



Oral History of Burton Grad: Burton Grad Associates, Inc.

Interviewed by:
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Burton Grad: Burton Grad Associates, Inc.

Conducted by Software Industry Special Interest Group

Abstract: Burt Grad describes starting Burton Grad Associates, Inc. in 1978. It was his consulting practice for software and services companies after leaving IBM. During his work as an IBM representative to ADAPSO, he had met many of the leading entrepreneurs in the industry and was able to build a practice providing strategic planning and organizational consulting to those companies. This was then changed into a business which focused more on company valuations for tax purposes and then became most heavily involved in due diligence studies for companies buying other companies in the industry. Informatics, Sterling Software (and later Sterling Commerce) along with AGS Computers were among the most significant of the more than 200 clients for the company over a 30-year period. With the gradual drop in mainframe computers and the growth of minicomputers and then microcomputers, the contacts that had been built up through ADAPSO were of less significance and the size of the consulting practice diminished. And eventually the consulting business basically faded away.

Doug Jerger: Good morning. I'm Doug Jerger and I'm interviewing Burton Grad as part of the Software Industry Special Interest Group's Oral History Project. It's December 17, 2008 and we are at Burt's home in Westport, Connecticut. Burt, I'd like to start out by asking you to share with us your experiences at Burton Grad Associates Inc. which we will call BGAI along the way.

Starting BGAI

Burton Grad: Well the beginning of BGAI was in 1978. I had been with IBM for almost 18 years at that point and had thoroughly enjoyed the experience. IBM was a great employer and a great company to work for, but things were not developing quite the way I was hoping at that stage. There had been a big reduction in the size of the software development operations. The software products area was not maturing very well and it wasn't very profitable for IBM. They didn't know how to market application programs successfully and that's where the market was going. And the profitable systems programs had been moved out of the Data Processing Division. The system software products that we had been working on were transferred into the product divisions --- where they should have been in the first place. In 1977, I was actually working at IBM Research in Yorktown Heights, NY. I enjoyed that very much but it was a limited assignment.

I was offered some other jobs within IBM and I looked at these alternatives and I decided that they were not going to be in the mainstream of what was going on in the software industry. A lot of new stuff was happening and because I had been very active in the trade association, ADAPSO, since about 1970-1971, I knew all the software products companies quite well. And I also knew many people in software professional services and processing services through the trade association. There was a lot of excitement in those areas. And I thought I'd have more fun and be more in the mainstream if I got involved with those people.

So I decided to leave IBM and to start my own consulting practice. I had some models of people who had done reasonably well in the consulting field. Carl Machover had built a very strong practice in the computer graphics field and I thought I could sort of emulate what he had done by setting up a small practice using professional people who had skills in particular areas as I needed them. In other words, I didn't plan to build up a staff of employees, but rather to bring in other consultants to help me in the areas where I didn't have useful knowledge -- and there were plenty of those. So in January of 1978, I actually incorporated three different companies. One was Burton Grad Associates Inc., which I used for my primary consulting practice. I also incorporated 2 other companies because I thought I might use them for other business areas. One was named Heights Information Technology Services and the other was Castle Systems. The names came from the street that I was living on, Castle Heights Avenue.

I started my own consulting practice as BGAI on February 1, 1978. I set up an office in White Plains where, incidentally, Carl Machover was located. I had a single office. I must have had a secretary to start with, at least on a part-time basis, but I don't recall the details at this time. The first thing I did was attend a meeting of a bunch of software products companies who were very unhappy with IBM. Marty Goetz and Larry Welke organized a meeting in Chicago at O'Hare Airport on February first of 1978. I had told Larry what I was doing, but I hadn't told anybody else. I had no clients when I left IBM. I made no approaches to any companies or anything. So I went out without any support, but I did attend that meeting as a guest of Larry's, and of course when I came into the meeting, Marty Goetz was somewhat unhappy: "What is this IBMer doing here?" We played that card for maybe about five minutes until finally I said I was no longer with IBM and that I was there as a consultant.

When the meeting ended around three o'clock, Bruce Coleman, who at that time was the president of Boole & Babbage, said, "I didn't know you were leaving IBM. But if you have a few minutes let's go and talk." So we went to his hotel room and we talked for about two hours about the problems he had at Boole & Babbage. The things that he needed to have done included reorganization, strategy and business structure. He asked if I'd be willing to help him do that. I had worked with Bruce extensively at ADAPSO when he was the Chair of the Software Industry Association, or the Software Industry Section I think it was called. So by the end of that first day I had my first contract. Bruce asked me if I'd come out to their California

offices and spend the time needed to do a complete organizational study of Boole & Babbage. That was my first project.

Jerger: How long were you with IBM? When did you start working with ADAPSO?

Grad: I had joined IBM in 1960 and I became a member of ADAPSO as an IBM representative in 1970-1971

Jerger: I remember my company joined ADAPSO in about 1970 and I remember from the beginning that Burt Grad was around somewhere.

Grad: I was invited to join ADAPSO by Bill Lynch from SBC who had been IBM's representative for the service bureaus. Bill was one of the founding members of ADAPSO back in 1960; he's the one who had suggested that after unbundling software and other services, IBM then had its own software products so it should have a software representative in ADAPSO. I was one of the four software products directors, each of which had a set of industries and he thought this would be a good assignment for me. He felt that I would enjoy it and help IBM. One goal was to prevent the independent software companies from supporting the US government in its suit against IBM, and to try to prevent ADAPSO from taking strong anti-IBM positions. Later on the objective was modified so that a lot of my focus -- and this ties in with my later consulting work -- was to try and get these companies to support IBM hardware products, rather than supporting Univac and Honeywell and the other computer manufacturers, since the more they could provide application software for IBM computers the better for IBM. And that developed even more over time. IBM initially was very reluctant to have software products competition. But as IBM wasn't very successful in marketing application products themselves, yet they wanted the applications running on IBM mainframes, this approach would help expand the market. And so part of my role in ADAPSO was to help to make that connection.

Jerger: Yes, I didn't mean to sidetrack you from BGAI.

Grad: No, but the point is that the ADAPSO experience was what led to my thinking that I could function as a consultant since the software executives knew that I knew IBM and I could help them understand IBM's strategy and direction. I could help them to make the connections, and to help them strategize where they could go to take advantage of what IBM was doing or planned to do. Certainly, for the first five to eight years with BGAI, I think some of my clients clearly came in because they wanted to take advantage of my IBM knowledge and IBM contacts. I was very clear from the beginning that my client list was the independent software companies. And when I use the term "software" I'm using the broader definition to include professional services and processing services. But certainly the focus initially was on

the software products companies. This was the area I had been in, and this was the area which I knew the best and where I thought that I could be the most helpful.

Boole & Babbage

The Boole & Babbage study was a wonderful project. They were located in Silicon Valley. It was a company with one major investor: a fellow named Pitch Johnson who basically owned the company. It was a privately held company and it originally had been called Katch and Kolence, the names of the two guys who started the company. The name was changed when the two of them left the company. They had products mostly in the systems utilities field, and as in so many small companies, it was somewhat dysfunctional. The development process was not well-defined, the marketing process wasn't well-structured, the measurements of how things should be done, the financial planning, all of these things were somewhat in disarray. Bruce had been brought in to make the changes needed to make this a well functioning company. Pitch had been very much a pure entrepreneur and wasn't really a company manager. And so I must have interviewed 30, 40, 50 people in the company. I talked to almost everybody there.

Jerger: That's about the size of the company probably then, right?

Grad: Yes. I interviewed them all. I tried to make contacts, make friends. I was out there for maybe two weeks. It was fairly lengthy. Then I went back out again. I wrote a very lengthy report probably in an IBM style, covering area by area what I felt should be done and how it could be done. I had some presentation meetings with the people there, debating with them, what they had been doing, why they could be doing things differently, how they could transition from what they had been doing to the new modes of operation. And it was really quite a successful project. What was interesting was that this took place over about maybe a two-month period.

Informatics

My second client was Informatics. Frank Wagner of Informatics was someone I knew through ADAPSO and I think that I also knew Werner Frank from Informatics at that time. Walter Bauer was the CEO/President of the company, I but he was not active in ADAPSO so he was not someone I knew. Coincidentally, about 6 after I started projects for Informatics, Bruce Coleman was offered the presidency of Informatics, a far, far bigger company than Boole & Babbage. He ended up taking it, and with him gone, I lost my first client very quickly.

