An Interview with

OSCAR SCHACHTER

OH 389

Conducted by Thomas Haigh

on

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Abstract

After getting his law degree from Harvard, Oscar Schachter worked on international licensing agreements for a small law firm before going to work for Charles Lecht, the founder of ACT, an early professional services firm. Oscar describes Lecht's flamboyant personality and some of the unusual projects which ACT performed. ACT had an extensive logistics contract in Iran and Oscar tells about running this project in the Middle East. He talks about ACT's attempts to diversify and then its gradual business decline. He describes running Creative Socio-Medics and then returning to the general practice of law. Finally, he discusses his extensive activities within ADAPSO.

Preface

As part of the Software History Center's collection and preservation activities, and in conjunction with its meeting on the history of personal computer software held in Needham, MA, on May 7, 2004, the Software History Center (SHC) arranged for 14 oral histories to be conducted with computer software company founders and other key industry participants. All of these oral history interviews were conducted by historians well qualified by their knowledge and interest in computing history.

The following is a list of the people who were interviewed together with the name of their interviewer:

John Brackett and Doug Ross, interviewed by Michael Mahoney
Dan Bricklin and Bob Frankston, interviewed by Martin Campbell-Kelly
Dan Bricklin and Bob Frankston, interviewed by Paul Ceruzzi
Jerry Dreyer, interviewed by Thomas Haigh
Ben Dyer, interviewed by Nathan Ensmenger
Dan Fylstra, interviewed by Thomas Haigh
Gary Harpst, interviewed by Tim Bergin
John Imlay, interviewed by Bill Aspray
Luanne Johnson, interviewed by Janet Abbate
John Landry, interviewed by David Grier
Mike Maples, interviewed by Nathan Ensmenger
Seymour Rubinstein, interviewed by Jeffrey Yost
Jonathan Sachs, interviewed by Martin Campbell-Kelly
Oscar Schachter, interviewed by Thomas Haigh

Each interview was tape recorded, transcribed and edited by the SHC, the interviewer and the interviewee to ensure clarity and readability without changing the style or flow. The original tapes along with the edited transcripts were donated by SHC to the Charles Babbage Institute (CBI), which placed the edited transcripts on the CBI website and have archived the audio tapes.

On January 1, 2005 the Software History Center merged with the Computer History Museum, and its work is continuing as the Software Business History Committee as part of the Museum's activities (see www.softwarehistory.org).

Software History Center Oral History Program Oscar Schachter Interview

Thomas Haigh: This interview is taking place at the Sheraton-Needham Hotel on May 7, 2004 in Needham, Massachusetts. I am Thomas Haigh and I am interviewing Oscar Schachter. Oscar, I wonder if you could start off by saying something about your early life and background, particularly as it contributed to your entry into the Law and entry into the computer industry.

BACKGROUND and EDUCATION

Oscar Schachter: I grew up in Brooklyn, New York. I guess the Law was always part of my background because I grew up as an Orthodox Jew and went to Yeshiva through grade school, high school and college. Obviously, the Torah, which I studied extensively, was part of my regular daily course of study and basically it is a set of laws, and, in some way, it is a discussion of the laws that govern Orthodox life. I went to Yeshiva College and after graduating from Yeshiva, went to Harvard Law School. I had an interest in the Law from a fairly early period of time, though I was vacillating between becoming an historian and becoming a lawyer.

Haigh: What was your undergraduate major?

Schachter: My undergraduate major was actually History, with a minor in English Literature. After graduating from Harvard, I then went to work for a small law firm, where I worked for about a year and then worked for a corporation doing mostly international work. This was in the late 1950s, early nineteen-sixties. They were in the process of expanding overseas and establishing subsidiaries in England, Germany, and in the Benelux countries. I was involved with those arrangements and also involved with licensing agreements, between the parent company and the subsidiaries and a Swiss holding company. So, I got a lot of licensing experiencing in those early years working for this corporation.

In 1962, I met my next door neighbor, Charlie Lecht. We both lived in the same apartment building on West End Avenue in Manhattan. It was serendipitous, the way that we met. In New York, you can live next door to someone and not really know them. I had bought my first car, an Austin Healy. I had parked it on the street outside our building and was in the course of changing, or trying to change, a tire, which had gone flat overnight. I was taking a wing nut off the wheel and banging it with a lead mallet, with no success. Charlie Lecht was looking out on the street and happened to see me. He came out and offered to help and I said, "Sure. I've been at it for about half an hour with no success." We managed to get the wing nut off and changed the wheel, and we started talking and he mentioned that he had come down to New York from Rhode Island. He was starting a computer software company and he needed a lawyer to assist him. I sent him to a friend of mine who lived in the same building, another Harvard graduate, and Charlie came back to me about three weeks later and said, "Look, he's a nice guy, but we

just don't think on the same wavelength. Would you mind just helping me with this first endeavor?" This was to write a stockholders agreement between himself and some investors that he had got to help fund the software consulting business he was going into. I said, "Sure."

I did that work for him. He was a great salesman. His next question was, "Will you be on the Board with me?" The others were going to have three members and he was going to have two members. He needed a second member. He knew no one in New York and asked me to go on the Board. So, I did that. I didn't know anything about software. I didn't know anything about computers at that point. Still thought it was spelled with w-e-a-r, rather than w-a-r-e. But Charlie was a fascinating guy and it was very easy to become involved with the company, which I did over a period of three years.

ACT—INITIAL WORK

Haigh: What was the date of this initial meeting?

Schachter: The initial meeting was, I would say, in perhaps June or July of 1962.

Haigh: And within a couple of months, you were on the Board?

Schachter: Yes. Then Charlie kept on asking me to join the company and I said, "You're a company of 10 or 12 people. You really don't need a full-time lawyer. You don't really need a full-time financial person." I was very interested in finance as well. He said, "I need someone with some business experience." I kept on deferring until 1966 when I joined the company. It had grown to about 20 or so people by then. It was still located in the Plaza Hotel, on the top floor, which rented rooms to companies who were going into business, and I joined him full-time as VP of Finance and Administration. I was literally, except for a couple of secretaries, the only non-technical person in the company. Everyone else was technical.

Haigh: So, to backtrack slightly, what had been the origin of your interest in finance? Was that a common thing among the lawyers?

Schachter: Well, working for a corporation, you naturally get involved in financial matters, in particular, I was involved with a couple of acquisitions of other companies, so you are involved in looking at their financials, their balance sheets, things of that kind. And I had taken my first accounting course at Law School. There's a course they teach at Harvard, it's required accounting for lawyers, and I just found I had a natural interest in it.

Haigh: So, by the time you became a lawyer, you knew that you wanted to work in a business-related area.

Schachter: Exactly. Yes.

Haigh: The shift from being part of the law firm to working for ACT?

Schachter: I was actually working for the corporation directly, rather than through a law firm outside the corporation. We were what was called in-house counsel to the corporation. The corporation was unusual in that it tended to have its in-house lawyers do everything, you know, the whole nine yards rather than having a lot of in-house lawyers do the less interesting work while the interesting work went to an outside law firm. That wasn't the way this company worked.

Haigh: So, at the point that you did that, did you see that as marking a decisive shift in your career or did you think it would just be a temporary arrangement?

Schachter: Working for the corporation?

Haigh: Yes.

Schachter: Working for the corporation, I thought was in fact a career move that I would continue to do. The truth of the matter was, by 1966, I had done pretty much everything that I was likely to be doing in the corporation in terms of different kinds of work. I had traveled extensively overseas doing some joint ventures, one in England, one in Germany, one in Greece, and I was just looking for something more exciting to do. The software industry, as I had been involved with it over the four years that I knew Charlie, before I joined ACT, just looked like a very interesting area. It was clearly growing. It was something that I was very curious about. When he asked me to go in with him, finally, and I thought the company was stable enough at that point, I joined the company.

Haigh: So, really it was a gradual transition more than abrupt shift.

