An Interview with

RONALD W. BRANIFF

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Conducted by Jeffrey R. Yost

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Ronald W. Braniff Interview

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Oral History 449

Abstract

Ron Braniff joined Tymshare near the start as a salesman and went on to be a sales manager and held executive roles with the firm. He discusses sales organization, changing customer base, TYMNET, competitors, acquisitions, and other aspects of Tymshare's technology and management.

Yost: My name is Jeffrey Yost, from the Charles Babbage Institute at the University of Minnesota, and I'm here in San Francisco today on April 5th, 2012, with Ron Braniff, doing an oral history on the history of Tymshare. Ron, can you begin by just giving me a little background; where you were born, where you grew up?

Braniff: Sure. I was born and raised in Oregon. I spent the first few years of my life in a small town east of Portland, called Hood River. And then during the Second World War, lived in Vancouver, Washington, where my parents worked in a shipyard. Then we moved after the war to the southern part of the state; and from there, I went back to the middle part of the state to go to college. Went to engineering school at Oregon State University; and then three years in the Air Force in the aerospace world; then four years with IBM and met Tom O'Rourke.

Yost: What area of engineering did you study?

Braniff: Mechanical.

Yost: And do you recall what year you joined IBM?

Braniff: Yes, I joined in 1962; September of '62. And I left almost exactly four years later. I sold mainframe systems for IBM for three-plus years, after finishing all the training.

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Yost: 1401s and . . .?

Braniff: Oh, yes; 1401s, 1440s; I even sold a lot of punch card equipment in the beginning. That's what we had to do to go out and learn how to sell stuff, knock on doors. [Laughs]

Yost: Through the sixties, IBM still made a good chunk of its revenue on pre-computer punch card equipment. And so you left that in '66, was that to come to Tymshare?

Braniff: Yes. When I was working at IBM, I was really happy with the fact that I was able to get a good job at IBM and live in the city where I wanted to live; I could live in San Francisco. And I learned a lot in those four years about computers, but more importantly, about how they were used in business. So I learned a lot about business. I was, you know, an engineer who had minored in business, but I really got my graduate school, so to speak, with IBM over that four-year period, calling on manufacturing companies, and distribution companies, and the engineering and research companies. It was really an educational experience for me. But I knew when I joined IBM that in the long run, I wasn't a big company guy, but I thought it would be a good place to start. And while there I met another kind of young guy, who had come originally from GE to join IBM in the control systems area. And he had known Tom O'Rourke from his GE days and learned from Tom about what Tom was trying to get going here. Tom had come here from Phoenix, I think, to start Tymshare. Maybe he'd come for some other reason to begin with, I don't recall. Anyhow, I got interested and I'd been doing some

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interviewing. I went to Tymshare; I was introduced to Tymshare and had a couple of

interviews, and they were looking for their first salesman. Then I met O'Rourke. That's

when I knew. [Laughs] I don't care if it works or not; I love this guy.

Yost: When you were at IBM, were you aware of time-sharing in the 360 days.

Braniff: Yes.

Yost: Not initially, but IBM started a time-sharing system with the 360 I think '65, '66

they worked on it.

Braniff: I knew that as I dug into it a little bit; I knew that there were some competitors

out there that were relatively new companies also; one of which was local. I think that

was something-Babcock, and they were offering time-sharing services on an IBM 360. I

think it was a modified Model 50. But the others were on, you know; there was no one on

SDS systems that were local. But there were a couple of those; a CDC-based company,

and there was also — I'm trying to recall another — I knew there were some young

companies that were getting started in the industry and I knew of one that was on IBM,

but that was about it. And of course, GE was a pioneer in the business at the time.

Yost: When you went to Tymshare — well, first, I don't think you mentioned what IBM

facility you were at. Where was that?

Braniff: I was working out of what was then the San Jose office. It was the only branch office south of San Francisco in the bay area at the time, and it was established, initially — well, this doesn't matter, really — established initially, I think, to service Lockheed but grew into a sizable branch office. So I was selling out of that. But my territory —

Yost: IBM, of course, had the research facility in San Jose.

Braniff: That's right. But my territory was more commercial oriented; it was not scientific. And it was from south San Francisco down to San Mateo.

Yost: When you were at Tymshare, you mentioned you met Tom O'Rourke.

Braniff: Yes.

Yost: What were your general impressions of the company and how many employees were there, at that time?

Braniff: At that time there were around 10 or 15 employees. I learned later that most of them were engineers, of course, working on getting our operating system and related software up and running. I was originally interviewed by, his title was Northwest Division Manager, I believe, John Jerrehian. John was a really wonderful guy, and he was actually my boss for the first year or so after I joined Tymshare. One of the best guys I've ever worked for. And it was my first small company job other than little companies I'd

worked for summer jobs, in the past, which had nothing to do with computers. Anyhow, but my second interview was with O'Rourke and I was really impressed by him, as well as John. But I mean, this was the guy who had six kids, started a company, with everything he had in it.

Yost: I read that he liquidated his pension to fund . . .

Braniff: Yes, he told me he had $35,000 in his pension fund. [Laughs] Then I met Dave Schmidt, later — oh no, I met Dave before I joined — and Dave was also a very impressive guy. I just liked the people. I hadn't met any of the engineering staff, but I met Dave, Tom, and John; and I think that was it, before I decided this is it. I'm going to give it a shot.

Yost: Had they signed up any customers by that time?

Braniff: At that time, Tom had done most of the selling before that. There had been a salesman before, but Tom had, through his business contacts, as well as knocking on some doors, he had about eight or 10 companies that were using our system when it was up. Initially, it was would you please use it and tell us what's wrong with it so we can make it better, as I understand it. But when I joined, the deal was use it, and if you get productive work we expect to get paid. And so there was a little revenue coming in from a group of customers. The company's original business plan had been based on the small business market, that this is a way for small companies to get access to big, powerful

computers. But the cluster of companies that I found when I joined Tymshare were almost all — that were spending any money — were big companies. And it was their engineering or their scientific departments. And as I ran around and made sales calls, I discovered they were all there primarily, almost all of them, large companies for the same reason. They were frustrated with their in-house services. They were low on the totem pole for getting access to computers. So it was hard to get access, and even hard to use, hard to test your programs. But almost all of these were engineers and scientists who knew how to write in FORTRAN and, in some cases, BASIC, although very little of that.

