: There were too many then.

Grad: You say that and yet I was involved in ADAPSO and we put together contract books for each different kind of contract: professional services, software products and on and on and on including employee agreements and things like that. I'm saying there were some lawyers around, trust me. There were more than you might think.

Humphries: Nothing like today. But the other thing that I think everybody is alluding to is in timesharing, first of all, you're dealing with a departmental guy. They didn't want to have to

write an RFP. They didn't want to have to do a big evaluation. They liked the idea that they could sign up for nothing a month, or the minimum was like $30 a month, or it was something ridiculous. And they would kind of get their feet wet. It was almost like being a drug dealer. They would start out small for the first couple of months; they'd fool around and get something going. And then they'd discover they needed more. And the first thing you know after a year or so, they're billing a decent amount of money. But nobody really wanted to make a big deal out of that purchase.

Grad: Question, did they have to have use purchase orders to buy your services?

Humphries: <nods head yes> I got thrown out of one of the aerospace accounts, I forget which one it was, up on Sand Hill Road, because I wasn't used to doing that and I closed [the service with] an engineering group and they had been using it for two months. And then I get a phone call and it was the purchasing agent and he called me and he told me never to ever to set foot in the place again without having a PO.

Grad: And what about the rest of you? Did your clients have to have purchase orders and so forth? Do you know? Did you care?

Orenstein: I think some of the bigger customers had their structure.

Grad: It's an odd question, but if you were performing services, how did you have any assurance they were going to pay you?

Orenstein: Well, the fact is, we didn't. <laughter> But the reality is in 1970, when we were so cash poor, we went to billing every two weeks. AT&T said, "We're not going to pay any attention to this." And we said, "That's okay." AT&T paid their bills every 34 days. They paid whatever they paid and the big companies ignored it. With the smaller companies, one of the problems we had was we weren't fast enough on receivables and so we got twice as fast, meaning we were billing every two weeks so we were on top of them.

Grad: What did you do if they didn't pay?

Orenstein: We changed the password. We had Black Watch Farms. They didn't pay, we changed the password. They said, "We have to get in." We said, "You can't get in." They delivered cashier checks.

Grad: So they wouldn't be too deep into your pockets before you could control access?

Orenstein: Well, originally in our case, we did not pay a lot of attention to this and we got very badly in the hole, but once we understood how to manage receivables, you couldn't get very far in the hole. We just changed the password. We held your data.

Grad: Did you have any of the same kind of issues or not?

Wyman: I don't recall. But one of the things you had to watch out for was a customer could get on and start running up a huge bill without realizing it. So on a daily basis we had to kind of monitor customer activity to make sure they weren't getting in over their heads.

Grad: That's what I was wondering. In other words, you didn't require them to send a purchase order to you to indicate that they were authorized to spend the money?

Wyman: I don't know to what extent.

Belvin: I don't remember.

Grad: Because authorization to my mind is tricky.

Rawlings: Maybe Gary and Mike could tell us. We've got salesmen here.

Myers: Well, I think for the most part you judge the kind of company. If it was an aerospace company, yes, you'd have to try to get a [specific] PO. But you'd get a broad PO and you wouldn't put a dollar amount or maybe a not-to-exceed amount. But generally the smaller companies you'd deal with, you didn't want a PO. As Mike said, the department guy that's using it didn't want a PO. So you just kind of go a month at a time and see how it worked out. If we got paid, then we wouldn't cut off their username and we'd just keep the relationship going and growing. But we had them and they had us and we kind of worked together.

Grad: Did some of them slow pay? Were there three-month payers, six-month payers?

Orenstein: Sure.

Grad: But you didn't cut them off.

Orenstein: I think I would say that at the beginning – I keep bringing this up – we were very poor at managing.

Grad: This sounds like Genesis, "in the beginning."

Orenstein: Well, finally, we got badly caught. And once we understood that, then it was clear [once] you went 45 days and we didn't have a check, we were on the phone in 30 days. We were on the phone in the two week period. We were on the phone before the next two week bill went out.