But fortunately, right after my Boole & Babbage assignment, Frank invited me to come look at one of their divisions to see if I could help by reviewing their development plans and strategy. My initial work was primarily strategic planning and organizational planning. This is what my

strength was. People who knew me from ADAPSO knew that I could organize things, structure things, and that I had been involved in a wide range of software areas in IBM. But I still think that one of the reasons that I got my initial assignments was because the view was that I knew IBM, and these companies were all fundamentally supporting IBM equipment or doing things with IBM. They felt that that was where the market was and they were right. IBM had 70 percent of market or whatever their share was. And certainly the mainframe world by the end of the 1970s was totally dominated by IBM. The other players were relatively few and they were relatively weak. So Informatics turned out to become a very large consistent client for a number of years.

Bruce, when he got there was used to working with me so he brought me in on project after project after project. I don't remember the number, but there may have been as many as 15 projects over the next few years. Most of my projects tended to be relatively short term. Many of the other consultants I used for my projects didn't like these short-term engagements. They wanted to be in a project for six-months or more. My view was almost the opposite. I preferred shorter assignments, specific assignments, get a project done; a two-month long project would be a long project for me. Two to six weeks was quite common. And I would tackle a specific project, get it done, and then be finished. When they wanted me for another project, I'd come back in. So I had no retainer agreements, no long-term relationships in the sense of the client committing work to me. Anybody could just not give me another project and that would be the end of it, and with many clients, that's what happened. There would be one project and then I was done. But with others, like Informatics, AGS and some of the venture capital companies, I would have five, ten, fifteen projects with them; and then with Sterling Software later on I had probably 80 projects with them. So it was a mixture, but I preferred that kind of short-term project-by-project relationship. And that was quite different from almost any other consulting firm. There weren't really any competitors doing that kind of consulting work at that point in time. The big accounting companies would do that kind of work, but that was sort of an adjunct to their auditing practice even though there was supposed to be a Chinese wall between the auditing and consulting. But I really didn't have any direct competitors at the beginning.

Jerger: What was the longest particular project you had? Because I remember you being involved with companies for a long time, like Informatics, but I didn't realize each of those were separate projects. What was the longest project you probably had?

Grad: Well if a single project lasted more than three months it would have been very unusual.

Jerger: That's probably healthy for the company too; that way they don't have this problem of expectations changing over time because it's a short project and you just get it done.

Grad: That's a very good point because in the number of cases I was offered some kind of retainer arrangement in return for a lower fee, and they said, "We'll guarantee you a certain level of work." And I refused those consistently. I felt they should have no obligation. They should go where they thought they could get the best help they could get, and in turn, I didn't want to feel that I had an obligation. In a sense I was a gunslinger. I'd do a specific job for you and then I'm gone. The other area which was very significant to me was the issue of a potential conflict of interest. A number of companies said, "Will you take stock as part of your payment? Would you like options as part of your payment?" And I refused that. There was only one exception much, much later on with Sterling, but I refused that offer in every other case.

Jerger: Do you have any regrets because you could have become wealthy?

Grad: Some. My brother-in-law at the time, Herb Mennen, thought this was terminal stupidity. In retrospect he was absolutely right in terms of money. But I had five children and a number of them were going to college at that time. My wife, Pauline, was also going to college at that point. Expenses were certainly significant. At the beginning, it was tough getting as much money in my consulting practice compared to what I was getting at IBM. Remember I had medical coverage at IBM. I'd had my stock options at IBM. I had all those kinds of things going and all of a sudden they all disappeared.

Jerger: Yes, I know the feeling well.

Grad: You were there all by yourself. And so this was a conscious decision [not to accept stock], but the main reason that I refused was the conflict of interest. There were two layers to it; one, how would it be perceived by my clients? "Hey, you've got stock in X or you have a retainer with X. They're a competitor of mine. I can't use you." That was one issue, but the other issue was even maybe more important to me. It's a funny one. I don't trust my own judgment if in a sense my financial well being or my financial reward would be dependent upon that company's doing certain things. Now I want every client of mine to succeed in what they were doing, but if I were doing an evaluation study or doing something like that, I don't want to have any bias.

Jerger: By the nature of some of the work you did, that was extremely valuable to you for taking that position. Many folks wouldn't have done that, but it really is a desirable condition to be in for evaluation issues, things like that.

Grad: Yes, that starts in 1981. While I didn't start at the beginning but fairly soon I felt that my judgment could be impaired if I had a financial stake in how well they did or didn't do.

Jerger: Healthy.

Grad: It worked for me. I did get a few cases where company X was uncomfortable. I'd say "Look, I've worked for dozens of companies. You can check with people who are in the industry that you trust." Broadview was one of my great supporters. For a number of clients I'd say, "If you think that will be an issue you shouldn't use me. But I think you'll find that I can deal totally objectively with what you're doing." As a matter of fact later on I'll talk about some merger situations, when both companies had been clients of mine and I served both of them in the merger discussions to help them resolve issues. I had one with AGS and SDA, Larry Schoenberg and Jay Goldberg. I also did the same thing with Dick Thatcher and Larry Schoenberg. Both were clients and I worked on those kinds of things.

Jerger: That was a compliment to you.

IBM Consulting Projects

Grad: Well it worked out well for me. Some of the early studies I did were somewhat oddball. When I left IBM, I left with pretty good feelings on both sides. Nobody was mad at anybody. IBM had treated me very well. I had no complaints. There were some good jobs IBM was offering me, but they weren't what I wanted to do. So, relatively shortly after leaving IBM in 1978 I was called to come in as a consultant. They had a project going in Atlanta and in Boca Raton where they were considering producing what later became known as "personal computers." And some people in the IBM General Products Division (GPD) felt that this might be an interesting business opportunity. This was 1978 and about the time that the Apple II gets introduced, but you're talking very small markets. You have a number of manufacturers all of whom have relatively specialized machines. You have one standardized operating system at that time, CP/M. And you had some fairly successful applications starting to sell. Peachtree and Great Plains had their accounting applications. There were a number of those, and Microsoft Basic was running on these machines.

IBM brought me in as a consultant, but it had to be on a totally confidential basis. Remember that my model was to use consulting people to help me as they had knowledge that I didn't have or it was more than I could handle on my own. So I had to come up with a story to tell to the people I was bringing in to help me on the studies, because they couldn't know who the client was. I went to my friend Larry Welke who ran ICP and published the ICP Directories. I said, "I need a cover. You are now my client. It won't cost you any money, but I have to be able to use your name. If anybody calls to confirm it, you need to say, 'Yes, I've asked Burt to do XYZ regarding microcomputers which is an emerging software products area. I am now covering mainframe software and covering microcomputer software is of interest to me. I want to explore this area and see what's going to happen there and what I should be doing in it.'"

Larry agreed without ever knowing who my client was (although I bet he could have guessed). Therefore, I was able to do the project. So I went to IBM and signed a confidentiality

agreement. None of the consultants I used signed a confidentiality agreement with IBM because they couldn't know who the client was. But they did sign the usual confidential agreement with me.

Among the people I used was Carol Anne Ances and a few others who were knowledgeable in the microcomputer area. We studied what was happening in microcomputer software. That was my focus. Not the hardware, just the software. If you were going into the microcomputer hardware business, what software would you need? And we said number one, given the way that the market has developing, you probably would want to use software from other companies. Don't try and build your own.

IBM hadn't been successful in mainframe application software and certainly, in this much smaller market with smaller customers, it seemed it would be much more difficult for them to create their own applications. So they needed to consider how they could get other people to support your machine. It would be the logical evolution of what IBM had been doing with ADAPSO members, trying to get them to support mainframe hardware by writing their programs to run on their equipment. So we went and had interviews with Peachtree, with a company out in Wichita, Kansas and elsewhere. We went to meetings out in California where they had microcomputer fairs.

We interviewed stores that were opening up at that point in time. We went through the whole thing. And we came back and said to IBM: here's a plan of what you can do if you can build the hardware and keep the prices right and provide the support. We were not thinking about the consumer market. We were thinking about small businesses. We were not thinking about it as an extension of the terminal business either. It wasn't a replacement for the 3270s. We weren't thinking that. We were thinking of it as a standalone business. If IBM produces these machines, it would sort of be like going down the line; IBM had the System 3 series and the 32, 36, 38s which were aimed at medium sized businesses. This would take IBM down another notch to the much smaller businesses.

Jerger: For people who couldn't afford the higher priced iron?

Grad: Exactly. Low-priced iron. But you have to find some way for them to program and install these systems since they couldn't do it themselves. The concept of local firms doing programming, installation and support for medium sized businesses already existed with what were called OEMs and VARs. This had been the model for the General Products Division of IBM which sold their lower-end machines. In that market they couldn't afford the normal IBM sales force, so they were doing telemarketing. They couldn't afford the on-site support in the same way as mainframes because there wasn't enough money in each sale. Later when IBM announced the AS/400, GPD moved up the scale pricewise and it became a different ballgame since there was real money and IBM could afford a higher level of sales and support. But that

wasn't the case at the time. This was the first microcomputer study that I did for IBM. But nothing happened as a result of this study (and the others that IBM was doing at the time).