Yost: I came across that Lockheed was an early account.

Braniff: They were. And Lockheed, at that time; well, at that time I think Tom told me, don't bother to call on Lockheed, they've agreed; he had a very close friend running the computer department there, whatever his name was I can't recall. But he had agreed that he would eventually become a customer, but the system had to become more reliable. And when Tom felt it was at a point where it was really usable, they were ready to go. So I didn't waste time there, for starters. But we had companies like Stanford Research Institute (SRI), we had Varian, let's see, trying to remember the big names. Memorex, Bechtel in San Francisco, I think we had some users at the BofA [Bank of America], which was the only banking customer but Tom knew people there. Westinghouse had an operation in Sunnyvale. These were the largest users. The largest customer when I got started, where we had revenue, was Standard Research Institute. We were doing, I don't know, five, six thousand a month when I first met those guys. But most customers had

the same problem: when our system went down they lost all their session. They'd been on for two to three hours, it was gone. We hadn't gotten to the point where we could, you know, keep saving their work.

Yost: Was there a standard rate for those first customers?

Braniff: Yes. Trying to remember. Our standard price was $13 an hour and that was for the use of our 940s, our SDS 940s, which at that time could share about 10 or 12 users, something like that, when they were up and running. And then we charged for storage. I've forgotten what it is. It was a buck for a block, and I don't remember how large a block was. It wasn't very much. It was a few thousand characters, I would guess. And that was it, storage and session time. I think those were the only charges. We restructured things later on to charge for something close to how much CPU use they were getting, in addition to connect time. But that's the way it was for the first two or three years.

Yost: And GEIS opened a facility.

Braniff: They had an office going, up and running, when I joined.

Yost: Were there others in the area?

Braniff: That was the only significant competitor I felt I had at the beginning. Babcock, A.J. Babcock or something, we eventually bought that company and that was two or three

years later. They were up and running, but they didn't have much of a sales force — of course, we didn't either — I was the only guy for the first year or so. But that's who I bumped into was GE. I didn't really have any other competitors I was concerned about at the time. Now, SBC showed up later. But when we were starting, it really was us and GE, in this part of the country and in Los Angeles, as well. There were some other competitors, but they didn't matter much to us.

Yost: Yes, in the early days time-sharing was regional?

Braniff: It was more geographic.

Yost: . . . I think ComShare, their outfit, they were in Michigan and so there was no competition.

Braniff: There was no competition — yet — that's right.

Yost: Fairly early on, Tymshare looked to expand to new geographies; expanding to a Los Angeles area office, and New Jersey. Were those up and running about the time you joined?

Braniff: Los Angeles was up and running when I joined. I mentioned the Northern [Division manager] was John Jerrehian; the Southern Division was another fellow in his early 30s, maybe he was 35, Ray Wakeman, and he'd come from SDS. Tom had come

from GE; Tom had known John at GE. And Ray, I think he had hired a salesman or he hired a salesman just after I was hired. And there may have been someone there before me, but we're basically at the same stage. And we were both geographic; we didn't have any customers beyond the reach of an inexpensive leased line. Leased lines cost a lot of money in those days. We were working the back yard, you know?

Yost: So what was the geographic reach?

Braniff: Here we were limited to — we weren't even in; I don't think we'd even crossed the bay yet — it was San Francisco to San Jose. I think we had local dial-up; we may have had two different numbers, maybe three. Down there was Orange County, we had customers in Orange County and in Los Angeles. And I think that was it, at the time. The revenue for the entire company the first full year I was here, which would've been '67, I think the revenue for the company that year was about a million? Or three million? I can't remember. Maybe we had done a million the first year I was here. Because I was here just for the September through December period, and we already had customers generating some revenue. So I think the company had about a million that year.

Yost: In 1966?

Braniff: '66. And the following year, we did a little over three million. And we hadn't yet gone to New Jersey, or maybe Tom had started getting some things going back there.

He'd be gone, looking for someone to manage the operation, and maybe we had that fellow hired by the end of '67. I don't recall. But if it wasn't '67, it was '68.

Yost: Three million in revenue in '67, was that enough to be profitable?

Braniff: No. The company didn't achieve profitability until 1970. 1970 we were profitable for the first time. I think we reported net income of about $100,000 on $10 million in revenue. So from '66, we did a million; in '70 we did 10; and we basically broke even AND we went public, if you can believe that. (Laughs.)

Yost: That was a tough year.

Braniff: We kind of had to go public because we were faced with some debt from the Bank of America. It had loaned us some money, and they were basically saying hey, we want those notes paid off on time. And that became a major sticking point for O'Rourke. As soon as we got those guys paid off, we moved all of our banking business.

Yost: So Quist at Bank of America provided venture capital funding [and] there were also loans?

Braniff: There were some loans involved, probably for the computers, would be my guess. They were probably secured by; but that's just a guess. George Quist, I don't know when he and Hambrecht started H&Q, but it was right around the same time '66, '67,

something like that. But he had originally been with the Bank of America. They had a subsidiary that funded young companies.

Yost: Can you characterize Tom O'Rourke's philosophy and management strategy?

Braniff: Yes. Tom was a people guy. And he was very, very personable, fun-loving, so his style was very relaxed, very informal. When I met Tom I'd come from IBM and the Air Force where everybody was buttoned up. Well, O'Rourke had a suit on, and a tie, but the tie was pulled down a little around the collar, his hair was kind of — what little hair he had, he was only about 42 years old but he was semi bald — hair was kind of frazzled, sleeves were rolled up. He was a marketing guy and a sales guy. Loved people. So his management style, I would say, the way he characterized it was, Ron — I think I talked to him when I first met him about training or something and he says — Ron, the way I run things here is I'm going to drop you off the dock and see if you can swim. And if you can swim, great. If you can't, it's adios. And if you swim, next year I'm going to drop you off a higher dock and a deeper lake. [Laughter] And if you swim, great. So, in other words, hey man, you're going to learn on the job and I'll help you as much as I can. We don't have a training department here. So that was his style. You know, the culture of our company grew up around his personality. And his personality was kind of — the culture became an extension of his personality. He was a fun-loving guy and almost always upbeat and positive. Fun guy to be around. But he was tough, not tough to work for, but a tough guy. If the chips were down, he could make hard decisions and he could go head to head with anybody if he needed to. So he was really a good guy but a very hard-headed

guy when he needed to be and a tough guy when he needed to be. As far as his business practices he was highly ethical, above-board. There was never a hidden agenda with Tom, you knew where you stood. And I'm talking about not just as an employee or one of his guys, you know, trying to get things done, but in watching him perform with customers, and perform with venders, then even a few times with competitors.