Bayles: And then there was the whole issue of whether [and when] did that hit the sales. If somebody didn't pay the bill, what happened to the commission?

Orenstein: Right.

Grad: I remember that your commission structure was a little more complicated in that sense.

Orenstein: It was paid on what was received.

Grad: It was paid on what was received? Or paid on what was sold?

Orenstein: What was received.

Bayles: Well, no, it was paid on what was sold, but we recaptured if it was not received.

Grad: Claw back.

Humphries: Eventually you cut them off.

Use of Customer Credits

Orenstein: We used to give customers credit for various things that the customers made errors about and I remember sitting around centralized [billing] doling out credits and it became almost impossible to deal with on a centralized basis. I think they were running like four percent of revenue seems to stick in my mind and we gave it out to the salesmen. We said we can't deal with this anymore and it went to like half-a-percent of revenue.

Grad: Because it was affecting their commissions.

Orenstein: Right. They figured out how to not give credit, so we were too lenient in the central office.

Grad: How about Tymshare, any comments on that?

Myers: Early on, we paid on billing. And then we changed the commission plan to pay on receipt of cash. And there was always the charge back system. So if it really got to be over 90 days old regardless of whether it was ultimately collected or not it was charged back to the sales guy. But I think there's one other thing that's relevant here. Not only was the sales guy, as I mentioned yesterday, on a 50/50 sales incentive program, but [so was] the whole office. So consequently, for the ACs that were seeing that customer some part [of their pay] – what was it, Mike, 10 or 20 percent?

Humphries: Fifteen or 20 percent, yes.

Myers: [Some part of their pay] was tied to the incentive and that, again, was affected by a charge back. So the AC, whom the customer loved was in there talking to them and saying, "You know, you've got to pay your bill or we're going to have to cut you off." And that had more of an impact on getting the customer to pay the bill than the sales guy beating on him.

Belvin: Yes, our tech reps were not on any kind of commission plan.

Grad: How about GEIS, are you familiar with this area at all?

Brook: Not really, no.

Grad: So these things tie together in a sense, don't they, how all of these pieces fit?

Humphries: Yes, we wrote credits also by the office. So it was never centralized. And credits were sort of a normal part of the timesharing industry. I'm pretty sure this would be true with NOMAD, but it certainly was with Express. There were certain commands, where if you did the command and you weren't very well trained, that one command could cost $1,000. I remember an AC going back to the paper coming out of the back of the terminal and saying, "You know, you did this one two times before. How come you're not using it?" And the guy said, "Well, it's easier just to do the calculation again." And he said, "Do you know how much this is costing you each time you do this?" Well, we would write credits for things like that pretty readily because you didn't want a hostile customer and maybe part of it was our fault for not making him aware or training him. And by giving him the credits, that helped develop also a lot more trust. And customers didn't really abuse that.

Grad: But you're often selling to a user, who wanted to get a job done. And many of them didn't really have good fiscal discipline. You couldn't tell them what it was going to cost to

do the things, is what I'm hearing from you. So it's a very different process from the professional services, though there you had the danger, I'm buying so many hours, I'm charging per hour, I don't know what the hell is going to get done. Certainly, your software products were a whole different ball game. You had a locked price, a locked maintenance fee that was recurring revenue. So that's a very different model, though, too, it has very interesting characteristics.

Humphries: Can I tell you how we did professional services until we got organized? So up until about 1974, the professional services weren't even called that. If you had some work to do, the salesmen would assign his AC and you'd do the work, you'd keep track of what you did. And a guy that's still a friend of ours today Bill Morton wrote this little program called #Biller and at night, you'd fire up #Biller and you'd tell it how many dollars you wanted to charge the customer for the work that you did. And #Biller, through a combination of connect hours and CP units, would come out within like a few cents and it'd run in the customer's account.

Grad: It would fake it that way.

Humphries: Yes. It looked like they were working in the middle of the night, but the customer knew that that's how you were going to bill them.