Schachter: Yes it was.

Haigh: Before you had met Charlie, had you ever even seen a computer before?

Schachter: I don't think so. I had probably seen punch card machines, but I had never seen a full-blown computer.

CHARLES LECHT

Haigh: Now, if we can shift gears slightly. I wonder if you can describe Lecht and the origins of the company as you understand them.

Schachter: Lecht was a fascinating character. He later became one of the really well-known gurus. He was a salesman par excellence. He was a great showman. He needed that to differentiate himself from the hundreds of other consulting companies that were being formed in the early nineteen-sixties in the computer industry. He was business-oriented in some ways but not in other ways. He was very fun-oriented and had a wonderful sense of humor. He loved to have fun. He loved to have bright people around him, and the company, well, its credo was to hire the brightest. There weren't very many computer scientists at the time. Charlie would, I guess be aware that people by that time had discovered, or perhaps he had discovered himself,

that those with a musical background, those with linguistic backgrounds, often made very good computer programmers, as did mathematicians. So, he would search for people in those areas. The company would train them to become programmers, while some of them already had that skill. It was very funny, when we moved into a big office building after moving out of the Plaza Hotel. There were a number of other early computer consulting companies in the new location. It was on 55th and Madison. Every time Charlie went up and down the elevators and saw someone carrying a deck of punch cards who did not work for ACT, he immediately offered them a job. We recruited a number of people that way. The other company was called Computer Applications, Inc.

Haigh: What had Lecht's own professional background been?

Schachter: He had, as he says in his own biography, been thrown out of high school three or four times. He went on to Purdue, where he got a BA and a Master's in mathematics. He then joined the Army and headed up an underground computer data center. It wasn't clear exactly which branch of the Army he had belonged to, but he was in charge of a rather sizable group of software developers and data processing people at this facility. When he got out, he didn't have much money. He decided to come to New York and to form a computer software consulting company. He found three engineers who were all on the faculty of Columbia University who were willing to stake him to help him start the company. As it turned out, he needed less than \$10,000 because he immediately started consulting for MIT Lincoln Labs. So the cash flow started at once to come into the company, but he needed someone to back him in the initial few months of running the company so he could buy office furniture, etc. These people did that. They wound up with 70% of the company and he had 30%. About two years later, we reversed that. We got them to agree that their contribution had been rather minimal and that his contribution had been rather extreme, and so they agreed to reverse the percentage ownership. He wound up as the 70% owner and they had the 30%. They had relatively little choice since he could have left and formed another company very easily, and it was really his reputation, his name at that point, that was gaining contracts for the company.

EARLY ACT PROJECTS

Haigh: Yes. What were these contracts for? I understand that the very first one was from Univac to work on a compiler.

Schachter: That was one of their early ones. I'm not sure if that was the first one, but it was certainly one of the very early ones. Most of them were in the system software or scientific software area. I remember we did a lot of work for MIT Lincoln Labs, for Mitre Corporation, which is another partially-owned MIT subsidiary that does a lot of work for the DOD. Then gradually, we started working for the computer manufacturers, for IBM, for Univac. Compilers became one of the early development endeavors within the company and later became really a mainstay of the company's business. We had a suite of compilers as products that we sold in the nineteen-seventies and eighties. So, following the contract with Univac in that area, there were contracts with Honeywell. There were contracts for system software, such as a tape operating system. We did the first tape operating system for the General Electric 400 some time in the late sixties, I believe, and other system software and scientific software work. We had a man

stationed the Pacific on a Pacific atoll called Kwajalein who was monitoring the U.S. missile shots in the Pacific, and Charlie loved really adventurous, leading edge kind of work. The Honeywell experience was an interesting one because it led us to our first overseas operation. Through the parent company in the United States, we were introduced to Honeywell SPA, their Italian subsidiary, and we established an office under a subsidiary called InterACT SPA in the late nineteen-sixties to service the needs of Honeywell SpA in Italy. They were in charge of developing some of the Honeywell computers and we developed compilers for them as well as operating systems.

Haigh: Would you say then, by the mid nineteen-sixties, that the core of the company was the production of system software that would be marketed by manufacturers with their hardware?

Schachter: That was certainly one of the cores. There were really a couple of others. The Army work was very important and so was that for the Defense Department. Some of that was in the compiler area, FORTRAN particularly for the Navy. We had started doing commercial application development for major corporations at that point in New York City. It was just such a natural market to develop commercial applications. There wasn't a lot of learning in that area at that point and not many people knew all that much about doing it - it was largely trial and error. We were one of the companies that went into it and we had a number of clients in New York - Union Carbide for example, United Airlines in Chicago was another and Shell Oil was a large client. So, we were doing a variety of development work. It was all in the area of software development of one kind or another.

Charlie, at that point, started becoming a consultant in the use of computer technology to major corporations. He published his first book, I think, in the late nineteen-sixties on programming documentation, which was a neglected field at that point, and he felt very strongly that documentation was as important as the code. He did one on project management because he felt that doing a project in an orderly way was very, very important. We tended to have a good reputation because I think we did our work in a way that a lot of other companies didn't. We were less hit and miss in our early days than others. Eventually, everyone became more standardized, became more careful about how they organized their projects, how they did their work. They wouldn't just sit down and program as was often done in the first days. They would write specifications and go over those with the client and get an agreed upon set of specifications and then start their programming work.

Haigh: Can you give me an example of projects that the company undertook early on in the application area?

Schachter: Yes. For Union Carbide, we did a major financial system. We were doing a system that basically was going to control all of their financials, starting with general ledger, accounts receivable, billing. It was a rather substantial system. With United Airlines, we were working on an airline reservation system. For Hoffman-LaRoche, we worked on marketing, developing programs which allowed them to have better tracking of the pharmaceuticals they were selling, where they were selling, what the markets were like. So, those were kind of typical of the projects they were doing. Monsanto was another client in St. Louis for financial systems..

It ran the gamut of just about any kind of system that people were starting to program, to put on computers that they thought would be useful in running their business, and we were willing to undertake this work. We were adventurous in that we didn't try to specialize in any particular area, but we did a wide range of applications. I think that was probably true of most consulting companies in those days. Very few of us turned away any work.

Haigh: Within the company, the same teams of programmers would be working on all these different kinds of projects?

Schachter: Well, there was a group of people who specialized in the compiler area. That was a unique set of programmers. Occasionally, they shifted over into the commercial area, but by and large they stayed in that area. There were people who were more adept, I think, at scientific programming, more mathematically oriented. They probably focused a bit on that. In the commercial applications area, people moved from one kind of system to another. It was felt that if you are a good programmer, if you can understand the customer needs, you can develop a reasonable program for what they needed. You didn't need any particular expertise in any particular area.

Haigh: So then there were really three groups that were reasonably distinct, the compiler writers, the other systems software people, and the application people.

Schachter: Yes. I would say that was in fact the case.

RECRUITING and MANAGING PEOPLE

Haigh: Would people for those three groups be recruited in the same way or did they come from different places?

Schachter: No. In those days, they were recruited pretty much in the same way. If we worked at a facility and we met someone whom we thought was very, very bright, if we talked to the client about hiring them, very frequently, people particularly who worked in the government area, said, "Fine, if you want to hire that person and it's not in the middle of a project, you can do that." We would hire from there. We would not hire from our commercial clients. We probably rarely asked them, except if the person approached us first, and then we would ask if it was all right for us to talk to the company, which we would do. Things were fairly loose in those days. Everyone was looking for people but people were much less rigid I think about owning their people. The other thing about the company was that we had a real, real focus on keeping people in place. Once they were hired, we kept them in place. Perhaps, at points, too much so because we also didn't fire anyone, even if there was a good reason to fire them, unless they did something really outrageous.