Jerger: What didn't happen?

Grad: IBM didn't go into the microcomputer business in 1979. The GPD proposal was turned down. It was bought within GPD which was going to have the marketing responsibility, but the General System Division which had the lower end business and production responsibility rejected the proposal based on the financials. They felt that it would not be a financially successful market.

Jerger: Okay.

Grad: I was called back again by IBM about a year later, probably in 1980. And this time I was brought in with Mike Uretsky; he was a professor at New York University and he did graduate level business training using simulation models, things of that sort. He was a Russian scholar and had done a lot of work on management training in Russia. He was almost blacklisted in the US because he had done so much work for Russia that they figured he must be a communist. Anyway, Mike and I worked together on this next study. And the thing that was interesting is that at that time IBM had made a connection with an organization called MCA which was the big outfit out in California that represented various stars and packaged things together for films. MCA was interested in finding another visual outlet for movies. At that time the video stores were starting to grow. And MCA thought that with IBM this might be a dual thing. MCA would get consumers to use the videos, and IBM would get a microcomputer business machine. So, there was a double purpose. That was the basis for the study.

Jerger: What year was that?

Grad: Probably 1980. These two studies were one right after the other. So Mike and I conducted the study and prepared a report with what we thought was a "brilliant" idea. We said that since the video stores only successfully sell were "blue" movies, IBM could have a natural entree into this area. We could call the product "Big Blue." That obviously didn't go over well with the IBMers, which of course was our intent.

Jerger: <laughs>

Grad: We took that approach because we felt that this was not the thing to do. We told IBM that you do not want to go into bed, if you'll pardon the expression, with MCA. We said that although IBM and MCA both have three initials, that isn't going to cut it for a partnership. You

don't want to go there. You want to be in the computer business. Don't try and be in the video business.

Jerger: Safe is nicer.

Grad: Anyway we were trying to kill the idea and I think we helped to kill it. So that project didn't go anywhere either. I was called back a third time, probably in 1981 and we again did a similar kind of quick study. We were not directly involved in the Don Estridge work when Estridge was able to avoid going through the GPD route. He came at it with a completely independent route. He was able to bypass the normal decision processes and the product got announced as sort of a who cares, it's not very significant. Essentially our recommendation the third time around was similar as the first study. We said you have to use CP/M as the operating system since that was the standard at that time. You have to get the top two or three accounting software firms to support your machine. You've got to have data base software like dBase, and here are the companies you've got to tie in with. We didn't make any further approach to those companies.

Everyone knows the story as it is told in Triumph of the Nerds, IBM sent some GPD people out to visit DRI (the company that produced CP/M) who, in my opinion really didn't know what they were doing. They couldn't cut a deal with the CP/M people (it's not clear who was at fault). So, they went to Microsoft. They made a wonderful deal with Microsoft so that Microsoft promised to give IBM a new operating system called PC/DOS while Microsoft was able to market an identical version called MS/DOS and Microsoft became the 800-pound gorilla in the operating systems business. They did get deals with the other software companies, all of which had to sign "I'll never tell who I'm developing this product for" agreements.

I think it must have been about 1982 when they finally announced the PC. And they made this incredibly effective product announcement using a Charlie Chaplin character PC [which made IBM look human and allowed IBM to address the personal market and not just the business market]. They announced a large number of software products that would run on their PC with that opening announcement and that was very impressive. They had VisiCalc announced at their opening. As we know, the IBM PC took over the world very quickly. But IBM left itself open to hardware clones because they used all standard components which was the right thing to do to get traction early. And they had none of the application software business. They had none of the additional systems software business because they gave it away to Microsoft. They left themselves open to not being able to control the market. [By not controlling the market, the PCs essentially became a commodity business, not the usual high profit business that IBM was used to. More significantly, it effectively permitted Microsoft and eventually Intel to become the industry standard and IBM became somewhat of an also ran.]

Incidentally, this was one of the most fun projects I had.

PC Software Market

Jerger: I have to ask, could they have done it another way and actually controlled the market? I mean all the things you said sound like good things, certainly good for the industry.

Grad: The real question is whether they would have been credible if they had come in on an "it's my proprietary operating system" basis, because there always had been a lot of concern with software companies particularly about being locked to IBM. And their view was that this was the sea we swim in, but if you are in a sea that represents 70 percent of all the water in the world, that's not all bad. But in the microcomputer world there were some established companies, particularly Apple, and could IBM come in with the arrogance, with the "we know best" approach, and get these software companies in effect to support their exclusive operating system? Who knows? It turned out from a market standpoint it's probably the finest thing that could have happened to the application and systems software companies, the ones who were new to the PC world, because it opened up the door and MS/DOS became the standard. And that's of course what happened; it became so much like the mainframe world where you had a standard that you could write against -- IBM's operating systems. The PC world now had OS and DOS. If you wrote to that standard you had access to 70 percent of the market. Now if you want to be a niche player, that was fine since there were some nice niche markets. But if you wanted to be a big player, you supported the IBM market. And that eventually is exactly what happened. Even if Apple may have had better products, with Mac and everything else that they introduced, they just never got traction in the business world at all. And eventually even in the personal computing areas, Apple only kept five to ten percent of the market -- just those people who were aficionados. Apple never understood that if you have a standard platform (MS DOS), then every application development software company and every systems software company says "I'll write to that as my principal platform and I'll support it. And only if I get a chance, I may do the other."

There's a very interesting story which relates to the IBM OS/2 situation which comes in later. My clients were in the PC applications software business. They would ask me, "Should I support Mac?" And I said "Why bother?" That was easy. Now IBM is going to OS/2. And they would ask, "What platform should I support? Should I go with Windows that the Microsoft people are doing or should I support OS/2?" They trusted IBM, but my view at the time was to be careful. This is a battle. Don't choose sides. Those who chose sides like Mitch Kapor with Lotus chose OS/2, and he bet wrong and Lotus lost the spreadsheet market. That was the opening for Microsoft's Excel which of course decided to support Windows. And the same thing happened with the World Processing products. Word Perfect was in a wonderful situation and Pete Peterson and the others at Word Perfect decided to support OS/2. They were wrong and they lost the market to Word as a result of choosing the wrong platform. Not choosing too early sometimes makes a hell of a difference.

While there was a continuing evolution in my consulting practice, the bulk of my work during the 1980s was still with mainframe software companies. I never got a lot of work with the minicomputer companies. They were never a big part of my clients. They were small companies then. They couldn't afford me. I forget what my initial rates were, but probably on the order of 600 to 800 dollars a day, something in that ballpark. By the 1990s it was up to 3,000 dollars a day. My view was that I knew where to put the Xs on the machine (a la the apocryphal Steinmetz GE story). I could solve the problem in less time. It would cost the client less money, but it would cost you more per day. The result was that I lost a lot of potential contracts, but the business was very successful.

Jerger: Good.

Sterling Software

Grad: I think I want to talk about some of the other client stories. Might that be a good thing to talk about now?

Jerger: I think that sounds like a good idea, yes.

Grad: During all this time I continued to be very active in ADAPSO. That was the only marketing I ever did. I'm not a marketer. I only like selling in the sense of selling an idea, selling a concept. I don't like selling myself. I can do the job of selling somebody else, but I can't sell myself.

Jerger: I was hesitant to interrupt you because we wanted to focus on BGAI. On the other hand you were all the time in the industry and people recognized you in the industry for having this knowledge, the IBM knowledge and the industry knowledge in a broad sense. That certainly is what attracted you to ADAPSO and maybe helped you get clients for BGAI, but it's this breadth of experience and knowledge you have that is terrific.

Grad: Thanks. ADAPSO was my marketing. I was working hard there, being very active in the Software Industry section. Working with those people was my marketing approach, and that's where the contacts began and that's how I got my new clients or through referrals from somebody else. But often it's a tricky ballgame because client X is using you and they're a competitor of prospect Y. Why would client X recommend to Prospect Y that they should use me? But eventually Broadview Associates was a significant factor; Bernie Goldstein and the other people there became a major help to me in getting new clients. A good example was Sterling Software which was my big new client that signed up in 1981.