Belvin: We did that too.

Wyman: Yes, Dynamics [Associates] did the same thing. The command was called Burn. B-U-R-N as burn up CPU. <laughter>

Humphries: Well, it just did an endless loop until it got to the right amount. Is that right, the same thing you guys did?

Rawlings: One of the things we found out, when we decided we were trying to emphasize a product, I don't know, the product Ralph, whatever, and we were going to give salesmen twice the credit if they sold Ralph CPU time. And so they would go to a customer and do the work on his account and charge him $100 in Ralph rather than charging them $100 in overnight batch. So the salesmen would get double credit and we were wondering why is Ralph really taking off? And it had nothing to do with Ralph at all. It had to do with the fact that there was this commission plan and this mechanism that we had for selling our tech rep time in sort of a sub rosa way. So there isn't a plan that there isn't somebody smart enough to game it.

Bayles: One of the things we did was that for every two CPU seconds you could pick a character which, in the case of an IBM Selectric 2741, would wiggle the ball. Or in our case, you could set it to a dollar sign. You could do a command, dollar sign, dollar sign, dollar sign so

you get an impression of how much computer resources you were burning up. So maybe we didn't have quite the surprise that this thing cost $1,000 because he could sit there and watch that thing go by. At some point, you hit the escape button and you say, "Wait a minute. I did something wrong."

Grad: I think I've got most of what I wanted. Go ahead.

Role of the ADAPSO Computer Timesharing Section

Thomas Haigh: With regard to the ADAPSO timesharing group, I was wondering if there are any examples where that group was important in sharing best practices in these kinds of things.

Rawlings: Sharing?

Haigh: Well, you were really all learning and inventing the business together. So I was wondering are there examples where the ADAPSO timesharing interest group was important as a mechanism.

Grad: Were any of you involved in that? I don't think anyone here was.

Stein: I don't believe so.

Wyman: Not to my knowledge, no.

Humphries: I'm going to guess that there was no sharing of best practices, though.

A. Hardy: Yes. There was no sharing.

Rawlings: Even for those of us that *had* best practices. <laughter>

Grad: One has to have best practices in order to share them. Is that what they're saying?

Rawlings: I think our sales force did have some guys we hired from them and they hired guys from us and I think some of the practices best or not were probably carried on.

Grad: This is a question. Tom [O'Rourke] used to come to the [ADAPSO] meetings; were there any other people from Tymshare that used to come, Luanne? Do you remember?

Johnson: Not that I remember. As Rick alluded to yesterday, that ADAPSO group was really focused on the AT&T problem. For example, the representative from GEIS was Dave Sherman, the lawyer. So it was people like that. And, of course, Tom was involved as a business man but they really had that big focus on the difficulty they had dealing with AT&T. So I don't think that they spent much time talking about best practices. It was a different focus.

Grad: Was there anyone from National CSS? Bob Weissman, but that's later on isn't it?

Johnson: Bob Weissman, but that was later. I don't know who would have been there before Bob. I don't think any of you guys were there.

Grad: You know, I think what Tom's alluding to, which I think is very significant, is that the software products and the professional services companies were all part of an interest group. It was a Section [within ADAPSO]. And there was an incredible amount of communication among them on how they did business, what they didn't do. Then roundtables were set up where people shared at a very detailed level how they ran their business, what their problems were, how they solved them. I don't remember Tymshare being involved in that.

A. Hardy: I don't think it was.

Grad: It doesn't mean it didn't happen. I just don't remember that as being that kind of group. It was [focused on] communications.

Rawlings: I just found out that Mike Wyman worked on a whole bunch of stuff that was identical to what I was working on – COBOL debuggers and some other things. I mean I didn't know, and he didn't know.

Belvin: Our salesmen knew.

Wyman: Our salesmen knew.

Grad: I have a question for Doug Jerger. He worked at ADAPSO for a number of years. Do you remember, was there anybody involved with the RPSS Section in terms of sharing of information or discussions or anything like that? [Editor's Note: According to *ADAPSO: 25 Years* published by ADAPSO in November 1986, ADAPSO formed the Computer Timesharing Section in 1969.   The section was later renamed to the Remote Processing Services Section.]