We had a very informal work environment, particularly for those days. I was the only one in the company who wore a tie to work every day, that was just part of me. There was one other person, Bill Lone, who joined the company and dressed in a more formal way. He had worked with Charlie at Lincoln Labs and was an elder statesman, so to speak, probably in his 50s at the time. No one else in the company dressed formally. It looked like the Internet companies did in the late

1990s. No one else wore a tie or a dress shirt, which were common in New York at the time, though less so certainly in technical companies. We allowed people to work the hours that they wanted. If they worked late into the night, which was very typical in those days for programmers, they would take the next day off if they wanted to. They just had to get their job done. How they did it, the hours they worked, was totally up to them. If they wanted to work on the weekends and take a Monday off, that was fine. There were two rules in the company. One, you had to tell us if you weren't coming into the office. The second rule was that you had to produce a weekly progress report that went to both the company and the client, which recorded your work against the project plan of the company. We were absolutely rigid in that regard. You filled out a time card each week, but your project report was an absolute necessity. If you didn't get that report in, you weren't going to get paid in the second week of the month; we paid twice a month. I think we were one of the early companies to develop that kind of a format. As Charlie would say, a client can get angry at us, but he can't be more than one week angry at us because we told him exactly where we were. The last section of the progress report was a problem section. If you were having a problem, if you were behind schedule, you had to tell the company and the client why you were in that position. It was interesting, even though he had an informal working environment, that most people didn't mind doing those progress report. There were some who did, usually more in the compiler area than in business applications. The business applications people somehow were more oriented to reporting. Eventually, everyone in the company did their weekly progress report.

Haigh: Do you feel that that culture was something that set the company apart from its competitors?

Schachter: I think it set it apart from some competitors. At the opposite end of the extreme, you had a company like EDS that was militarily rigid in its format. A lot of the other companies were more informal, but I think the informality with regard to work rules, and at the same time the formality with regard to project planning and doing the project, did set us apart from other companies in the field.

RELATIONSHIPS with LECHT

Haigh: How did your relationship with Lecht develop? Did his flamboyance have any effect on what it was like to work with him?

Schachter: Yes, it certainly did. We did things that probably I in a conservative business sense would not have done. We expanded more rapidly than I probably would have. He would fall in love with people. We had an office in England for a while. I don't think it ever made the annual reports because it was closed before we went public and he had an English secretary. This was another mark of distinction; there was an association of British secretaries in the United States at the time, and all of our secretaries came from there. They had these lovely English accents. I remember the first time Ann Williams, who was his secretary, had to set up a meeting for him to go up to IBM in Poughkeepsie. She called the train station to find out when the trains went to "Pufkipsie", and they didn't understand what she was talking about. Then there was the beginning of the trade show era. There was a COMDEX show, I guess. Was that on at that time? There was an annual computer trade show I think. . .

Haigh: The joint computer conference, perhaps? The Business -Equipment Manufacturers Association show?

Schachter: No. I think it was COMDEX. I think it was the beginning of COMDEX. I'm not sure, because it was more business-oriented and less technology oriented. One year, we got a copy of the IBM songbook, which was a set of songs that were sung by the IBM employees as they arrived to work early in the 1930s and perhaps even through the 1940s. We had a group of these English secretaries record it, got it pressed into a recording and gave it out at the trade show. It was a tremendous hit. He dressed in a very flamboyant way. He started out doing that because it was a way of being differentiated from all the other three-piece-suit guys who were arriving at IBM and Univac. It made them curious about him and about the company. But he continued doing that throughout his career. He would arrive at work sometimes in a jumpsuit with yellow suspenders and had a set of hats and canes that he loved to wear and use. His office was eventually completely wallpapered in silver square tiles, and he had his desk and conference table built out of the same material. He was very much a showman. Very much a showman.

Haigh: And you were more of a conservative influence on the company.

Schachter: I was kind of the governor, yes. The person who sat on Charlie, or tried to. He had a sense of when he was getting close to the precipice financially and not to step over that line, at least in those days. Later, it became more difficult to control his actions, in the late nineteen-seventies, early 1980s. We did a number of acquisitions in those early years. We acquired a very successful market research processing company called Informatab Corporation and we actually acquired his brother's printing corporation in Rhode Island. Charlie had this vision of writing and publishing books. He had a contract with McGraw-Hill to publish a couple of books, some of which were quite successful. We had a series of books on ALGOL, FORTRAN and COBOL and then eventually on Pascal, when that became prominent. We had this project management book, the documentation book, and later Charlie went into more philosophical and consulting types of books, or predictive kinds of books having to do with computer technology. One of them was called "The Waves of Change," the other was called "Tsunami."

GROWTH of ACT

Haigh: In the 1969 annual report, there's a chart showing the development of the firm. It shows the opening of a second consulting office in 1965, a third office in 1966, and then in 1967 the addition of a fourth consulting office and the first computer centers. That would be the acquisition of the Informatab firm, what did you say it was called?

Schachter: I think it was. It may have been the opening of a computer center in Phoenix. We had a large contingent of people in Phoenix because that's where General Electric was located and had a major facility. The General Electric computer business was eventually acquired by Honeywell. We had a great number of people there who were doing systems and compiler work for those companies. The office manager found someone who was running a service bureau for a bank, and the bank wanted to divest itself of that service bureau. It had an accounts receivable program. The bank was willing to have the service bureau continue doing work for the bank, and

so we acquired that service center. That may have been the first service center and Informatab may have been the second center, which was acquired in 1969, I think.

Haigh: And in the report, it is clearly designed to accentuate the diversification and growth that had occurred by 1969, at which point there were seven consulting offices, three computer centers, the publishing firm in Rhode Island and three educational facilities.

Schachter: Yes.

Haigh: Can you talk about that?

Schachter: Charlie was a great believer in diversification. He used to pride himself on being able to say about the company that it was a "supermarket of services for the computer industry," so regardless of what you needed, we were prepared to supply it. That was part of his nature and I suppose there's some grandiosity in it. On the other hand, there were times when it was certainly helpful from a business sense because it did diversify us into different areas and if one area was down, another area might be up. I think we probably overdid it. We probably went into too many areas and probably some that were difficult to enter, such as the education area, which was an entirely different field and we never really were successful in it. We carried it over to the Italian subsidiary, perhaps down to Washington, D.C., and it just never really caught on.

You know, there's a difference between diversification and lack of focus, and at times I think we probably didn't have enough focus going into a business rather than just diversifying into something that we knew about. In these businesses, in the early days, people were so anxious to buy anything in computer technology that, while I'm not saying that we sold things that were not valuable, but you could learn with the customer in terms of what you were doing. That started changing in the late sixties, early seventies. People became more sophisticated and there was less trial and error going on. You had to be more careful about what you undertook to do.

Haigh: So, you think in general the different businesses didn't reinforce each other in the way that you might have hoped?

Schachter: I don't think so. They turned out to be largely standalone businesses and didn't have a lot of commonality. There were companies that were just in the data center business. and others just in the consulting business. We were one of the rare companies, for example, that was in both of those businesses. There weren't many companies that were spanned both, and there certainly wouldn't have been any company that resembled our model of being in the publishing and educational business as well as those first two.

Haigh: What was the educational business? Was it training?

Schachter: It was training. It was training in computer technology, how to do projects. We tried to sell Union Carbide a course for their program development staff on how to organize a project, how to monitor it, how to bring it to completion, things of that kind. There were courses in the use of technology, the use of COBOL, the use of FORTRAN - it ran the gamut. There were companies that were specializing in each of those areas. It was hard to compete with them.

We also came into this in the late nineteen-sixties, early nineteen-seventies, when there was a downturn in business in the United States. There was a recession in the early nineteen-seventies. The stock market took a very deep tumble, technology companies particularly, a lot of whom had gone public in 1968 and 1969, as we did. So it was just a difficult business period.

NEW PEOPLE in ACT

Haigh: Okay. Before we move onto the nineteen-seventies, can you say something more about what this growth meant in terms of other key individuals who might have joined the company, in terms of overall staffing levels, and any particular challenges or problems that they posed.