Yost: You mentioned dropped off a dock, in terms of swimming, was there a quota in the beginning?

Braniff: In the beginning there wasn't really a quota, *per se*. I knew what the company's goals were and I knew what our goal was for our division. I was not paid based on whether I achieved that number or not, but I was paid a percentage of revenue collected. I got two percent. When I started my salary was $10,000 a year plus two percent of the revenue, paid monthly.

Yost: An incentive to sell to companies that were actually going to pay.

Braniff: And to collect it, if they didn't. And I can tell you a story about that. Early on, one of the guys at SRI called me and said Ron, we want to talk to you about this bill we just got. They'd received a bill; this was several months later; we'd done a lot of training out there and they got a bill for $8,000. And so I said fine, I'll see you this afternoon after lunch. I go out and they went over that bill and explained, and showed me because it was backed up with all the session times and said well, we had a lot of crashes and we lost

data, and we want a credit. I said a credit? He said yes, we're not going to pay for 8,000; we want a credit for some of our lost sessions. I said let me get back to you on that. So I went to see Tom and I explained to him this meeting I'd had. Tom looked at me and he said Ron, we don't have credits. [Laughter] Now you go back there and collect that 8,000 bucks. And by the way, it says I pay you based on what you collect. I don't think he really said that, but he knew that I knew, right? But he just said Ron, there are no credits; there's no such things as credits; now you go figure out how you're going to get that money. So I thought about it that night and went back the next day and sat down with these guys, and these are all good guys and they knew we were struggling to get this thing really going. I explained, you know we don't really have credits — but I had to have a reason of why we don't have credits — I said the reason why we don't have credits is because if everything worked perfectly we'd be charging a lot more than 13 bucks an hour, so the credits are built in. [Laughter] And they laughed and laughed, and said okay, we'll pay. So, I forgot now; oh, was there a quota? No, there was not a quota, *per se*, but in 1972 by that time I had; we did establish quotas and when we get to the '70s we can talk about that, for all of our sales guys.

Yost: Do you have an idea what GEIS was charging?

Braniff: I think they were charging around 15 bucks. And I think it was just a flat rate like ours. And of course, their system was more reliable. It wasn't more powerful. It was harder to use, but I think their prices were a little higher than ours and that's probably why we were priced where we were.

Yost: Can you discuss the decision to start TYMNET and how did that affect things on the sales and marketing side of the company?

Braniff: Well, by the time we started TYMNET… let's see, let me think. I said in 1970 we did 10 million, in '76 we were a 100 million dollar company and that was almost entirely revenue from our time-sharing business. Is that right? No, it's not right; that's not right. By then we had TYMNET revenue because the time-sharing revenue peaked out at around 125 million, and that was around '82, I think. So '77; let me go back and think; I think our revenues from the time-sharing, by that time we had revenue coming from Europe, we had a national sales force, we had a national network. Actually our network extended around the globe, but not to every spot on the globe. So TYMNET must have been established around '75, '76, something like that. And I think our Tymshare revenue, out of that 100 million in '77, was probably around 70 million, something like that. So there was another 30 million of revenue, part of which was coming from our international operations. I think we got credit for some of that revenue — I may be wrong about that — the balance from TYMNET. So TYMNET, their market was big companies, like ours was. They were selling communications services, the use of our network, and there was initially, there was no — we didn't run into each other. We had a sales force, by that time, of around 60 salesmen, 70 salesmen, and another 70 plus customer support people; we called them application engineers, application consultants. And TYMNET had a handful of salesmen in the beginning, but eventually we began to work together, where they would run across opportunities for time-sharing, and we ran across opportunities for

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them. The TYNMET grew, by the time our company was acquired I think TYMNET was

north of 100 million, and our time-sharing business was about 110, 120 million,

something like that.

Yost: Before the network.... Did the network change essentially what you were selling,

in terms of reliability, in terms of how you marketed the time-sharing product?

Braniff: No. Well, the more accessible our network was around the country, the more

beneficial it was to our large customers. They could easily, at low cost, connect with our

network. Initially, we had some customers that would buy their own lease line to get to a

multiplexer, so that they could get access to our machine, our system. But our network,

eventually covered, by the late '70s or even mid-1970s; our network covered all the

important bases in the United States, so our customers could dial up locally. And then our

network evolved to the point, as you were indicating, where we could plug a computer in

anywhere in the world into our network. We wanted the flexibility to be able to plug

computers in from anywhere, geographically, and so we could spread our own data

centers around. We didn't have everything on the San Andreas Fault in California. But

also, eventually, so customers could plug their computers into our network. And that

started to become a business in the mid-'70s, as I said earlier. But the reliability and the

accessibility were sales factors that were important to our time-sharing business. And as

the reliability went up and the accessibility costs went down, it became; we were one of

the few companies that could really sell to big companies, access wherever they might be

in the United States and, eventually, in the world.

Yost: Moving back to the late '60s for a moment, I came across that Tymshare made a sale to Harvard after they purchased a 940 but the number of your services couldn't meet their specifications. And I think Ann Hardy went out to check on the Harvard account, were you part of that?

Braniff: No, I wasn't. That was not really something; that wasn't a deal that we did through our sales organization. I think there was a lot of technical work involved in that, and they actually bought our operating system, I think, didn't they? Or they licensed our operating system. Yes.

Yost: And also in the late '60s, the company acquired Dial Data.

Braniff: That's right.

Yost: As far as I have ascertained, to this point, that was the first acquisition.