Sterling Software was created in 1981 by Sam Wyly. He recruited two key people. He recruited Sterling Williams to run the company and said, "Hey, I'm naming the company after you." That was certainly an interesting approach. And he recruited Phil Moore. These were both people who had worked for him at UCC back in the 1960s and 1970s and he also recruited a financial guy who left after a relatively short time, after some difficulties.

I worked very closely with Phil Moore and with Sterling Williams. They had the concept from the beginning that they were going to buy companies not build products from scratch. And they therefore wanted someone who knew the other companies in the industry, had a lot of contacts in the industry and could help them select which companies to buy and then how to effectively integrate them into an overall strategy. So they wanted a company strategy, but it wasn't a "what products am I going to build?" strategy, but it was a "what companies do we want to acquire?" strategy. And then the other aspect was how much am I willing to pay for them? Are they really what they say they are? Due diligence and evaluation had to go with strategic planning and selection. Those were the elements. It was a very structured, very strong approach. Sterling Williams was a very good, very strong manager. He was very difficult to argue with. Phil Moore was technically very competent and these were good people for me to work with. We had a lot of debates. A lot of differences of opinion, but they were never on a personal basis. They were always on the subject matter which made it a wonderful company to work with.

I started to work with Sterling before they actually were in existence. At that point in time they were looking at six possible companies to buy. I'm not going to go into detail on this, but my first assignment for them was to help evaluate the companies that they had decided to buy for accounting book purposes and to help them put together a structure, a framework for their strategic planning. I created a set of grids to show: which were the things they definitely wanted to do; what aspects of the business they definitely didn't want to do; and which were in between which we called "strategic opportunism." If something popped up in that area, you looked very carefully before acting. The company eventually referred to them as "Grad's Grids."

Jerger: It sounds like those things you developed at that point in 1980, 1981 served you well in your area functional areas: there's due diligence, evaluation, valuation, those kinds of things. That's got to be for other clients as well.

Grad: That's a little backwards, because I had already been doing due diligence work for AGS and I had already been doing evaluation work for CGA. I brought those experiences to the table. None of the other clients I had ever looked at it as systematically and structurally as Sterling. The grids were unique to them. That was something I developed and built for them. Strategic planning yes, but the knowledge of the companies was what was significant. The other thing I brought to them was my contact with Broadview Associates and particularly with Bernie Goldstein, whom I had worked with at ADAPSO over the years when he had been the

chairman at National CSS which was a client of mine. And then they were bought by Dun & Bradstreet so my work with them declined, but Bernie and I had a good history. Gil Mintz was Bernie's partner at Broadview. I hadn't had much work with him but we had worked together a little in setting up roundtables [these were small groups of executives who served as sort of an unofficial board of directors for each company]. He and Larry Welke were the two who set up the original roundtables at ADAPSO. So I had helped Broadview and worked with some of their clients so there was a confidence there. And Sterling had he wanted a framework for knowing everything that was going to be available in the market and then picking and choosing. Sterling wanted the right of first refusal of anything that popped up as a possible acquisition.

And by that point Broadview was the place for mergers and acquisitions. If you wanted to sell your company, you told Broadview about it. If you wanted to buy a company, you asked Broadview to help you and I think they worked both sides of the street which can sometimes be questionable. So what I suggested to Sterling was "Look, the best way to get them is that you tell them that any deal that you do, whether they bring it to you or you find it on your own, it's their deal. They'll get a piece of the action, whether it's a client of theirs that comes to sell something or whether it's somebody they pick up off the street. However they get it, it doesn't matter. If it's a deal they bring it to you. You want them to give you a first shot at any available company. You show them your pattern, what your strategy is, what's inside your grid, and if it falls within your grid they should give you the right of first refusal. And in return for that, anything that you pick up regardless of how it comes to you it is their deal." That worked for the next 20 years until Sterling was sold. Sterling Software was sold to Computer Associates and Sterling Commerce was sold to SBC, Southwestern Bell. [Each was sold for \$4 billion in 1999]

Jerger: That's a compliment to you though. Did you have to work hard to sell that approach to Sterling Williams and Sam Wyly?

Grad: I had very little contact with Sam. My contacts were primarily with Sterling Williams, Phil Moore and George Ellis. And the answer is that we debated it. He made a quick decision. Sterling Williams was going to have dinner with Bernie Goldstein that evening and Sterling was saying that he sees what is on the table. What should he do? He's unhappy about giving Broadview the ones he gets himself, since people were coming to him directly. And I said "You know, this is the way to get it. You'll get right of first refusal from Bernie if you make it a locked deal." It was never formally stated and I'm sure that Broadview would deny it. But as a practical matter if it was something that looked good, Sterling got first crack. And of course during a lot of that period Sterling and Computer Associates were competing to buy companies and that was much truer in the late 1980s and 1990s that they were competing. Whenever they competed, Computer Associates invariably won because they would always pay more money since they were going to fire almost everybody. The Computer Associates business case model was a totally different one than the Sterling model.

Their model was we're buying the company not primarily for your products or services. Those products are good, and the services are good. We expect to make money off of them. But we want you. We want your people. There will be some duplicates. We will have to get rid of some people. We're not going to double up on accounting; we're not going to double up on certain other kinds of things. But fundamentally we're hiring your skills and your talents and we want you to stay with the company forever. And we'll give you responsibility and you'll run that business for us. Now a few things you'll have to combine, but fundamentally we want you to run that as your business. You'll report to a Vice President or Executive Vice President but it's your business. That model was so far the antithesis of the Computer Associates model. We want to build the product. We want to enhance the product. We want to broaden its market. We want to do all those good things and we'll invest money in making that happen.

Computer Associates were very clear about their model. It was no secret that they wanted to live off the maintenance income and they wanted to spend as little money as they could on development. They wanted to keep increasing the maintenance price because you're stuck with their products. You can't switch easily, and in many cases Computer Associates had all the products in the market. They had bought out all the competition so you had no place else to go. If you were a mainframe user and you wanted system utilities, there were like 21 different system utility areas. In a study that I did on that subject in the late 1980s, I think it turned out that in 17 of them they had 90 percent or more of the market, 17 out of 21 system utilities on the mainframes. So you had no option. You were stuck so you had to pay whatever they asked and Sterling was just the total antithesis.

Jerger: You said that if both Sterling and Computer Associates were after buying the same company, that Sterling would lose.

Grad: Yes, Sterling would lose.

Jerger: So, they just paid more money, then. Even though they do have that reputation, Computer Associates, they're still doing it?

Grad: Yes. It's one of those things. What are you going to do? First of all, if you're a public company, you're stuck. You have to take the best deal for the stockholders. If you're private you're still stuck because people want the money and you have to agree if there's 50 percent more money.

Jerger: Because the differences were that large?

Grad: They could be 25% more. Do you remember the contest to buy RAMIS?

Jerger: Yes. RAMIS from Mathematica.

Grad: Sterling wanted it. RAMIS was a 4GL [Fourth Generation Language]. It was a nice product and Sterling really wanted that. I was part of that project and then we decided that Sterling could really go head to head with Computer Associates. Now first of all Sterling would act reasonably quickly but they would do a thorough due diligence. It would take a month to eight weeks on each due diligence study, all the financials, all the technical, the marketing. We would check, even call customers under a cover story. We would do all those things. However, Charles Wang [Computer Associates CEO] could basically close a deal in two weeks because he didn't care about the people. He didn't care about the customers. He didn't care about anything. All he cared about was the revenue flow from the maintenance, with his view that he could double or triple that revenue over a few years because he would just raise prices and they were stuck. If they got more machines, they'd have to move this to their new machines. They didn't have choices. The fascinating and different model of Sterling was one that I obviously appreciated from a personal standpoint, a moral standpoint, and long term business standpoint. I liked the way Sterling ran things, so it was a really happy relationship for me and I think for them.

Growing BGAI: Due Diligence and Valuation Studies

Grad: Let's go back to 1978 through 1980. By the end of those three years, the frameworks of the things I was going to do had developed. Larry Schoenberg, founder and CEO of AGS, was running a successful small professional services company. Almost everyone else thought that the values of professional services companies should be low because the talent walked out the door every night. In spite of that, Larry felt that these businesses would always keep going, that they were like the Eveready Rabbit in the advertisements.

Jerger: Yes.

Grad: He felt that they would keep going and going and going. And he said that even though the stock market didn't value them very well compared to a software products company, he felt that the long term value was there. He said, "My view is that computer user companies go through bad times and good times." If these companies have bad times, they lay off people. If they need programming done, they've got to come to us. In good times, they don't have enough trained people, they got to come to us. If they are working in a very tough new area like the online transaction processing, they got to come to us. If it's on a new operating system or tying in with a new database management system or data communications system, they have to come to us." Then he said, "The business is going to continue to grow. It'll grow, as a solid, steady business. Cost of entry is trivial so anybody and their dog can get into the business. So what? If we establish our relationships with these big companies, with the AT&Ts, who is one of the very big buyers of services, with the big insurance companies, with

the big banks, we know them, they know us. Wherever they are operating, wherever they have branches, wherever they have contacts, we'll be there."