Doug Jerger: I don't remember anything like that. It was only the software guys that did that kind of thing.

Johnson: Yes, the software guys and the professional services guys. It was amazing to me.

Jerger: The thought that it continued for 20 years, it still exists.

Johnson: As a CEO of a small software company to go to these conferences and my competitors would sit up there and tell me how they did this and that and the other. It was just a very open kind of sharing. I always said I got my masters degree from ADAPSO. That's how I learned how to run a business.

Jerger: Actually, before the roundtables, the software people did it at conferences at the bar. That's how they shared things like this.

Johnson: The roundtables are a little bit different because they were very specifically designed not to have any direct competitors. So that when people wanted to really open the kimono, which was the term they used, they weren't exposing themselves to a competitor. But with the conference sessions, I remember a session on user groups, where my direct competitor sat up there and told me what worked and what didn't for user groups. It was an amazing environment.

Grad: That's a very interesting point you've raised now, Tom. I don't remember that in the timesharing and remote processing area.

Belvin: We didn't even participate in SHARE which had a very strong IBM 370 group. And I would sometimes send someone to the meeting, but with a piece of tape over his or her mouth. <laughter>

Wyman: That's how you could tell us.

Belvin: It was just too awkward for us to be in a situation where our pearls would be [exposed].

Grad: Why would that be so different for the timesharing companies than it was for the software products or the professional services companies? That's surprising.

A. Hardy: It's very strange, too, because we were friendly with Rick, with Comshare, and the same development was done in both companies.

Grad: Luanne raised a good point. Tom O'Rourke's role in what he did at ADAPSO was not that kind of role.

Haigh: I've got a suspicion why it might be. In the software industry, the companies mostly had different niches. Head to head competition was relatively rare. I mean you only had a couple of products going up against each other, but there were a lot more different niches in it. Also, there were a lot more companies. Originally in ADAPSO with the service bureaus there were a large number of them and they were very local. So sharing information there makes sense. Then with the software products companies, there were more market niches. With timesharing, it seems to settle out that there's a relatively small number of companies that see each other more as direct competitors.

Grad: It's an interesting point you make, but I just don't see it. For example, in professional services, companies like AGS and CTG all competed directly against each other.

Johnson: I think though Tom's point about the service bureaus starting ADAPSO is significant because initially the service bureaus were local. They weren't direct competitors. And I think they established that culture. Then that culture carried on with the other companies except for the timesharing companies.

Grad: It just never happened that way with them. That's an interesting point.

Brook: Somewhat analogous to this, I was involved some with the CCITT [Comité Consultatif International Téléphonique et Télégraphique, an organization that sets international communications standards] working groups. And that was a similar thing. I mean you had all of these competitors who got together to set the next standard or revise the existing one or whatever. And you had to exchange information to get the standard written otherwise nothing would happen. But it was difficult because IBM would always show up with two lawyers because they had an agenda. And whatever IBM wanted had to be in the standard. So everybody ended up fighting all the time about it.

Haigh: Well, according to my article in the *Annals* [*IEEE Annals of the History of Computing, Vol. 27, No. 1, January-March 2005, pp. 67-73]* what I actually say is "specialist timesharing firms such as Tymshare, Comshare and General Electric Information Services Division, National CSS and several short-lived rivals were heavily involved in this section. Computer vendors such as UNIVAC, Xerox, Control Data, Honeywell and IBM were also involved, though not necessarily all at the same time."

Grad: But they were involved not at the same kind of personal level. At least that's my recollection.

Johnson: Control Data was very active, but I guess that was SBC [Service Bureau Corporation], wasn't it at that point?

Grad: That was SBC. Yes. That's fascinating. Okay. We are now going to topic 10. We're getting towards the end, guys. You've hung in here very well. Take a 30 second break here, let's change tapes and we'll talk more.