Schachter: In terms of other people who joined the company, we hired a number of people; it was interesting and somewhat amusing that we hired a number of people from IBM. I'm going back now to 1966 and 1967. Charlie felt that if we brought some IBMers into the company, we would establish a somewhat different image as well. He was anxious to have both sides of the coin represented, both the playful side of the company and the business side of the company. As it turned out, the IBM people just didn't fit into the culture - many of them went on to form their own companies, but they just didn't fit into the culture of a small company. The first time one of them came in and wanted the secretary to Xerox something and the secretary said, "I am in the middle of doing this progress report," and he was astounded that the secretary would tell him to, in a sense, "Go Xerox it yourself!" Charlie and I were perfectly willing to Xerox our own stuff, to help a project if it had to be done, to get a project report out the door and would Xerox it for them. We did everything and everyone else in the company did everything. There were people who were designated Vice Presidents, but they were in fact technical people who sometimes managed projects, but everyone was expected to do whatever had to be done to make the company go. So, those people didn't tend to work out and there were two early arrivals who left.

Haigh: And they would have been working as project managers?

Schachter: No. They were hired as vice presidents. That was the motto in those days. If you were willing to leave your safe, secure job at IBM to join a new company that was still getting its feet on the ground, you wanted a position and a title. One of them went down to found the Washington, D.C., office for us. He was a gentleman by the name of Jim Sood who started that office in Washington, D.C., and was quite successful down there. He stayed for about three years but then found that the company's informal mode of organization just wasn't satisfactory for him. The other gentleman was named Bill Brown. He was there in the early days and left rather quickly. We hired someone from Union Carbide, Bill Hardin, who was in charge of one of the processing areas at Union Carbide, and he stayed for a number of years with us. But again, he was less formal than the IBMers, but it was just hard to get people from large corporations to adapt to ACT. I think they did adapt to a number of the other consulting companies and young companies at that time, but we were perhaps a shade more informal and a shade more playful than most of the other ones around.

ACT STAFFING

Haigh: So that's the key individuals part. How about the growth in overall staffing levels? Do you have any recollection of how that proceeded?

Schachter: I don't remember exactly. It's a shame. The later annual reports have the staffing levels, but the earlier ones don't. I know we were continually growing, particularly since we had businesses now at other locations. Those locations hired their own staff and grew as well. We had offices in Boston, Chicago and Phoenix. I would imagine we were in the 60 or 70 people range by early 1970. I'm just looking at our revenue to see if that would give me a possible clue. We were doing \$3,200,000 in revenue, so at that point probably \$50-60,000 might be average revenue per person, and some of these people were data processing people who would bear lower numbers, so I would guess about 60 people in 1970.

Haigh: Yes. Actually in the 1975 or 1976 annual report, it said there had been about 100 in the early 1970s. There's some kind of graph in one of the later reports that goes back that far.

Schachter: It grew very quickly. I'm looking at a 1970 report and certainly 1971, 1972. And then, of course, we went to Iran in 1973, and that resulted in a great number of additional staff because at the height, we had about 60 people in Iran. There's a fascinating story there if I can tell it.

Haigh: Slightly later, but I'll make sure you can tell it. So, the third part, this process of diversification and expansion, were there any particular problems that it posed from a managerial viewpoint?

Schachter: Yes, it posed one major problem that arose quite early. The companies we acquired as opposed to the offices we set up ourselves, namely Informatab and Rhode Island Lithograph, but less with Rhode Island because that was Charlie's brother, were charged an overhead fee by the parent company for services for handling the finance, the administration, etc. There started to be constant edginess with the subsidiaries with regard to the amount of the overhead fee. I don't think it was atypical, I think even the large corporations, their divisions and subsidiaries, they all go through the same allocation problems, but it became at some point later, not in the early days, somewhat more severe with the subsidiaries. That was one problem. The other problem was just the span of control. If you have five consulting offices, how do you make sure that they're all operating in the same way that you're used to operating. Some of them were headed by people who came out of the company. Others were headed by people who were hired into the company to set up those offices, and so they really didn't know all that much about how the company operated and what controls we had in terms of how we did projects, etc. So, that was a problem. Diversification generally in some of those areas was just beyond the reach of the company in terms of its expertise.

ACT GOES PUBLIC

Haigh: It appears that quite early on, the company went public.

Schachter: Yes. It went public in 1968. It was a time when a lot of software companies went public, and in a sense it was like the bubble at the end of the nineteen-nineties where there was

just a ground swell of going public. It certainly gave us the capital to expand into these other areas. We were profitable from the very beginning. We never had a down year until much later, and we had always been profitable, but there wasn't enough cash flow. There was a fair amount tied up in receivables, a fair amount tied up in work-in-progress and contracts where you couldn't do the billing yet but you had already done some of the work. So, we needed capital to expand and we decided to go public at that time.

We were one of the stars of the public era. We were brought out by a very reputable firm, Faulknar, Dawkins and Sullivan, who were known as a boutique, technology underwriter, and they put together a very significant underwriting group, people like Morgan Stanley, Merrill Lynch, etc., who were part of the group. They were the lead underwriter, and we went from \$7.50 per share to \$28.00 on the very first day of trading. We were mentioned in Barron's as an example of probably a bubble. I don't remember the article any more, but it was probably maybe the first mention of a bubble since South Seas and Tulip days. We were one of the companies that had a meteoric rise in the stock market as a result of technology being an up-and-coming area at the time, starting to be recognized by the public as a real growth area.

Haigh: Was it an over-the-counter stock?

Schachter: Yes. It was an over-the-counter stock, full over-the-counter stock, not bulletin board or anything like that. We had the balance sheet and the revenue and the profits to support being that kind of a company. Periodically, we toyed with the idea of being on one of the exchanges, but it never really made sense to undertake the expense and the reporting requirements for small companies such as that. We never felt that was warranted.

Haigh: A few years later when the technology bubble burst, did that have a practical impact on the company?

Schachter: Well, it had a profound effect on the stock. The stock at one point went down to \$1.00 a share from \$28.00. I was not sure if it was then, we went down to perhaps \$3.00 or \$4.00 a share when the bubble burst. But it was happening to all the other technology companies around. No one thought that much about it. We had a stock option plan and perhaps some employees were unhappy, but it was very different from the late nineteen-nineties in that regard. People were not focused on the stock nearly as much. That wasn't the major focus of the young people who worked in the company. Their focus was in the technology, doing interesting work. They didn't want to do boring work, but to have fun, and be in an atmosphere that allowed them to work and have fun at the same time.

Haigh: And were you able to use stock for any acquisitions?

Schachter: That's an interesting question. I'm not sure we did. Yes, I believe we did use it for the Informatab acquisition. Yes. We used stock for the acquisitions. We didn't use cash for the acquisitions. I'm quite certain of that.

Haigh: Those would all have been made before the crash?

Schachter: Before the bubble burst, right. I mentioned the subsidiaries' management problem before and the issue with allocations. The other problem would have been the fact that the stock had dropped substantially at that point. It didn't stay up at \$28.00 for very long. It went down to the low 20s and then down into the teens very quickly, so they didn't experience that \$28.00 to \$3.00 drop, but it was a substantial drop.

ACT as an INTERNATIONAL COMPANY

Haigh: Now, do you want to talk about international expansion and Iran?

Schachter: International expansion was the result of two things. One, it was the result of the fact that some of our major computer clients had offices overseas and wanted to have those overseas offices serviced, and it was a result of Charlie's love of travel. It was part of his adventurous spirit. Having offices overseas was part of the adventure but, at the same time, it had good business reasons. The Iran project resulted directly from that overseas expansion because Honeywell Italia was actually designated by the Shah as a supplier of computers to the Iranian government.. The story goes that IBM had 98% of the market in Iran at the time, in the early nineteen-seventies, as it did in most overseas markets. The Shah at that time was trying to have every American company donate 5% of its stock to the Pahlavi Foundation which would become a joint owner of the company stock with the company. Many American companies did that. IBM refused to do that. So the Shah decreed that starting in 1973, I think it was, the Armed Forces--he couldn't do this to the commercial area--and National Gendarmarie had to acquire non-IBM equipment; he set up a company through a friend of his, which was capitalized at about \$2,000,000 and gave them the franchise to import all Honeywell equipment into Iran. The government proceeded to give them multimillion-dollar contracts to work for the Air Force, the Army, the Navy and the Gendarmarie.