Braniff: Dial Data was our first time-sharing acquisition. We bought that after my first year. When was it? That was '69. Around mid-'69 I went; I had been running the Northwest Division. I was a salesman for the first year, then my boss came in, John came in and said okay, we're ready to hire; no, he said it's time for you to be a sales manager, because I told him that's I wanted to do when I joined. He says okay, you're a sales manager starting tomorrow, but the first thing you've got to do is go hire some salesmen.

And so I started building a sales force. Up to that point I was a sales force of one. By '69, during that next year or so, John went back East for a while, to pick up the pieces that Tom had begun to put together back there. We'd actually hired a manager back there and then Tom decided he needed to make a change. And then John went East as temporary Division Manager and I stayed here. And this all happened, let's see, '68. So I was running the Northwest Division, which had sales, and application consulting, and a computer center. And John went back and kept things together back there for several months. And then he and I swapped jobs. He came back to his old job in '69, running the Northwest Division, and I went out as the new Division Manager for the East. That all happened around mid-'69. And we were in that mode through 1970, when we went public. And just following our offering, and before the end of the year, we reorganized the company; Tom reorganized the company. Instead of divisions with a computer center, and sales people, and support people, we established a national sales organization with national customer support. Part of that organization, we set up a national computer services organization so we had somebody to run all the computers. Centers; we had a center in Los Angeles, here, and in New Jersey. And I became the Vice President of Marketing and Sales for Tymshare at the end of 1970. So, let's see, I joined at the end of '66, so I'd been there about three years, four years. How'd we get on this? You asked me a question and I got off on a tangent trying to get to the point I could answer it.

Yost: I asked about Dial Data.

Braniff: Oh, got it. Just after we'd gone public we had a liquid stock we could use the capital to buy things. And Tom had been laying the groundwork to buy Dial Data. Dial Data was a 940 time-sharing service. There were several of them scattered around, focused primarily on New England. They did have some people in Washington and New York, as I recall; most of their customers were in Boston, as I recall. We bought that company in April, I think it was April of 1971, something like that. So that was the beginning of a series of time-sharing companies. We must have bought — I don't know — eight or 10 or them over the next two or three years.

Yost: And were those all based on SDS 940?

Braniff: They were. Yes, they were all SDS 940s until Tom decided that we needed; because there were some; we didn't want to have all of our eggs in one basket. We were all in the SDS basket and SDS was having — I don't know if they had problems or not but it was just a wise thing to do. And the natural choice for us was DEC and their PDP time-sharing system was really solid. And our people believed that we could make money using that machine, given its power, and its efficiency, and its reliability. And so we bought a company called Graphic Controls in Buffalo that had one or two PDP-10s and they had a handful of customers. So they had revenue, they had the computers we wanted to use, and that was our first non-SDS acquisition. I think they had two systems up there. And that was probably the second. That may have been our second acquisition, although there may have been one or two small SDS companies we bought in between there. I think Graphic Controls happened in '72, yes. 1972.

Yost: When you became a sales manager and started hiring a sales force, what were you looking for, what was the important stuff?

Braniff: I was looking for; well, I began hiring at the end of '67. I was looking for guys from the computer industry that had in their background at least some technical experience, because at that time we were focused almost exclusively on scientific, on people who were trained or could write programs. We could train them on how to use our system and we could teach them how to use BASIC. We had another language that we actually started with before BASIC, but I wanted guys who had some kind of technical knowledge in their background; engineering graduates, but they had been out selling to businesses. And so my first choices were two guys from IBM. They were about my age; they were a couple of years younger. One was — and these turned out to be a couple of key guys in our company — one was a graduate of West Point. He had been selling for IBM for about three years in the city. And the other was a mechanical engineering graduate from the University of Wyoming, and he had an MBA from Stanford, [a] guy named Gary Myers. The first guy was Dick Greene. And I had the authority to hire two to get started. So I was looking for guys that were experienced salesmen that could talk to engineers and had demonstrated success. Although we're selling mainframes, I'd done the same thing so I knew you could make a transition there. Okay? Now that changed dramatically in a couple years, but that's where we started. We're going to get every engineer; I went to the, I think it was the local city government and they had directories of businesses — or maybe it was the county — and just went through and picked off the

companies that had more than two or three hundred employees. And I knew if they had

two or three hundred employees, if they were a manufacturing company, they had enough

engineers for me to spend my time on. And that was kind of the mode we were in for the

first couple years, just working that list. And then we went after banks as we got a couple

of banking customers, we started going after banks; and Dick Greene had sold to banks

so I gave him all the banks to work on.

Yost: Do you recall when you started having the first banking customers?

Braniff: Yes, we had one when I joined, BofA. And so we found people in these large

companies, which kind of pretended — what we eventually found with a lot of large

companies, there were departments of people that knew how to write their own programs

with a little help from us, but were very frustrated with their MIS department because

they were not part of the financial organization. By let's see, when was it? I came back

from the east coast at the end of 1970. By the end of '71 we had a lot of engineers using

our systems and we were going through a recession. When was the recession? It was '71,

I think it was '71; there was a major one in '74. I think we were entering one in '71, in

that time frame. Anyhow, the engineering budgets were under a lot of pressure, and by

that time SBC was in the marketplace and they were out there through the IBM sales

force, initially. They eventually wound up with who was it? They were acquired by debt.

Yost: Control Data.

Braniff: That's right, Control Data picked them up in some kind of a settlement deal.

Anyhow, IBM time-sharing, SBC, was selling to the departments in big companies, and I

knew something about that. So we decided that we had grown about as large as we were

going to get, selling to engineers, and to keep this thing going we had to expand. And

many of the companies whose engineers were using our computers were large

companies, so we had established ourselves as a good vender, good reputation, with a

good service. And we started calling on the finance and accounting departments, the

business planning departments, and marketing departments, and we found more people

that were unhappy with their access to computers. Maybe not as well versed in using or

writing programs, but by then BASIC was a very good language for business

applications, and we had our own version called Super BASIC, where we had a lot of

neat stuff that GE didn't have. So we really went after; and to do that we had to hire

salesmen and application consultants who understood what went on inside the personnel

department, or inside the finance department, or inside the marketing department of large

companies. And these were guys usually with MBAs. And they didn't have to be from

fancy schools. They had to know the lingo and they had to understand how a large

company operates. But the salesmen, the sales side, had to have some sales experience.