I remember that with one of my other clients, CGA, the big thing with them were the Blue Cross/Blue Shield organizations all over the country. He hooked up first with the one in New York and eventually opened offices all around the country, wherever there was a major Blue Cross or Blue Shield operation. The view of Barry Goldsmith, the founder of CGA, and Larry Schoenberg was that if they depended upon the large companies as their clients, then they're going to be just fine and that it is a growth opportunity. So then Larry's question was, "How do I get more people?" And his answer was that if I have to go recruit and build my own offices in every location, it's relatively expensive. Their model said that it would cost around \$150,000 to \$ 200,000 to set up an office and find the right leader, and hope that he works out, and hope to build a customer base. He said, "Wouldn't it be easier if I just buy a company who's already in that location? So I'll get somebody in Chicago and somebody in Washington, DC, and somebody in Boston and, if I want go to Phoenix, I'll deal with somebody there and on and on and on."

So his idea was to grow the business by acquisition. Larry is probably as astute a financial man as I've ever come across as well as being very bright. This was the model he decided to go on and this was probably around 1978 or 1979. One of my first assignments with AGS was to help them work out how you would go about this kind of process, what criteria you would use, He asked me to examine a bunch of candidates he'd selected after reading the papers and so forth of companies in specific cities he wanted to see. Washington, DC was one. Boston was another. I think Chicago was maybe the third.

Jerger: Had you known Larry other than through ADAPSO?

Grad: No, I met him in ADAPSO. Larry was very bored at his first ADAPSO meeting and when he and I were having some coffee, I said to him, "Well, that's really simple. You aren't doing a damn thing except sitting here listening. Why don't you do something? Get involved. Then you'll find it interesting and you can contribute." So I got him involved in the software industry section and he eventually became the chair of that section. So the first connection that he and I had was through ADAPSO. He and I did some work together later at ADAPSO on special projects that came up on some of the financial areas that started to bubble up during that period so our connection got much stronger. Larry then retained me and we put the pattern together and then dealt with the opportunities one at a time. I set up a due diligence process to analyze the prospective acquisition's markets, their people, their processes. Larry did the financials. He was much better at that than most anybody I know. He didn't depend upon me for that but I was supposed to be checking on all of the other parts of the businesses. Later on, as we got more sophisticated, we would actually talk to the potential acquisition's customers under a cover story or use a third party. We usually used Joe Blumberg for this at

Vertex. He would call some of the clients, using the cover story, and find out if the client was happy with the company that we were checking out. Larry dealt through Broadview for all of the acquisitions so that was part of the package. So that was the way I got into doing due diligence work.

Jerger: Okay.

Grad: The other major work ties into working with CGA. Now, that's Barry Goldsmith's company. It was formed by three people and the G was Goldsmith. The other two guys disappeared relatively soon. Barry, again, was very bright, but he plays his cards very close to his vest, which even he would admit. My comment to him was, "You have your cards so close to you, even you don't know what they are." <laughter> He had just bought a company called Allen Services and they were in Ohio, I believe, someplace. There were two major partners there, Fisher and Allen. They had products that Barry was picking up. There may have been some professional services as well but I know there were some products. What happened is that, in buying the company, Barry went through a valuation process for tax and reporting purposes that the IRS and SEC disagreed with. They told him he would have to have an independent valuation done of that company. It was probably in 1980, somewhere around there. He approached me and said, "Will you do the valuation?" I said, "I have no idea what a valuation is." He said, "Well, you got to follow some rules." I said, "Well, let me think about it." I called a friend of mine, a fellow named Felix Kaufman who had been a top executive in one of the largest Auditing firms; he had headed up the consulting practices side at Coopers & Lybrand.

He was a top flight accountant, well respected. I had met him through business friends. I called Felix and said, "Look, I've been offered this assignment. I don't have the accounting skills or knowledge to do it. I have the business knowledge, I know the industry, I know the products but I don't have the accounting skills. Will you work with me on it?" He agreed and we worked together on that. We set up a procedure and a structure and came up with an independent valuation of what Allen Services was worth when AGS had acquired it. We got that first one done.

Jerger: Was Felix still with Coopers?

Grad: No, he was no longer with them. He was an independent consultant at that point. And so we did the first valuation study together. The result was that CGA was required by the SEC to report their results both ways, using the original valuation and the new independent valuation. Barry had to do that for, I think, six or eight or ten years.

Jerger: Those must have been tumultuous times for CGA. Very difficult.

Grad: What made it even worse, which I didn't get as deeply involved in, is that he had acquired a product called Top Secret from Allen Services. Fisher, who had been the development guy, refused to give Barry the source code, even though he was required by contract to give CGA the source code. Meanwhile, Barry has this product and these customers to support, but he doesn't have the source code. So he can't maintain the programs or make any changes. So I introduced him to a guy who had been working with me named Sid Dunayer and Sid was a technical genius. Sid is very bright, very capable and a delight to work with. You'll hear me say this over and over again. I feel so fortunate that I was able to find and work with an incredible number of third party consultants, none of whom were my employees. They were all independent but they apparently enjoyed working with me and I enjoyed working with them, which was very, very good. We got top talent for every project, which was the way we did it the entire life of the company.

Sid went out to CGA in New Jersey and deconstructed the program; he reverse engineered the code, and was able to, in effect, reconstruct the source code. As a result, they were able to maintain and support the product. So Sid ended up with a long-term assignment with CGA. The case went to arbitration, and it dragged on for probably two years before being resolved.

Jerger: I read lots of annual reports and SEC reporting about those events.

Grad: Sid was technically good enough to do any of those kinds of things. He was really great. Anyway, now I've got two new functions that I can do. I can do due diligent studies; I can do valuation studies. So somebody else says, "Hey, will you do some valuations?" so I started to get more work. When Sterling comes to me, I can say, "I've already got those two things in my pocket so I can do what they wanted to have done and I have people that I've worked with, Ed LaHay, Mike Marcus, David Gold, people like that, that I can work with. They can help me do these kind of studies because I have a pattern and a structure. Here's how it's going to be done. Here are the rules we're going to follow. Here's our checklist." Mike Marcus created a 20-page checklist for Sterling of the questions we should ask during a due diligence study. We cut it down to a more manageable size but we used that for the next 20 years. I still use it today. If I go in to do a study, I still use exactly that same set of questions as to what do you have to check to be sure that the development process is right, that customer service is right, that the marketing is consistent, that the sales mechanisms and sales measurements are right. We check all the elements of running a business, to make sure that the management processes work.

Jerger: The elements are the same. The details of execution are just slightly different.

Grad: Exactly. But the questions are the same. So that was what I had in my hand. However, the problem was, I loved doing strategic planning and I've always felt that strategic planning was the thing I had the most fun at and I felt I was best at. Unfortunately, or

fortunately, I wasn't able to be able to use those strategic planning skills much over the next 20 years. My business gradually became more and more due diligence and valuation and less and strategic planning. I think, after the end of the 1980s, I hardly ever had a strategic planning project. Everything I was making a living off of was valuation and due diligence. So it was one of those things. You have to be careful what you learn how to do. One of the things I found disappointing, I guess, as a consultant, is that, in many cases, you go and you do the project and then you're done. You never hear from the client again. There's never any feedback, particularly if you're doing a planning project. Here's what you should do, here's how you should solve your problems, here is how you should go into a particular area. You don't know if they ever did it. You don't know how they did. Maybe you read it in the papers later on but you don't really know what went on. I found that very disappointing. I like to know what's happening. I like to follow up; I like to find out whether what I've said worked or didn't work and, if it didn't work, why it didn't work so I can give better advice the next time. But with some of the companies that I had a long-term relationship, of course, that was a different ballgame, with Sterling, with AGS, with Informatics. That was a different ballgame.

Jerger: Probably that attitude was reflected to the clients, even though they might not pay attention to what you said, they know you cared about it. I mean, that kind of comes through, I think, in the execution.

Grad: I hope so. I have great intensity in how I approach things.

Jerger: Yes, yes.