We were asked in 1973 whether we would be willing to do a logistics system for the Iranian Air Force. They had millions of parts, running from small electronic pieces to machine guns in the airplanes to major, major pieces of aircraft, on punch cards and storage bins. They had no idea what their inventory really was. As it turned out, it was far less than they thought it was, when we finally had computerized it. Honeywell SPA, their Italian subsidiary, for whom we were doing a fair amount of work in Milan at the time, asked us if we would be interested in working in Iran to do this logistics system which was going onto a Honeywell 600 computer. Charlie jumped at the opportunity. He went over first in September and then I flew over in October of 1973 to set up an office and to write a contract with ISIran, which was the name of the company that had the exclusive franchise for importing Honeywell computers and therefore was given all the contracts to do the software for the Honeywell computers. It was called Information Systems Iran, or ISIran, and I went there and spent two and a half weeks there writing the contract with ISIran and getting set up. It was about a \$3 million contract to start.

We found office space in Iran and thereafter, either Charlie or I were there almost on a monthly basis. I would go for two or three weeks at a time. I got the first contract written and signed in ten and a half days. In ISIran, the President was a young graduate of McGill University in Canada, a very, very wealthy young man who knew nothing about computer technology. I brought a secretary with me because I knew that was the only way I was going to get it done. It

was pre-PC days, so I couldn't do it myself. We may have brought over an IBM Selectric typewriter because we weren't sure what we would find there, and sat in the hotel room. We would do a draft and go back and she would type it during the evening hours and I would be back in his office the next morning to present him with the draft. He thought I would go away for a week or so and come back a week later. We got it done in two and a half weeks. When I left and he signed the contract, he said, "Schachter, I know you're a Harvard graduate and you think you've gotten this thing done quickly. Next time you come, even if it's just to extend this contract and one-page document, you'll be here a month." And it was absolutely the truth. In 1975, I guess, when I went back to extend the contract, I was there for a month because he just wouldn't see me, he delayed, etc. It turned out to be a two-page letter of intent to extend the contract, but he was good to his word.

It was an interesting adventure in Tehran. It was very profitable for the company. The prices we thought were very good. We hired ex-Air Force people who had worked for the logistics command service for the U.S. Air Force to do the actual inventory work at the 14 Air Force bases scattered around Iran. We had a couple of technical people, well, more than a couple. We probably had a team of five or six technical people over there, who were doing the programming for the inventory system. It was interesting work but at the same time very difficult working conditions, using this remote Air Force base. It turned out that there had been wholesale thievery in the inventory. They had told us, "You are going to find that the inventory is accurate to the punch cards at a 97% level." We found that it was probably at a 65% level. So, you had to hire an Iranian staff to actually go back and do the counting because the punch card records just could not be converted as being accurate; so they had to go back and count thousands of bins of parts in order to come up with a number for this inventory system. We were there through 1977. The contract was terminated in 1977.

Let me just talk a little bit more about Iran. Although we say we got a contract with the bank, it was a small contract to do some consulting work to do a study for them, otherwise we never got another single piece of work in Iran. The reason was quite simple. We decided when we were going in, we had heard that the government had demanded 5% from IBM to continue selling the computers there, and we were not going to engage in bribery. It was just known wholesale that throughout the Middle East it was certainly no different, although it may have been worse in some countries. We just didn't get work without bribing someone. We went out innocently at first. Then we realized there was a reason we weren't getting any work. People would ask us. A government official would say, "I'll give you this contract if you give me "X" number of dollars, deposited in my Swiss Bank Account." And we would say, "No." We were asked for bribes by the project managers who managed our projects within ISIran. I once went to the President to tell him that the project manager had asked us for a bribe, thinking that he would be outraged. He was not. He said, "Why don't you pay it?" I said, "Firstly, we don't pay bribes and secondly, why would you want us to pay him? He's supposed to be supervising our work." The response was "Im Noddery." Im Noddery means in Farsi, "it doesn't matter." And that was their general attitude. It didn't matter.

So, in 1977, we lost the contract to, of all people, Lockheed Corporation, which had a major presence in Iran. We don't know how they got the contract, but they managed to wrestle it away from us and we had to close the Tehran office. At the time we closed the office, they owed us

over \$1 million dollars. The Shah was not deposed until sometime in 1978, I think it was, or maybe even early 1979, when there was the Iranian Revolution. Between the time the contract was terminated and the time of the Revolution, we managed, through the good offices of Senator Javitz in New York- he was then the U.S. Senator from New York- and the State Department, to collect about \$650,000 of the million dollars. When the Revolution came, the U.S. froze all Iranian Government assets and they were held to pay the debts, firstly the debts of American companies that had been working for the Iranian government, and secondly they would go back to Iran. There was a tribunal in The Hague, which we attended, and we got every penny of our money at that tribunal. If we have time at the end, I'll tell you an interesting story about the tribunal.

Haigh: At its peak, roughly, what proportion of the company's overall business would Iran have accounted for?

Schachter: I would say probably in the area of 25% or so. It was a major, major piece of business. When we lost that business, it was a major blow. It was fortunately quickly replaced by our acquisition of a service center. Basically, it was an out-sourcing contract of the Canadian Caterpillar Company, and we were planning to use that as an office to do other work for other companies in British Columbia and in Edmonton, Calvary and Alberta. That was a fortunate replacement of the Iranian work and had, I think, just about as much revenue as the Iranian work.

Haigh: I imagine you found a rather different business culture in Canada.

Schachter: We did. For one thing we had difficulty doing the acquisition because Canada, at the time had, and may still have, an organization called FIRA, Foreign Investment Relations Agency or it may be Restrictions Agency. It could have been called relations, but it was actually restrictions. You could set up a wholly-owned subsidiary and not be subject to FIRA, but if you were acquiring a Canadian company, you were required after five years to find a Canadian partner who would acquire at least 49% of the company. So we went in knowing that it was going to be five years and then we would have to find someone to become our partner. Actually it was three years, but with good reason you could get an extension for another two years, and we got that extension. At the end of the day the Caterpillar Company, that was our main client, decided to buy the company back, and we gave up all of our ownership in the company. We didn't want to be 51% owners. Again, that was one of those situations where the overhead and the allocation of overhead became an issue in the early nineteen-eighties.

THE RECESSION of the EARLY 1970s

Haigh: So to jump back in time, you talked a little bit about the recession from 1970 through 1972 in terms of the effect on the stock price. Looking at the annual reports I also see that the profits turned into to losses and revenues were down sharply. It appears that some of the businesses were terminated.

Schachter: In the nineteen-seventies?

Haigh: In the 1970 annual report which of course is covering the year through March, it says that the performance was mixed, profits were down and that the Atlanta office was opened and that there was a facilities management contract.

Schachter: Right.

Haigh: Then in 1971 revenues were down sharply. There was a loss. In 1972 there was a smaller loss. There was a new plan for diversification, but the report also said that there some closed divisions and some businesses stopped taking work. Exactly which ones?

Schachter: I think a number of consulting offices closed, and we closed down the educational subsidiary. The consulting offices in Chicago and Atlanta were closed so that by 1973 we only had offices in New York, Washington, Phoenix and one overseas office in Italy. But the other consulting offices had been closed, and the educational business, which was a tremendous drain in the early nineteen-seventies, had been closed as well. I think by 1973 we were once again profitable.

Haigh: Yes. I should also mention in the 1973 report the creation of a new advanced timesharing application division is noted.