And by that time, we started to move some of our application engineers to sales because

we had the wherewithal to train. I started the first sales school in time-sharing while I was

back east. We organized and set up a sales school, using our sales managers as the

trainers, and even though the guys we were hiring were salespeople, we could teach them

how to sell our stuff with our own people. So we were building a sales force that could

sell to business at the department level, with people who we hired from the outside with

the right kind of experience to do that, and promoting also some of our application

consultants who could make the transition, and all we had to do was teach them how to

sell. They already knew the product, and they knew our culture and our style, and how to

get things done.

Yost: Were there formal mechanisms to make certain that the knowledge you needed

about customer needs was brought back into the corporation? You developed new

applications, and new services?

Braniff: Yes, that was done. In '71, when I became the vice president of marketing and

sales, I brought Gary Myers, who I mentioned before, who was the second salesman that

I hired, had spent a year selling and then went, when I was on the east coast, came back

to open our Washington, D.C. office. He spent about a year back there. When we

acquired Dial Data, they had an office there. We moved their manager in to run that

office, merge the two offices. We wanted to have some winners besides Tymshare guys.

And Gary came back out here to be the first vice president — he wasn't a vice president,

but he later became a vice president — he was the director of marketing. So Gary was the

beginning of a small marketing group whose job was to help funnel information from

what we were learning in the marketplace back into our engineering people. But our

engineering people were, at that point in time, were predominantly focused on making

these machines easier to use, and more cost effective, and more efficient, and support

more users. We didn't really get into application development for another three or four

years, actually building applications. We were focused on finding groups of employees in

large companies who may not, in some cases, even know that services like ours existed, or that we could do what we could do. So we had to kind of teach them what we could do and watch their eyes open up and then train them and support them, and help them become users, successful users of our system, and get larger budgets to spend more money doing more of what they were doing. So application development didn't really happen; I think, there were a couple stabs at application done independently by our technical people, but eventually it became clear that we had plenty that we could sell without investing in application stuff at that time.

Yost: Were there any customers where they needed or received technical assistance from the sales staff? Probably the sales force varied in [interrupted]

Braniff: Technical assistance of what kind?

Yost: With programming.

Braniff: Programming, yes. From the beginning to the end, a big part of our service and our benefit to our customers was to train them. And in the beginning, as I mentioned earlier, we focused on engineers and scientists who already knew how to write FORTRAN programs but they needed to learn how to use our FORTRAN. We had a conversational system. You could debug interactively and so they had to learn how to use our system, how to use our editor for editing programs and data. And so education and training was very, very important. That's how you built the revenue. You know, get your

foot in the door. The contract minimum in the beginning was like 90 bucks; 90 bucks a month, which was just, you know, a pittance. But to build the revenue, you had to train the hell out of the customers. Pardon me. Later on, as we got more into the business customers, selling business users, we had developed a line of modeling software, database management software, and higher level languages that our customers had to be taught to use. But that's after we moved from the engineering market into the business market, and that began to happen in '72, beginning of the '72 time frame.

Yost: And was that bundled in or was that billed separately?

Braniff: Yes, our pricing was based solely on how much time, and eventually, computing resources were used by the customer. That was our business model.

Yost: My understanding is that long before TYMNET was spun out as a business, a handful of networking customers and the Library of Medicine, was one that there were customers creating large databases.

Braniff: Yes, there were several.

Yost: . . . and at that time, was it the Tymshare sales force that helped with such application?

Braniff: No, we had somewhere around the mid-'70s, maybe as early as '74, we had a —

maybe it was '73 — we had a separate effort that reported directly to Tom, to get the

network services business started. And we did provide some leads from our time-sharing

sales organization but it wasn't a significant part of the process. They were breaking new

ground. So I think Tymshare probably had 50 million a year or so of revenue when

TYMNET was established as a Wholly Owned Subsidiary. I don't recall the situation

entirely but I think we were treading on the regulated world, regulated communications

world to some extent, so we had to be careful of what we were doing. Maybe careful is

the wrong word. I can't remember exactly how it was done, but it wasn't illegal. Tom

wouldn't do anything like that, and we were a public company. But as soon as we could,

we set up a subsidiary that was actually initially, I think, it was regulated. But not for

long because regulatory measures started to change in the mid-'70s. Warren would know,

[he] probably filled you in on that anyhow. They really started separately from time-

sharing, organizationally.

Yost: As you got to toward the mid-'70s, who were the primary competitors?

Braniff: By that time our two top competitors were GE and SBC, Service Bureau Corp.

They were everywhere we were geographically and they were more established, well-

known companies, high quality. There were a few; there were two or three time-sharing

companies. ComShare was in business and was a competitor. There was…what was it?

SDS? Not SDS. It was NCSS an IBM-based time-sharing company out of Connecticut.

Then there was CSC, was a sizable time-sharing company but they were focused largely

on the scientific community, which we had pretty much walked away from. I decided I really; with the sales force that I had in the early part of the '70s; and even though I had a lot of engineering customers, the revenue there was 10 or 12 million, and we were up to 50 and I wanted to get to a hundred. And it divided my sales force. You needed different kinds of sales people, different kinds of support people, so we just kind of maintained that base and we went on. In that world we ran head to head with Service Bureau Corporation and then eventually, not long after, with GE also. They were seen in the market the same way we were.

Yost: I think the actual transfer with the settlement between IBM and Control Data that occurred in 1972, when Service Bureau . . . [interrupted]

Braniff: Did it happen in '72?

Yost: . . . becomes part of CDC. Did you see this, for instance, later in the '70s, with (pause)

Braniff: How competitive they were?

Yost: How competitive they were.