BGAI Projects

Grad: One assignment that was most interesting was a company called Future Three. They were a relatively small company in the Detroit, Michigan area and I was originally brought in through Summit Partners, which is a venture capital firm in the Boston area. My original contact with them came because they were being asked to invest money in the company. So I did a valuation study for Summit and gave them a report of what was being done. I don't know whether they decided to invest any money or not. It wasn't a big deal. But then I got called by Future Three to come out and do a business study for them, produce a complete organizational plan and propose a complete restructuring of the company. Again, I used one or two people to work with me. Since it was not a big business, we interviewed almost all of the key people. We even interviewed the people who were financing the company, which was not the man who was running the business. We interviewed every one of their managers. We interviewed a number of the other people there, so maybe we interviewed 20 to 25 people in the course of a day and a half. This was the pattern I used for those kind of studies. This was an organizational planning study. We would interview for a day and a half or something like that. Whoever I was working with and I would go over our interview notes during the second afternoon. The third

morning, we would prepare the flip charts and the presentation we were going to give and then, in the afternoon of the third day, we'd bring everybody together that the client wanted. So it might be all their VPs and managers, and we would go through a two or three or four-hour presentation of what we learned about the business, what we thought they should do in each individual area of that business, in every one of the organizational functional parts of their business. And, of course, people at the meeting would say, "You don't know what you're talking about." So, we'd discuss the issues. It was a great experience. It was wonderful how much you could learn and retain after just a day and a half or two days and how much you would know more about their business in many respects. You couldn't run it for them, but you'd know more about how it should be run and strategized than they would themselves. I like to show off anyway and being up there presenting, this kind of thing was just a great, fun experience. Carol Anne Ances did a number of these studies with me. Her role was often to talk with the customer service people, those who did the actual work. Her analysis was that I was always approaching the situation at 30,000 feet and she was approaching it at ground level. This was really quite effective, so when we made the presentation, she knew the details and I knew the structure and the framework; and that really supported the strategy that I thought we should follow. She knew why each of the pieces should work.

Jerger: You did that in three days? You did the reports later?

Grad: Yes, I'd give them a report the next week. I'd give them a formal report which might run 30, 40 pages. I would ask them for material ahead of time. A typical engagement might be for six to ten days all together, including whoever was working for me, who was getting a lot less money than I was. We'd stretch our work out probably over a two to three-week period from the time they first sent me the materials which I would read before I went there. I would have told them ahead of time whom we wanted to interview. Every project I ever took on from the beginning, I had a project engagement letter. I wrote an engagement letter for every single project. It would cover what they were expecting, what I was going to do for them, what the price was going to be, what the delivery schedule was going to be, and the framework and a non-confidentiality clause. I insisted on that with everybody; I wouldn't do a project unless they had me sign a non-confidentiality agreement. So it was a very formal process. In many cases, they'd say, "Oh, just come on in" and I'd say, "No, I don't do it that way."

Jerger: You never had a problem as a result of that, either.

Grad: Well, I had problems. Some people didn't pay me. And there were some cases who would say, "Well, we thought you were going to do X." I'd say, "Well, here's what I said in the letter agreement." If it's wrong, we'll fix it. That was, again, basic marketing because my reputation in the industry was key. If you start to get some people poor mouthing you that would be pretty devastating; remember, the ADAPSO meetings were still going on, and these people were all talking to each other.

Jerger: Yes, that's right. It was a small little club.

Grad: It was a very small club and if one of your clients felt that he got mistreated or something, that wouldn't work at all; it just wouldn't work.

Another thing, when I was doing due diligence work for Sterling or for AGS, I tried to represent the company that was trying to do the acquiring, but I wasn't the negotiator. I was simply doing due diligence but, obviously, the company being bought would ask me questions about what were the people like at the acquiring company.

Jerger: Sure.

Grad: And I tried to be very much the independent observer and say, "Look, I've worked with these people, this is my fifth or sixth or tenth project with them. I think they're pretty good people or I wouldn't keep working with them. But you've got to decide that for yourself. You got to decide what's best for you, decide whether this is really what you want to do. Are you going to be happy or aren't you going to be happy? I can't answer the question. Get to know their personalities." I said, "They're trustworthy. What they promise, they will do because those are the clients I work with. If I thought they were lying to these other people, I couldn't get involved; it wouldn't be useful, I wouldn't be happy."

Sterling Software Hostile Takeover of Informatics

Grad: I thought it was important that the selling companies believed that I was independent, that I was supportive of the client who was trying to buy them because these were people I believed in or I wouldn't have worked with them over that lengthy period of time. During those first few years, 1978-1981, due diligence had become a heavy thing for BGAI. Almost every software products and professional services company decided they wanted to buy other companies. While for Sterling that was their entire structure, buy don't build, everybody else also decided to buy. Informatics was very active. Now, I had both kinds of projects with both Informatics and with Sterling. I had strategic planning projects with Informatics which I enjoyed thoroughly and I had acquisition due diligence projects with them during that period. But when we come to 1983 which was an interesting checkpoint because, unbeknownst to me, Sterling Software and Informatics had discussions. First it was about Informatics wanting to sell Sterling a product and then, as the discussions developed, Informatics really wanting to buy Sterling.

Jerger: This is in 1983?

Grad: Yes, in early 1983. These were my two biggest clients. Between Sterling and Informatics, they probably accounted for 65% to 70% of my income. All of a sudden, I didn't hear from Informatics, I didn't hear from Sterling. Then I was told by Sterling that they wanted to buy Informatics. Sterling called me and said, "We need your help." I said, "Not a problem." Then I get a call from Walter Bauer, CEO of Informatics, "I need your help." I had to say to both of them, "We have a problem. I can't help you." I actually got called on that hostile takeover from three other organizations who were all interested in buying Informatics or getting a piece of the deal, including Morgan Stanley and a Venture Capital firm in New York City, General Atlantic, who were very good people. All of these companies were interested in determining whether to buy Informatics and wanted me to work for them. I said, "I'm out of it."

So there was a period of about three to four months where my income shrank because my two biggest clients couldn't give me any work and I couldn't get involved. When the dust settled, and Sterling had been able to swing the deal, it was with a breath of relief. Now Sterling Williams said, "Okay, now we need you to value all those pieces that we just bought. We also want you to help us with the strategic planning, what should we get rid of? What should we keep? How do we get rid of them? How do we integrate them? Who are the people? Tell us about each of these people." I gave that latter one to Werner Frank, who knew most of the people from having been one of the early Informatics executives. He was actually involved in Sterling's planning to acquire Informatics. He had left Informatics a couple years before and then worked as a consultant for Sterling. He was involved, without giving away trade secrets, in helping them because he knew the businesses and he could talk about how to integrate these businesses.

Jerger: Sure.

Grad: BGAI had a very big project to do the valuation. I think it turned out to be about 25 separate businesses we had to value. Each one had to go through a complete valuation because that information was going to be used for tax purposes. You could take tax deductions for what you could put on the books, which you could amortize over the life of the product. There were definite tax advantages, but you had to be able to back it up if the IRS challenged you as to why it was worth that much. I remember that Elizabeth Virgo worked with me on this valuation study. She was a superb analyst, accounting skilled, a very bright, very capable person. She had been working with a company called F International, a British company. I was introduced to her through one of the people at F International. She was living in Bermuda and she and I started working together. We must have ended up doing over 60 projects together over a 25-year period. We worked together from about 1980 or 1981 up until around 2005.

Elizabeth lived in Bermuda and I decided to go down there and do the work with her. I took my computer and all of the materials we would need to Bermuda and set up my hotel room as an office. It was a nice hotel room, on the beach. I even have pictures of us working together.

The only place we could get enough power with enough surface was in the bathroom. <laughter> Elizabeth had a very small apartment with no place for us to work. So we have pictures of the computers and everything set up in the bathroom at this hotel in Bermuda. It was the largest single project I had ever worked on up to that period of time and for quite a few years afterward.

Jerger: Oh, really?

Grad: That was probably a \$25,000 or \$30,000 project and, for me, that was a big project. It took about two months, two and a half months, to complete that work. It did get challenged by the IRS later on and it stood up to their scrutiny. They didn't change one number. I met with the IRS people, discussed the pros and cons and the process I followed. I said, "If you think you know more about these businesses than I do, and what their projections should be and what their revenues will be then tell me so. This is my best judgment. The truth will be different from what I put down. They may earn more or less, but this is my best judgment at this point in time and that's my view as to what these products are worth." It was an exciting project. It certainly helped that I knew Informatics because I had consulted for many of the products there.

Jerger: Sure.

Grad: Again, we won't go any further into that. There were some very interesting Sterling experiences as a result of some of the people they acquired in the Informatics acquisition. Sterling ended up completely changing their strategy from what they had planned to do when they acquired Informatics. They were going to get rid of all the professional services since they were a products company and not in the services business. They were going to get rid of all the processing services operations but, fairly quickly, when they got in, they realized this was pretty profitable, and professional services wasn't bad. You can make a lot of money out of it. They had some very nice government business, the kind where "If I tell you about it, I've got to kill you" kind of business. They were doing that for the Defense Department and the CIA and others.