Schachter: Yes. That was described as a timesharing service, but really it was more of a consulting service. The companies that were setting up time sharing services within their corporations needed some help in setting these up and also perhaps in using computer power outside their corporation while they were setting it up. We were in that time sharing business for a period of time, but it never became a major part of the company.

Haigh: The 1970 report also mentions the beginnings of a facilities management business.

Schachter: We took over the computer facilities of a smallish company in New York called Butterick and were hoping to go into the business of managing facilities, but until we did the Canadian out-sourcing agreement, it really wasn't a major part of the company's business. I am not sure I could name another client that we did facilities management for other than the Butterick Company.

PERSONAL ROLE in ACT

Haigh: Did anything change about your personal role or your kind of day-to-day work through the nineteen-sixties and into the nineteen-seventies?

Schachter: I think I became more involved in the operations of the company. Tehran reported directly to me. The overseas offices at one point reported directly to me, and I just got more involved in the direct operations of the company, but in the overseas operations rather than the local operations which still continued to report to Charlie. That was a change. I enjoyed the operations. I think I had a fairly good relationship with the staff and with the clients we were

dealing with. I did a lot of international travel in those days. I was in Europe or in Iran just about once a month. I went overseas on a constant basis.

Haigh: Now how did the compiler business develop into the 1970s?

Schachter: It developed well. We started really doing the compilers on a work-for-hire basis, so to speak, on a consulting basis to the computer manufacturers. Then by 1975 or 1976 I think we were starting to recognize that perhaps we could sell them as products rather than continuously do them on a custom basis for computer manufacturers. As it turned out, of course, with every change in hardware a compiler needs to be modified. Basically it was a part product, part custom kind of sale, but it gave us entry into DEC and the mini-computers that started coming along at that point. Data General was a major client. So the compiler business was growing well and was usually profitable. We also got involved at that point in Defense Department contracts, particularly Air Force contracts, that required the use of a JOVIAL compiler which was a unique language that the Air Force used. No one else used it. Jules Schwartz wrote the first compiler. It was public domain. Jules Own Version . . .

Haigh: Of the International Algebraic Language, I think...

Schachter: Right, exactly. I am not sure whether we built our own JOVIAL compiler or acquired it but I think perhaps we took the public domain one and enhanced it. We started getting contracts. General Dynamics was probably our principal client, but then there were a number of other clients overseas, particularly British clients. BEA was a client, and other companies that did defense work. That was a true product, the JOVIAL compiler, because it was used for imbedded systems. Everyone could buy the same compiler and then just buy a different target for the output of the compiler for the imbedded chip, though a lot of the imbedded chips were the same. So that became a true product. We were able to sell them practically on a one off basis to other defense contractors once we had developed the principal compiler.

Haigh: Do you have a sense of roughly how many sold? Would that be a few dozen?

Schachter: I would guess roughly 20-30 sales overall at the end of the day.

PRODUCTS and OTHER SERVICES

Haigh: Now I saw mentioned in the 1969 annual report that HELP had been launched as a product, the Highly Extensive Language Processor.

Schachter: Right. Frankly the company, except for the JOVIAL compiler and to some extent with the other compilers and later the ADA compilers, never really had a successful product launch. We never really were successful. The products were, to a large degree, developed by development people, but they were really, in a sense thought up by development people rather than by someone who had a combined development and marketing role. They were not trivial to use, because the developers were extremely bright and just assumed that anyone who was going to be using their tools or their products was as bright as they were. Although we tried to competitively develop and sell products, we were not really successful even in the commercial

area. We had this package ARS1 and MARCAN which were more commercial applications but the company just didn't have a sense of merchandising and a marketing sense that was required to sell products as against consulting services. And it was frankly very early on. There were companies that were selling systems' products and later in the nineteen-seventies certainly companies started selling application products, but we were early in that space and just didn't have the merchandising and marketing sense that was required to really do that business well and expand it.

Haigh: So you had a sense that there was a potential market for packages but didn't really understand what it was necessary to do as a company to exploit it.

Schachter: Exactly. Charlie is one of the brightest people I have ever met, and he had a sense of what was coming in the computer industry and certainly wanted to take advantage of those things, but he was a consultant by heart and didn't have the marketing capability in that sense of building the marketing force and building the sales force that was required to sell this group of products.

Haigh: My impression is that a number of companies like accounting firms and computer consulting firms tried to go into private industry products in the early days, and I can't think of any of them that succeeded.

Schachter: No. That is true.

Haigh: So it was more of a general dynamic.

Schachter: Right.

Haigh: The 1972 annual report also mentions yet another new division for data input training and services, the advanced keyboarding system.

Schachter: It never amounted to much, perhaps six or seven people at a time. These were two guys who were data input experts in the newspaper area. They came to us with a number of contracts in the newspaper area. I can't remember why, but the technology changed and the need for those kinds of input devices changed as well in the newspaper area. They then tried to change that to a consulting business, training businesses or training large corporations who had large data input stats, but it just never really took off. It never really was successful. But Charlie was adventurous; he was willing to try anything once.

Haigh: It is worth mentioning at this point that back in those days the conglomerate model was rather more fashionable than it is today.

Schachter: Yes. Yes. It is true, but I am not sure it was that fashionable in the computer business. I am trying to think of other companies that had as wide spread a set of services as we were offering, perhaps two or three, but not five or six different services.

Haigh: Yes, particularly for the size of the overall revenue. Revenues reached 5 million dollars in 1974 by which point there was the services, the compilers, the keyboarding, training which had been abandoned, Iran was starting up. . .

Schachter: And there was the market research business. None of them was of a large enough size really. Informatab was always profitable. It had high margins. The printing company at the beginning was profitable and then turned unprofitable. It was probably too many businesses to be in at the same time.

Haigh: And did Informatab remain focused on the market research niche?

Schachter: Yes. They were totally focused. A fellow by the name of Lester Fensterheim ran it, and he was absolutely dedicated and focused and that was one of the reasons why it was so successful. He really knew that business well.

Haigh: So the big thing that I saw emerging later in the nineteen-seventies was Base Information Systems which appeared to be focused on developing software to be bundled with word processing systems.

Schachter: Yes. And I regard that as one of our worst failures in the sense that we had a real opportunity there, and we let it slip away. There were no word processing systems really around at that point and Wang was still off in the distance. We acquired a company called Base Information Systems which had some technology it had acquired from Exxon, which Ed Bright brought to the company. Because of our close relationship with Honeywell, who had just brought out a line of mini-computers, we developed a plan with them to produce a word processor for the Honeywell mini-computer series. I think it was the 200 series. And we were off and running. They funded part of the development, we funded part of the development, but we made one crucial error. The person in charge of the development was a very technical person, very bright, but he kept making the product more and more complicated, not an unusual thing. So in trying to market this the complexity of the development overcame the product. We were able to demo the product in the end, but just barely. It was too late by then. Wang had come into the picture in 1978 or so, and the product was just too complicated. It had been overbuilt. We could have built a simpler model and then enhanced it rather than trying to build the end product in one fell swoop. So it was unfortunate, because we were there at the point where I think we could have captured, with Honeywell, a major part of the market. Not by ourselves, but with Honeywell.

Haigh: And the product was called Ultratext?

Schachter: Ultratext. Right.

Haigh: So in the end did it ship at all?

Schachter: I don't think it shipped at all. It was demoed at a major trade show, but I don't think it ever shipped.

Haigh: Was that line of Honeywell a success in general?

Schachter: Yes. Yes it was. It was quite successful, and we had built some of the systems software for that product. Yes. It was a successful line.

Haigh: So with the failure of that product in 1978 was the Base division just closed down and were there later attempts?

Schachter: Yes.

Haigh: That was the end of that one?

Schachter: Yes.

MARKET CONSULTING

Haigh: The other new business that is mentioned as emerging around this time sounds like the beginning of a Gartner Group style, market analysis service.