Braniff: My recollection was — and I have a pretty clear recollection — I think they remained just as competitive. They were a very professional, well-trained, and well-

managed sales organization. Just speaking of them as a competitor. In fact, one of the first things I did when we decided we were going after the business market is I; a couple years before when I was a sales guy I kept running into a salesman on the peninsula here, his name was Steve Smith, and I tried to hire him. We were still a dinky little company and anybody inside IBM would, including his boss, didn't think we had long to live. But by '72 we were public, we had demonstrated that we could compete and win. I tracked Steve down and hired him because we needed someone who understood the market they were really going after. And also, we by then had our first IBM computer. We bought Allen-Babcock, was the time-sharing company that had a Model 50 with time-sharing operating system that Babcock had; I think he had originally worked for IBM. Anyhow, so I hired Steve as our first guy from the SBC, and that lead to eventually, we must have had 10 or 15 top notch salesmen from Service Bureau Corporation. I put Steve in a job to help our sales people around the country get trained in the kind of applications we wanted to go after and to get comfortable with the IBM time-sharing service that we were offering.

Yost: Were your sales staff being hired away by others?

Braniff: They were after ours, but I don't remember ever losing a salesman that was in the top half of our sales force to GE, or SBC, or ComShare, or that company in Connecticut. They did get some of our — I don't know if they even got more than a couple, three — but I'm sure they got a few salesmen from Tymshare. But they didn't get any of our good ones, or any of our sales managers. We didn't go after our competitor's

sales people, except I wanted to get more SBC guys into our sales force because we were on an IBM computer and we're going after I'll call it a commercial market, and that really helped.

Yost: And probably, once you get one or several, they tell their friends they like it.

Braniff: Right. And also, we had a big advantage, we always gave our salesmen stock options. We gave them compensation plans where they could make a helluva lot more money if they were really successful. By '72 we had quotas established for all of our salesmen, all of our sales manager. Tom had set things up and when I maintained his model for our sales, our manager, until 1980 or so, that our sales manager were paid based on a pro forma profit from there. So they were concerned about cost as well as revenue, but it was heavily weighted toward revenue. But they became businessmen, you know, in the process and some of those guys became regional managers who had much larger responsibilities. And some went on the start their own companies in the '80s. So we believed strongly in my philosophy, which was we promote from within. You come join us as a salesman, you do a great job, within two or three years you're going to be a sales manager and I can point to three regional managers that started as salesmen four years ago, five years ago. And I will always go with someone, if I have an opening or to fill a slot, I'll always go with someone who's demonstrated they can do the job they have now, and give them a shot — drop them off the dock, so to speak — before I'll go outside and hire some guy that, on paper, looks like he's God's gift to the sales force. And that's the way we operated. Every sales manager in our time-sharing operation from

the beginning to the end, had to have sold for Tymshare before he got a job as a sales

manager. One exception and that one happened to work out pretty well. [Laughs] But I

didn't make any others, and I lost a couple people over things like that, too.

Yost: In the 1970s, as the company really starts growing quickly and acquiring a number

of companies, including acquiring some companies that aren't just time-sharing

companies, can you talk about your knowledge of how Tom O'Rourke and the company

developed its strategy? Was it more planned strategy? Or more opportunistic?

Braniff: I think it was, to a large extent, opportunistic. But Tom's game plan was based

on the belief that the time-sharing business, *per se*, was to start with, the market was not,

you know, a huge market. It wasn't like 20 billion or so. It was a couple billion, maybe 3

billion depending on who you listened to. So we had to find other ways to grow. And

also, there were some big success stories in the computer services industry, of growth

through acquisition. Pick out a market you want to be in, buy a company that's a player,

and then build on it. Grow that business plus acquire competitors. If you have liquid

stock, a public company with stock, you have something pretty exciting to offer to the

entrepreneurs, and the people that are running the place that are always so important to

keep in most cases, not all but most. And so he was looking for niches where you could

execute that kind of a strategy. And he met a guy who was a fairly young guy at the time,

Bernie Goldstein, who had built a network of data centers. I think he had about 10 or 12

data centers. He was a small-scale ADP. His data centers were in secondary cities; ADP

was in all the big cities. And he had been in the computer services world long enough to

have a lot of contacts. He was a very sociable, very smart and interesting guy, so he had a lot of contacts. And he loved to do deals, so he became kind of our deal maker. We bought his company; he and another fellow named Al Eisenstat owned a company called United Data Centers. We acquired that company and it had 10 or 12 data center doing lots of things, different things, but if you took a look at where the revenue was really coming from and where there were what seemed to be good growth opportunities there was tax return processing stood right out. I mean, which exception, every one of the data centers was processing tax returns; they were also doing payrolls and payables, different accounting stuff. And they had their own software, but the single product they had that was in use in all the data centers was their tax return stuff. So when Tom decided to buy that business, we were all party to that but Tom was the leader who decided this was really what we wanted to do. But we all talked about it before we did it, and what we would need to do to really make the most out of that organizationally, and what our game plan would be. We set it up as part of a new division. We did a little reorganizing of the company into a couple of divisions. Mine was the Information Services Division. I promoted Bob Schwartz, my Eastern Regional Manager to run the Information Services Division. And we set up another division that I was responsible for, into which we began putting companies that we acquired that were in the data center services business. I mentioned Gary Myers before, the second guy I hired to sell back in '67 who had gone to Washington and opened that office, came back out as our marketing guy. I eventually moved him back out to run a region for the time-sharing business. When we set up that division I hired Gary to run what we called the Industry Services Division. And we acquired several companies that we put into that; and Gary's background was, I

mentioned he had an MBA from Stanford, and he was a sharp marketing guy and a very good sales executive; put that together and we started building our sales force, a separate sales force in that division to sell those services.

Yost: In the late 1970s, roughly what was the revenue mix of the divisions?

Braniff: That division, let's see, the Information Services Division, which was basically our original core business, by the end of the '70s was 100 million. And the Industry Services Division was around 70 million, something like that maybe 80. Is that right? Yes. By 1980, we were about a $300 million company. TYMNET was maybe 100 million, or maybe not quite 100 million. And the industry services, and the time-sharing business, the information services were pushing a couple hundred million. So they were both sizable businesses, in our world.

Yost: With all these acquisitions and different types of companies was it difficult to integrate?