Jerger: So they kept that as a separate arm?

Grad: They kept it. Remember, Sterling kept everything as separate arms. They integrated some pieces but kept everything. They also kept the commercial professional services business, which was in two places. In California they had a group doing government work and they also had a group in New York City run by a guy named Don Toy, who was a piece of work. <laughter> They also had operations in England. Sterling actually flew me over on the Concorde because there was a big meeting they wanted me to attend.

Jerger: Oh, that's terrific.

Grad: But they didn't fly me back on the Concorde. <laughter>

Jerger: Well, you were lucky. I haven't been on the Concorde at all and I'd love to have done so.

Grad: It was a terrible ride, especially since the seats were very cramped and it was very noisy. The only thing good about it was that it was fast. That was the only thing that was good about it.

Working for Israeli Companies

Grad: Let's take a different tack now. Somewhere along the way, I started getting involved with some Israeli companies. There was a bank called the Israel Discount Bank and I don't remember where the contact came from at this point. They had a company in the United States called Elron. There was a lot of Jewish-American money that was being used to try and assist Israel in the 1980s to grow software businesses in Israel to use their technical skills there and market the products in the United States. The concept was, we can build it in Israel and since our salaries are much lower the product development cost will be much cheaper. They had a tremendous number of very, very talented technical people in Israel. A lot of them had been trained by working for the Israeli Air Force and for various other military and logistics areas. The Israelis had needed to be self-supporting in these areas and although they got certain things from the United States, they might or might not get some of the software so they had to be self-supporting. There were a number of very bright capable people in that company.

The Israeli companies started creating systems products, utilities, things like that, not so much applications because U.S. applications had a whole different flavor and style. They didn't know the U.S. accounting world. They didn't know the U.S. insurance world or any of these kinds of things so they couldn't do that. But systems type products, systems software stuff, they could do. So it was decided on an Israeli government level to set up a venture capital operation in Boston. It was funded with Jewish-American money, or I guess it could be anybody else, they would take money from anybody, I'm sure. But they worked specifically to invest in these software companies. These companies got very favorable tax treatment in Israel, of course. And in some cases, the Israeli government was getting a piece of the action but the banks over there were strongly encouraged to provide investment money. The Israel Discount Bank set up an organization called DIC, I forget what the initials stood for. I assume the IC was Investment Corp. This firm which would control the investment of their money in these companies and then they would join in with other venture firms to put money into the resulting software companies. Elron is what they chose to use as their vehicle to buy these companies and organize them.

Let's see, I've forgotten how I got that connection and got in there. While I had been to Israel in 1982, I don't think that had anything to do with it.

However, over the course of the next four, five, six years or more, I had a whole series of projects with Elron and then with some other Israeli companies. That continued into the 1990s and even later on. One venture was called Level Eight; the division was called Liraz. Good people, particularly a person named Doron Birger, who was the chief financial officer of many of these companies. He was from the Israel Discount Bank, from DIC. He and I worked very closely because BGAI was doing due diligence and valuation of the acquisitions they wanted to make and then planning what they would do with the company after they acquired it. He eventually ended up as the CEO for a number of other Israeli companies; in the 2000s he was CEO of a company called Given Imaging, which produces a little television camera that you swallow, and goes through your entire system. Meanwhile, there is a recording device which records everything that the camera sees as it goes through the digestive system. It was a relatively close knit group of very interesting people I came across there. I think the Israeli government, when some of these companies were successful, offered a consulting contract to set up a country strategy for developing their software industry. I thought that was a wonderful idea. I bid on the project, but I didn't come close to getting it. <laughter> It was a wired deal.

That leads me to something else. In a number of cases, you have to bid on projects as a consultant, invariably on government ones. If you want to do a project for the federal government or a state government or a city government or certain corporations who are very formal, there was a bidding process where the buyer would put out an RFP and you had to respond with a proposal. I decided, relatively early on, I didn't want to do that.

Jerger: Why not?

Grad: There were two problems. Number one, it was expensive to prepare the proposal and I was too small to put much money into the bid. Number two, I thought that in probably almost every case, it was a wired decision. Somebody was on the inside writing that RFP and they were going to get the contract and I wasn't. Why waste my time and money? But the Israel situation was one of the few cases where I thought that although there are going to be competitors I'm still going to bid on it, because I'm I really like what they want to do and I think I can really help them.

But I lost it. <laughter> I did the same thing for a similar Irish government project. I bid on that one too. And I didn't come close.

Jerger: Who got that?

Grad: I don't remember, but I felt these were projects that I was somewhat uniquely qualified to do, that I really did know the software industry and I understood the market in the United States. That was the primary market. The secondary market was Europe and as to the rest of the world, it almost didn't matter. But I never got any of those projects although they were the ones that intrigued me most.

Jerger: Probably they were all wired.

Grad: Or just that my proposal wasn't good enough, who knows. It's not important. The key on those consulting things has to do with who the person is and what skills they bring to the table because it's a creative process, it's not mechanical. I think, in a number of the cases, they were given to the big accounting firms.

Jerger: Yes.

Grad: Accenture [formerly part of Arthur Andersen] and companies like that were most likely to get those kind of contracts. In a sense, the client was covering its ass by bringing in a large well known firm.

Jerger: Exactly.

Grad: If it went wrong and you had used a name firm you were covered. It was the same philosophy that, if a customer bought his hardware from IBM or if he got IBM to do a project, you could always say, "I got the best, what's your question? If it failed, it failed but it wasn't my fault."

Jerger: Yes.

Grad: So I can definitely see why those choices were made, which I can understand. The same thing happened later on in the valuation world. The big accounting and auditing firms who were required to accept the valuations that were being done usually got to do the valuations. A perfect example of that was with Sterling Software. I had been doing valuations for them for years and working with their auditor, which was one of the big firms, Arthur Young. They had a large office in Dallas and I made good friends with the guy who was the head of the practice. We worked together. If they had questions or problems, we worked out the methodology so that they could be comfortable that what we were coming up with was the fairest valuation we could do, that it wasn't biased to be high, to be low, that it was a fair valuation. By the late 1980s, you no longer could take a tax benefit from the valuation that was put on your books, but there were some R&D kinds of things you could still deal with in certain ways. So you still were doing their valuation but for a different purpose.

For a while, it worked fine and then Arthur Young decided they had their own valuation practice and they said to Sterling, "Why shouldn't we get the business?" This question came to the Sterling CFO, George Ellis, who was an absolutely terrific, smart, capable executive, probably the best CFO I came across in all the companies I worked with. He was a very straight shooter. He managed the flow of money and let there be no question about it; it wasn't just what happens, happens. He wanted to manage the way that the cash flow looked so he'd manage that. He knew when to set up reserves and when not to set up reserves. He then said on one acquisition, "Well, Burt, I can't give you this one." I'd probably done 20 or 30 valuations for them up to that point. But he said, "I can't give you this one." I said, "Okay. That's the way it is. If you have one in the future, let me know." He gave it to them, and it was a disaster. It cost him three to four times what it would cost with me. And he didn't think the results were accurate or even supportable to a challenge by anybody.

Jerger: That's the biggest concern, being supportable.

Grad: But if your accounting firm stands behind it, who's going to argue with you? So, from that point on, they brought me back in, and got the auditor to agree. They would argue with me at a different level after that, with more detail, and I had to justify more with them, but that relationship continued until Sterling was sold in 1999. I did every other valuation study.

Jerger: Good for George Ellis.

Grad: But, later on, by the early 2000s, the pressure got much greater from the SEC, when Sarbanes Oxley came in, so that I couldn't get a valuation project if I tried. I still did a few for a couple of companies down in Dallas, people who had been there and knew me from Sterling, but then it all ended. Not because of what I did, it's just that the accounting firms weren't going to back anything done by someone other than another accounting firm. So then the accountants did the valuations and they essentially put the independent valuation companies out of business. And what is worse is that they literally closed down two of the companies I had been working with because the way they did the valuations just couldn't stand up to SEC scrutiny. The companies were sued and they lost the suits.

Anyway, the Israeli projects were very interesting. It was fun to try and see if you could make a difference, to see if you could really help the country build up the software area and it worked. Their software business became very significant. A number of the Israeli companies have come over to the U.S. and tried to market their products and most of them are not good enough marketers for the U.S. world. They're good developers, they may run a company well but they need to bring in other people who know the U.S. market. Interestingly, they actually ended up being very successful in Europe in almost all of these cases because they did have a better market sense of the European mentality and European buying styles than they did the U.S.