Schachter: Right and that perhaps at its height had two or three people. It was never very successful. It did good work, I think, but because it was just a small part of the company, it just never got the focus that it needed. We just couldn't focus on as many businesses as we had. I think that was the story and there is a moral there someplace.

Haigh: And was Lecht becoming more prominent in the industry at that point?

Schachter: He was extremely prominent. He was recognized as a speaker. He was a regular contributor to ComputerWorld. The books were fairly popular, though his prediction that the coming war would be between IBM and AT&T turned to be inaccurate, but by and large, he was well regarded as a speaker and as a kind of guru in the industry.

Haigh: Now the last year for which I have seen the annual report was 1980. At that point there was 17 million in revenues. Although revenues had been growing in the late nineteen-seventies, margins had eroded substantially, so profits had rebounded somewhat but they were only \$300,000. It also talks about the emergence of new products at that point. A MIS, some more time sharing things and some compiler-related products, a Pascal based Fortran compiler which, introduced in 1980, had actually won the ICP million dollar award.

Schachter: Yes. The compiler business was always a good business for us. We were able to develop compilers well and able to sell them. They were, by and large, large sales. Compilers sold for \$250,000, so you didn't have to sell a lot of them to get to the million dollar mark. But that was really the only product that we had that was relatively successful, forgetting about Creative Socio-Medics which is still in existence, living a second life as a thirty million dollar company these days and highly profitable.

Haigh: And what did that do?

Schachter: Creative Socio-Medics was the medical systems division. They were focused on behavioral health care and had developed a system first for methadone maintenance health clinics and subsequently for mental health, mental retardation systems that were used by clinics, both inpatient and outpatient and by mental health hospitals where people went for lengthy stays.

BECOMING CEO

Haigh: So can you talk to the major developments in the nineteen-eighties? I understand that by 1983 you had become CEO.

Schachter: Yes. I guess at that point we had brought in a new investment banker. We acquired capital from a company in San Francisco, another technology boutique, called Birr Wilson and Company. They put a member on the board, Darryl Stanley, and I guess he just became unhappy with the way the company was being run. We were still chasing a lot of different businesses. We were in a lot of businesses. Charlie, as he was with people, he didn't like to let them go. He didn't like to close things down. It was an admission that an idea didn't work. We had done that in some cases, but there were still a lot of divisions and businesses that were not being run profitably, and he just refused really to change his mode of operation. So the inside board members joined with the Birr Wilson director to ask Charlie to leave. It was, of all the things I did in my entire business career, the most difficult thing I ever did, but I just felt the company was at severe risk of going bankrupt if we didn't really take a different position and a different posture.

Haigh: So was the company making actual losses at that point?

Schachter: Yes. Yes it was, and we were to some extent hiding the losses by deferring R&D development costs, which a lot of companies were doing, and by probably, though not purposely, over accruing on contracts which were two or three year contracts and not necessarily accruing on a conservative basis the revenue which had accrued from year one through year two. So I think you will see in the nineteen-eighties that there were some large write-offs both with regard to those contracts and with regard to deferred R&D development costs. When I became president, Darryl Stanley was CEO, I think until the following year, when we did a real housecleaning in terms of the businesses we were going to be in and of the balance sheet to get it into a reasonable state. In fact, we were profitable for the next number of years. We were profitable, I think, in 1982, 1983, 1984, and we were doing a lot of work at that point for Chemical Bank in New York. We had a major project, the first home banking system, to allow people to get on line and check their accounts and pay their bills on line. Unfortunately, the terminals were too expensive. It was before the days when you could use a PC for that purpose, and PCs were far too expensive, so they were thinking of a timeshare terminal system, but it turned out to be just before its time. It was ahead of its time. I remember we gave demos to bankers and their first question was, "Well, how is the customer going to get the cash out of the terminal?" So we were starting with an audience that was not in tuned with computer technology in the home. No one was at that point.

Haigh: Did the compiler business hold up?

Schachter: The compiler business held up, though it was becoming more and more difficult. At that point, you know, IBM and DEC and Data General were becoming so dominant that fewer and fewer new machines were coming along. As the PC market came out with a common chip set, the number of new compilers that were needed and had to be developed was severely restricted and reduced. The Defense Department work continued well through the nineteen-eighties, using JOVIAL, and then we acquired an ADA compiler from a Danish company on a license royalty arrangement, and that was fairly successful. We sold a number of those to defense contractors. At one point we had 17 or 18 major defense contractors in the United States that were using our compilers. So that business held up, but the Informatab business disappeared, because the person who ran it became very unhappy and very dissatisfied with the company. Actually when Charlie was still there in the very late nineteen-seventies or early nineteen-eighties, he left and took his business with him.

Haigh: Yes, I have a name for him from that report. Is that Lester Fensterheim?

LOSSES in the 1980s

Right. So we lost that fairly profitable business, and we had to sell off the Schachter: Canadian business, so we were profitable for a period of years in the early to mid nineteeneighties after Charlie left, but then by 1987 we had again become unprofitable, because the compiler business just couldn't sustain the level of revenue that it needed. We entered into a joint venture with a company called LSI Logic, a chip manufacturing company, with the idea of developing a really advanced new product that allowed you to simulate the hardware and the software environment at the same time. What typically happened in the development of new chip sets was that it had to be developed and then the software could be developed once the chip set was stable. The idea here was to develop a software package that would allow you to simulate the chip set and then simulate the software environment so that you could start developing your applications early in the process of developing the new chip set. It never really worked. It was before its time. It was a great idea. I think later companies developed systems that did in fact come close to doing that. So the venture lasted for about a year and a half with LSI Logic. They wanted out. One person at IBM got very excited about the idea and they decided to take a position in this subsidiary, which LSI owned part of, and we got some funding from PrudentialBache and set up a funding mechanism at the time. We tried to continue to develop the product. IBM at that point was investing in a lot of small companies, but once the patron at IBM left, (there was a huge turnover at IBM in the late nineteen-eighties), that was the end of the project. You were lost in the morass of this huge giant. So that happened, plus the product wasn't really showing itself to be a feasible product at that point, and so we had to close down that division.

CREATIVE SOCIO-MEDICS

The only real remaining operation of ACT- this is 1988- was Creative Socio-Medics which was a 5 million dollar company. It had some problems, and in 1989 I went over to aid that company which was located out in Islip, Long Island. It was the only remaining asset that ACT really had. We had debts. We didn't have any assets except Creative Socio-Medics, and it was doing okay, losing some money, making some money some years, but not in great shape. Eventually, in the

mid nineteen-nineties it was sold. ACT took the money that was paid to it for the sale of Creative Socio-Medics, paid off all its bank notes, paid off all its debtors, not 100% on the dollar but some reasonable amount, and so we faded into the distance. We just faded away. We never dissolved. We never declared bankruptcy. Well, I guess we are dissolved because New York State doesn't recognize a corporation that doesn't file annual reports after a period of years, but we just kind of faded away. Creative went through a series of transformations. I left in 1992 after running it for three years and went back into the practice of law.

They hired a successive number of people and then what happened at the point when I joined it was that the CEO of Creative, who was one of the two original founders and the chief sales person, had contracted a rather severe case of cancer and took a leave of absence. In a one out of a million miracles, he was able to return about two and a half years later to resume being the president of the company. His partner, who was also one of the founders, is still with CSM. He just retired in April, John Phillips. At that point the company was out on Long Island, out in Islip. I was going through a divorce. I wanted to stay in New York, and for personal reasons it became very difficult, and I wasn't really the right person to head the company at that point. They needed someone who understood that marketplace, who was more sales oriented than I was. I got them out of a series of major problems. They were facing 3 or 4 lawsuits from major states when I joined, and I managed to get all of those resolved without our being sued and retaining them as clients.