Braniff: Yes. Culture integration became a challenge of something we needed to pay attention to, whereas in the beginning we were small enough that Tom's style and the culture that had evolved was uniform across. But we started buying companies, in the beginning they were time-sharing companies and those who wanted to stay; they loved the culture. It was fun and it was challenging, rewarding and interesting. But as we got into different kinds of businesses and they were larger chunks that we're bringing into

our culture, it became one of the management challenges that we had. Now, I would have to say that we did a pretty good job of that, for the most part; as well as I've seen it done. It was not so easy to do, but we were not so large that management was out of touch with the people that we brought in. I've had enough experience acquiring companies that often you hire people who say hey, Ron — I've been told this — Ron, you didn't hire me, you bought me. [Laughs] Especially if you got a pocketful of stock when you joined the company, suddenly you have a little financial wherewithal to say well, maybe I don't need this job after all, right? So we had some of that here from time to time. But I would say that the culture of Tymshare changed as we acquired more companies, but I think it changed because we became much larger and we were no longer a family, so to speak. We were; but until we were up to 200 million plus, we didn't have those kind of issues to deal with.

Yost: In the 1970s, obviously, Tymshare was doing a lot of things right in growing the business. Do any strategic missteps stand out and if so, what were those?

Braniff: I think, strategically, there were a couple of things. We made a large bet on PDP-10s in terms of database software development, which turned out; PDP-10 architecture, turned out to be a dead end, is my recollection. And the PDP-11 was a battle. I don't know. They were on two tracks inside of DEC, and the 11 was the long term winner; although DEC was not a long term winner. Well, it did pretty well over 20, 30 years — not knocking them at all. So we made a pretty sizable bet. We were developing a relational database system for the wrong machine. Should've been

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developing a relational database system for an IBM system. But, you know, I'm sure when we thought about that; people worried more about IBM than Larry Ellison ever worried about them [laughs] because he didn't worry about anything. So that was, I think that was something that hurt. I think on the sales and marketing side, I think the thing that in hindsight, for me, we should have done a better job of was really staying close to our very large customers on what was going on inside the companies as the PC technology started to get commercial, get into our world so we'd have had a better understanding what a threat that was to our time-sharing business, and reacted to it earlier than we did. And I'll take responsibility for part of that. We always prided ourselves in being a very customer oriented company. We bent over backwards for customers. We trained the hell out of them. But I think we could've been in better touch with the couple levels above the user level among our customer base to understand better, you know, how fast things were likely to change so we could've adapted more quickly. But I think to adapt our business model to a very different business model was a very real challenge. I don't know anybody that made that transition very well.

Yost: Were you active with ADAPSO? Were you able to sense what that trade association meant for the industry?

Braniff: I went to ADAPSO meetings but I was not real active in it. Tom was, I think he was …

Yost: He became president.

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Braniff: …the president of ADAPSO for a year or two, or more. So I didn't spend a lot of my time with ADAPSO. Maybe that's something I should've done more of. But Tom was the key guy and we had our engineering, our technical VP there that went to all the ADAPSO things. Laz Rakoczi was — what was his title? But he was basically our engineering vice president for several years; I think seven or eight years, something like that. So they were actively involved in ADAPSO. I went to some of the meetings, but not all of them.

Yost: At what point did the PC business start to really hurt?

Braniff: I think that it really started to become an issue for us around 1981.

Yost: So, with the IBM PC?

Braniff: Yes. IBM, right. And Macintosh wasn't a real issue, but it was around '81 when we started to lose some of our base, our revenue base, to desktop modeling, for example. I mean, we had customers that were using our system at, you know, an average cost of 30 bucks an hour, 40 bucks an hour per session for financial models that were enormous that they used in marketing, that they used in doing deals. They could, you know, model a company they wanted to buy and model their own company, and see what it would look like if the two companies were merged together, and you took these expenses out and blah blah. Anyhow, my point is that modeling was a source of a lot of revenue, some of

which — maybe not the larger models — but a lot of the modeling could easily move to desktop computers as their software became more robust and their horsepower became more robust, which happened pretty fast. That's just an example.

Yost: Were there larger companies that tried to take over, to acquire Tymshare?

Braniff: Tymshare? To my knowledge, there were companies that were looking at Tymshare. The only one that I recall that made an aggressive move to acquire the company was Wang. It did make an aggressive move that did have an effect in the marketplace for our stock. I remember that. And it was some (pause); who's the CEO of Cisco, came from that company; I just can't remember who it was. I think it was a word processing company in its early days. So, anyhow, that's the only one that I recall that I would call aggressive. Now, in the later part, when our company our profits had topped out, our earnings were under pressure, there were companies that were interested. I don't know of any that made an aggressive move; maybe something like that happened I don't know about. Tom may have been talking to companies, trying to do deal; I don't know. Until McDonnell Douglas came along. Tom resisted doing that, I know that, but eventually they prevailed. But I don't recall anybody aggressively going after us, other than Wang.

Yost: So that was more of a threat to the company that deal, at that time, with McDonnell Douglas?

Braniff: Eventually. Not initially, but we were struggling too, financially, the last years or so. Our time-sharing business had flattened out and was in modest decline; and our capital requirements to expand TYMNET were growing. We needed capital, and we had a cash cow. Our time-sharing business was a wonderful source of cash but it became clear as it flattened out that we couldn't rely on that to provide the financing that we needed, so to speak, for expanding TYMNET as fast as it needed to expand to compete. And so I think that was the basic crunch we were in. Warren probably could add to this, if hasn't already, he could add to that also.

Yost: Are there topics I haven't covered, questions I haven't asked that you think are important to understanding Tymshare and its history?

Braniff: Well let's see. Let's see. Internationally, we could talk a little bit about that. That became an important part of our business. It became important to our customers in United States that they have access outside the United States for various types of applications. And it became a source of earnings for us. So, early on . . . and I think as early as 1969 Tom was already thinking about it and may have started making some contacts in Western Europe. But in 1970, after we became a public company, and we were making money, he started an effort — and I think by that time he had brought into the company, Alden Heintz to help him with that, primarily, as well as a few other things — to develop a game plan in Western Europe. And Tom had decided, with I'm sure a lot of good advice, that a joint venture structure was the way to do it, where we didn't have to put in a lot of money but we could put in our technology. And there was a lot of

interest over there for that kind of an arrangement. So Tymshare had, eventually, within a year or two we had; Alden really led the effort to find the right companies to joint venture with to, and to get the ball rolling, when to get Tom involved, and put together a joint venture company initially in France, in Paris. The next one was in London, and the third one in Germany. I've forgotten where it was headquartered; it was outside of Frankfurt, I think.