So in 1992 I went back into the practice of law. That company is still a major client of mine, Creative Socio-Medics. One other client is actually larger than Creative Socio-Medics, but I only do the intellectual property work for that company, the licensing and intellectual property relations and contracts, things of that sort. Most of my other clients are much smaller companies in the 4, 5 or 6 million dollar range for whom I do private work, in some cases all the legal work and in other cases just the intellectual property work.

Haigh: Have you been enjoying the return to law?

Schachter: I have. It has given me a lot more freedom. It is not 9:00-5:00 or 9:00 to whatever. The hours those three years at Creative were horrendous. At this point I am not looking for any new clients, so I am able to do the work that I want. We bought an apartment in Paris, and we go there for four months of the year. With the advent of the Internet I can travel and service my clients. I haven't lost a client because I am not in the United States at any particular point, so it has worked out rather well.

ADAPSO

Haigh: The other thing I did want to ask you about is your role within ADAPSO.

Schachter: I had ACT join ADAPSO in 1972. I was oriented towards the industry and I really liked it. Charlie, on the other hand, was more of a loner. He wasn't interested in ADAPSO, never really attended any meetings, so I was the company's representative to ADAPSO. Sometime in 1975 I was asked to assume the role of chairman of the committee that was established to interface the industry with IBM. I think it was originally called the IBM Interface

Committee and then it became the IBM Relations Committee. There were a number of problems that existed between IBM and particularly the application companies that were starting to come to the fore in the mid to late nineteen-seventies and who were members of ADAPSO. Some of the early ones, like ADR, were selling systems products in competition with IBM. Actually it was more the systems companies than the applications companies who were having battles with IBM.

Those battles related largely to two areas. First, IBM's preannouncement of a product that it was going to have in six months and then came out a year later or a year and a half later which kind of froze the market place for competing products of the same kind. Second, another major issue was the fact that IBM developers of systems software had a leg-up, it was felt, on outside systems software developers in the vendor companies. This was because they had access to information about an upcoming series, let's say the 360 series, the 370 series, new architectures, new devices, well before the rest of the industry knew about those things and certainly well before the industry had interfaces that were available. The interfaces too, I guess, were another issue, because at some point IBM decided not to make its interfaces available to the independent software companies. That raised a huge ruckus because, without those interfaces, the independent software companies couldn't develop their own software.

Haigh: Do you feel that ADAPSO had any success in changing IBM's position on these issues?

Schachter: I believe they did. I believe they probably stopped it from going further for one thing, from IBM taking more egregious steps in the eyes of the industry, and in some instances were able to establish some ground rules. IBM claimed to have set up a Chinese wall between their systems software developers and their hardware developers, so that they didn't have advance notice. This is similar to the problem that Microsoft is facing, has faced in the nineteennineties, with independent software developers, such as spreadsheets and word processors, what ever, with regard to availability of interfaces, as to when they are available within Microsoft, and when they are available outside of Microsoft. They were better about making interfaces available.

What happened, I am remembering now, was that the industry had a lot of access to IBM source code in their early days, and they put a lock on that, and with the source code went the ability to develop the interfaces as well. Their argument was that they didn't want to have software companies grazing, that is the word they used, through their source code to see where there were areas where the independent companies could develop additional tools and additional systems software to sell to the general marketplace. It wasn't overwhelmingly successful, but I believe it was somewhat successful in slowing them down and making them recognize that there was an independent software industry out there, and they couldn't just trample it. Whether advertently or inadvertently, they couldn't just trample it.

Haigh: Now aside from the industry 'as a whole' issues, what kind of direct benefits or insights do you think you gained for ACT from participation in ADAPSO?

Schachter: Well, I was sitting at meetings with a group of extremely bright and, in some cases, very successful executives, and just the ability to talk to them, to network with them was extremely important, extremely valuable. In addition, there were a number of issues that were raised, such as accounting issues which I got involved in, that were generally beneficial to the industry. We were able to lobby for rules that were helpful to the industry generally and therefore, of course, helpful to ACT.

Haigh: In the nineteen-seventies and nineteen-eighties ADAPSO's structure was sectional. Technically you had a timesharing business that was one section and a data center business which was another section, but from what you said it sounds as if you would have been primarily active in the Software Products section.

Schachter: I started out being active in the Consulting section and then moved over, not to the Software Products. It was when they set up a separate Software Division that I moved over to that, as it encompassed both the consulting and products.

Haigh: So that is what would have been called then the Software Industry Association?

Schachter: Yes. It started as largely a product orientation, but I am quite sure it also included the software consulting business of a kind that ACT did. I need to check that. I am not 100% sure.

Haigh: I believe that at least during the 1970s it did. Services firms would by and large have found their homes within that section.

Schachter: Right.

Haigh: So were you active just primarily within that section?

Schachter: Yes. I was on the board of ADAPSO as well, but in terms of my activities, the kind of substantive activities, they were all within that section.

Haigh: You had mentioned that at some point, I think, during the 1980s that you served as president of the section.

Schachter: Yes. I think, perhaps, it was 1989-90, someplace in that timeframe. I served for two years, and it was fun. We still had some IBM issues but those, to some extent, had been ameliorated at that point. There were always accounting issues. I am not really remembering the other issues that we covered in that section or what were the hot issues at that point. Microsoft was just coming along. They joined ADAPSO and were members of that section as were most of the mainframe software product companies.

Haigh: Can you remember any specific business idea or insight that you gained from participating in meetings with these different successful executives?

Schachter: I am sure there were. I am trying to think of something that strikes me immediately. Let me think about that. I am sure there were, but none strikes me immediately.

GENERAL COMMENTS

Haigh: Okay. Let me ask a general question then. As you have been talking, you have been implying that you do have some regrets about the way that the company went and that you do feel that the extreme diversification was a mistake. If you were able to go back and do it again, what would you have done differently?

I probably would have stuck more to the consulting business and not tried to build **Schachter:** products in those early days. I think it was just too difficult, and we did not have the right kind of sales force to sell products in any event. You have to build a marketing team to sell products. You have to have marketing materials. You have to have sales people out there in the field, and we just never hired anyone who could put together that kind of a team of people experienced in doing that. I certainly wouldn't have diversified to the extent that we did and into all of these different businesses. Perhaps the processing service business and the consulting business were two businesses, and they have some natural links. In Phoenix we did have other clients for the service center for whom we developed applications, and so there was some interplay between those two areas. Education was just far removed. The industry Gartner market research kind of thing was just not of substance enough to make us into a company. And probably the other thing, if I was going to develop products, I would start in a different way. We started from the bottom up. The developer had a bright idea and would convince management to spend funds to develop a particular product without our really knowing if there was a market for that product, and without our making sure that the product was built in a way that if there was a market, it would be usable by the market, and it would be not too difficult, not too complicated to use. My biggest regret is with the Ultratext system.

Haigh: Do you think that if less ambitious products had been brought to market quicker that that could have been a successful business?

Schachter: I really think so. I think the first Wang products that came to the market which captured so much of the market eventually were rather simple. It did what was necessary that a word processor could do, without a lot of fancy bells or whistles. They added the fancy bells and whistles afterwards rather than trying to build it in the beginning. Building a complicated software product, even today, is a difficult job, very difficult and requires a lot of time.

Haigh: Those are the areas that I had earmarked for discussion. If there is anything else that you would like to say before we wrap up, then now would be the time.

Schachter: I thoroughly enjoyed being part of this group. They were a group of really bright people. That was the basis on which we hired people. There were a lot of very bright people, obviously, in the data processing industry then and today. It was a fun company to work for, and part of the fun was the fact that it was adventurous in terms of its overseas work. We had an office in France, as well as servicing Honeywell in Italy and in Iran I can't say that I regret having joined the software industry, certainly, it has been a lot more fun, I think, than almost anything I could have done working for a large corporation or even for a law firm. I don't regret,

certainly, by any means, joining ACT. I am just sorry we weren't more successful than it turned out we were.

Haigh: Well, thank you.

Schachter: You are very welcome.