Yost: Do you recall the names of the companies?

Braniff: Yes, well, let's see. The joint venture company in France was a wholly owned subsidiary of Crédit Lyonnais. And then in London, our joint venture partner was a wholly owned subsidiary of — what's the really large company that started out as a soap company, you know, back a couple hundred years ago they invented soap. It's an enormous company now; well, it was then. And then I remember the small one in Germany was called TaylorX. It was a computer services company that focused on business accounting processing for small/medium size companies. Anyhow, the English company was a combination of two companies; it was a double word name for the corporation. It'll come to me; I just can't remember off hand. It was a very, very large bank and a very, very large consumer goods company, but they each had wholly owned subsidiaries that were spinoffs. They were the original data processing departments for those big companies. They eventually were spun off and set up as companies to serve the marketplace, not just the parent. So they were backed up by big names, except for TaylorX, and Tymshare put in the technology in return for, I think, we had controlling

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equity in all three of them. We had more than 50 percent of the equity, and they put in the capital and the people to get the businesses started. And the business in France, the first to start, by the time Tymshare was sold I think that business was up to around 25 or 30 million a year, something like that, maybe more. I think the one in England was half that size, and in Germany half that size. But the one in France was the one that did quite well. Then along the way we started up a joint venture in Japan, and our partner there was one of the major, I've forgotten what its name was, too. I'm sorry, I just can't remember. So we had our services available in all those countries. Those customers used our computers wherever they were in the world, didn't matter. So we had computers in the United States that would be very quiet at night. It was night here, but in Japan, they would start coming on or maybe they were going off, I guess, and Europe would be going off when Japan was coming on, before we actually started to hit our stride mid-morning. So it was the right way to use our computer resources.

Yost: From the sales end, was there a systematic effort to sell the right mix to balance loads?

Braniff: No. You sold what you sold, and then you balanced the loads. But our operations guys were really great at that. They developed tools and intuition that enabled them to read how machines were behaving. They were actually, through some kind of metrics they develop themselves, could figure out how; if we moved this customer from that machine to this machine it'll be just the right fit. They knew how to do things like that and they learned it all themselves. So they were really good at that and they could

rebalance overnight, I think, eventually, overnight from anywhere in the world. I think they could shift data, couldn't they? Probably from one continent to another, overnight. Anyhow, if not overnight, over a weekend.

Yost: Among the mainframe firms, IBM through SBC, and CDC were competitors. Were there others among the frequently referred to as IBM and the Seven Dwarfs, or IBM and the bunch later on, Honeywell, Sperry-Univac, Burroughs? Did any of those companies develop significant time-sharing businesses?

Braniff: No, I wouldn't say they were significant. I don't think any of those got any; well, let's see; CDC had; my recollection is almost all of their customers were scientific and engineering customers with very, very large programs to be processed. That was a natural because CDC had these enormous machines and customers didn't need to buy them, they could go to a service-provided hub. I mentioned Computer Science Corp; they were similar although they had a lot of government business, too. They were big in government. We eventually had, maybe 25 percent of our revenue came from government. I'll bet CSC was 75 percent. But they did get to be sizable; I think they were 100 million plus. Honeywell, I don't recall any time-sharing service companies based on Honeywell. There were two or three, initially, that were based on CDC machines; some of that. What were they, 3200s? What were the; not the really big ones, but they had some mid-sized systems, as I recall. In fact, one of the guys that founded the company, I think it was in Wisconsin, George Grodahl, joined Tymshare after that company went bust. So I don't think there were any companies making money on those machines, on the

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CDC or the Honeywell — I'm sorry, on the CDC. Outside the scientific stuff, I don't think there was anybody making money.

Yost: One thing that I neglected to ask about was computer security and network security. How did that factor in; how did Tymshare compare and how secure was the network? Was that a selling point with customers and did you adjust to meet certain customer's needs? I don't know if you did any business with the Department of Defense, or the NSA, the requirements were substantial.

Braniff: We did do some business but we didn't; I don't recall ever running up against requirements that would've been necessary to do some of the black work, you know. So that was not an area we went after. But network security was not a major issue in the time-sharing business and it wasn't a large scale. But there were customers who were concerned about it and I think our TYMNET people did a very, very good job there. I recall the first time I ran into a network security problem and our TYMNET operations discovered that we had someone in our system breaking into files. And they figured out how to track that down and we actually found it was a very, very bright teenage kid who was the son of one of my largest customers. [Laughs] And his dad had gotten a terminal for him and a user name for him, and he was one of those kids; he figured out, you know, my job is to figure out how to break into this thing and show them how smart I am. And when we found out who it was, we had a talk with the father. But, we said, we want to hire your kid. [Laughs] We want him to show us how the hell he did this. And we did that several times that I know of. There may have been more going on than I was aware of.

Yost: Perhaps sending the wrong message. But actually, that happened a lot with former hackers getting hired by companies they had hacked into.

Braniff: Getting hired. Well, we were among the first to do that, I think. Maybe not the first, but we were right up there.

Yost: I think that . . .

Braniff: Pretty much cover it?

Yost: Yes, it does. Unless you have anything additional to add.

Braniff: No, I don't, offhand. Let's look at your first draft and maybe in the meantime, I can remember some of these names. But I'm really happy that you saw Warren, and if you can remember, shoot me his email address and I'll get ahold of him. If he's still playing tennis I'll get him up here to play a game. I play here every morning.

Yost: It's a beautiful facility [San Francisco Tennis Club, the site of the interview].

Braniff: Yes, it really is. We have 12 more courts on the roof. So a day like this, you know we don't have a lot of them like this that are great tennis days. Usually there's some wind out there.

Yost: That's great. I walked around the building and I saw a handful of tennis balls.

Braniff: Outside? [Laughs] They came off the roof. Yes. It's one of the great indoor facilities in the world.