Jerger: I didn't know that.

Grad: When I was bidding on these other country projects, it was through a connection I had at World Bank. I had been brought in by the World Bank to do a valuation in some project and they connected me with the Indian project, with the Irish project, and with the Philippines project.

Jerger: I kind of wondered how you'd happen to wander around the world picking up these opportunities.

Grad: The World Bank kept saying, "Burt, you're going to get the next one." So I would literally reuse the same proposal and just replace the name of the country. The Irish one I thought I had nailed. I remember talking with the people there. They had a great personal connection with me. They liked everything I had done. They had looked at the reports I had written and they were going to go ahead, but someone overruled them. That's the way it goes.

BGAI Staffing and the Consultants' Roundtable

Grad: Essentially, BGAI had what I ended up calling a "virtual staff." I never had a lot of employees [other than office staff] and I never had any consultants as employees. Although most of my projects used consultants, there were some projects I ended up doing in BGAI that did take operations people, like programmers or computer based training personnel, but they were oddball projects. For example, BGAI did a project for IBM on the Series 1 which required extensive programming and Alejandrina Pattin worked on that. Some of the projects were done in conjunction with one of my other companies, Heights Information Technology Services, which was really intended to do professional services work [this was a company that Luanne Johnson and I formed primarily for women programmers who needed to work at home]. So the line got a little fuzzy sometimes but fundamentally, in my consulting practice, I never had any professional employees.

And it turns out almost all these consultants who worked on these projects liked doing them because they were fun projects. They didn't last forever. They paid well. They learned something new in almost every case. They liked working together and they liked working with me. So it ended up that almost always when I asked the consultants if they were available, they found a way to participate. For instance, Sid Dunayer said to me, "Whenever you ask me for something, I'm going to do it." So he must have done 30 or 40 or more due diligence studies with me and even with whatever else he was doing, he would find a way to sneak this one in and get it done. Essentially, everybody I used was an independent consultant. They had their own practices. My rules were very clear that they were paid on a 1099 basis and what % markup I was making, and that the project management and client relationship were my responsibility. They were not to poach on my clients, but often I would OK their working

independently for the client on a long term project. And these same people showed up for project after project: due diligence, strategic planning, business analysis, all these kinds of things; they always showed up.

Grad: One of the things I want to do is talk about people. That's what I'm going to lead into, the virtual staff and talk a little bit about each of these people. But one thing I want to discuss first is about the number of different clients that BGAI had. I think I had well over 200 different clients. I think I probably had close to 1,000 projects. It's hard to remember precisely. But even in the first year, 1987, there were 25 projects and a similar number in 1988. And it varied year to year, but through 2005 there were still at least 20 projects a year

Jerger: So it's probably between 700 to 800 projects over the course of time.

Grad: Let's go back to talking about having a virtual staff and the really good people that were involved in those projects and how effective they were. Among the people that I worked with extensively over the years, I mentioned Elizabeth Virgo and that she worked with me probably on 50 projects, mostly evaluation projects but also on some of the legal projects that I had. Ed LaHay was someone I had known from IBM. He worked primarily on technical due diligence and related projects. Another thing about working with Ed was I was sort of his in-house job finder; when he left IBM, he went with a company in Canada, and then with another company.

Jerger: As a related topic, did you mention that some of the people that worked with you were part of an ADAPSO roundtable?

Grad: Yes. One of the things that was most interesting is that, through ADAPSO, I joined a roundtable of consultants, all of whom did consulting for computer software and services companies. This was a terrific group of people. The roundtables had been set up by ADAPSO for people in a similar software or services business, but we were in a similar situation and we found that it was very helpful to talk to each other about our business and about how to run them more successfully. We didn't talk about the clients and the projects and we couldn't discuss any confidential matters, but we could review the general relationships with our clients and what was going on in the industry. The Consultant's Roundtable was formed with Barbara Brizdle and Walter Brown and me. The other people who were actively involved were Esther Roditti, Esther Dyson, Dick Thatcher, Joe Blumberg, and Pat Landry. Pat Landry unfortunately, just died within the last week. She had a company called Specifics. I got involved, actually, when Joe Blumberg bought Pat's firm and I sort of served as a mediator between the two of them so they could work out the deal. Other people joined the roundtable at different points in time for a period like Lee Keet, Larry Welke and Mike Marcus. They were a wonderful group of people.

Jerger: Those roundtables were supported by ADAPSO initially, right?

Grad: Yes, but the roundtables continued long after the ADAPSO connection was no longer meaningful. Ours continued up until 2002 when it just kind of dissolved at that point. And some of the others are still active. One other interesting thing is that those discussions, and of course my continuing attendance of the ADAPSO meetings was essentially my marketing effort. I remember the criticism they made of me consistently was you don't know how to market. And I said, "You're absolutely right. I don't know how. I don't really want to."

Jerger: This criticism came from your peers at the roundtable?

Grad: The roundtable.

Jerger: Was that one of the functions, to help each other with suggestions and observations?

Grad: Yes. I would help them on their financials and how they could set their prices right and manage their P&L's. I could even tell them how to market. I was very good at telling people how to do it, I just couldn't do it myself. Matter of fact, in a couple of cases they offered to do the marketing for me. Dick Thatcher, particularly, said, "I'll do the marketing for you. Give me what kind of projects you want to do and I'll go sell them." I said, "You know, I'm just not comfortable with it." I really wasn't. It may have been foolish, but I just couldn't go that way.

Jerger: That's the way it was.

Grad: But getting back to the people. Many of the people who were very good friends were not in the roundtable but worked with me over the years as part of the virtual staff. Elizabeth Virgo I mentioned before. Elizabeth was just very sharp. She would dig in on anything you wanted her to dig in on. If I didn't pay attention to her, one of the ways she had of making sure I gave her the answers she was looking for, was she would start doing needlepoint. Since I was paying her by the hour, she knew that would get to me so that I would respond to her questions sooner. Bright, capable, terrific on the numbers side of things, great knowledge of many things and incredibly well organized.

Ed LaHay, who I had known at IBM, started working with me doing some consulting work, some technical due diligence type of things. Ed went through a whole series of different jobs as companies closed down. He was in a company up in Canada, did very well and started his own company. That company closed. He started another company. Couldn't get enough business. Went to work, at one point, for Pansophic, worked for an insurance software company down in Texas. Each of these came to untimely ends for various reasons, nothing to do with Ed but to

do with the companies. Most recently, he joined a company called SPL about four or five years ago through Mike Marcus, who had gotten to meet Ed. They were bought by Oracle and he's still working for Oracle. I felt that I should be getting a commission on each new job that he gets. <laughter>

Other names? I had mentioned Mike Marcus. Mike and I almost became partners. He was actually sharing an office with BGAI when we were in Elmsford, NY. I guess I didn't mention that I sort of had a moving circus there. We started BGAI in the basement of my home in Tarrytown, NY. We then moved to an office in White Plains and next to an office in downtown Tarrytown. After that we moved to Elmsford into what we called the "Darth Vader Building" because it was all black outside. Then we moved back to an apartment where I lived for a number of years. Next we opened up offices in Westport in two different locations when I moved to Westport. And finally I went back to work in my home here in Westport and no longer had any office staff. So as a consultant, you can have a traveling office. It goes with you wherever you want to go. And in a sense it doesn't matter where your office is located since most of my work ended up being done by phone and email and in many cases I never even met the clients on a face-to-face basis.

Let me mention a few other names quickly. Phil Dorn was a well-known writer in the field and an editor of Datamation Magazine and other publications. Phil worked on three or four projects with me. Again, he had great knowledge of the industry, good skills and was well respected. Carol Anne Ances worked with me on a lot. She had worked with me at Heights and then continued to work at Burton Grad Associates when I sold off Heights.

Marty Silberberg had worked with me at IBM. He had set up an operation in Menlo Park, California. When IBM announced the System 7, they announced it without any kind of operating systems, any kind of languages, any kind of development tools, anything. We were tasked in the Data Processing Division to take on a commitment to sell a bunch of System 7s. How the hell were we going to do that? We had to have a bunch of applications. Marty was working for me at IBM and he was given that assignment. We eventually built a staff of over 100 or so people working for him at Menlo Park because he not only had to build a big application for AT&T, which was to be for their call monitoring and for their billing processes, but we had to build all the operating systems. We had to build the language compilers, all the development tools, all the utilities, sorts, anything that was needed, we had to build it out. And Marty did a superb job. Then he spent a few years in Japan, and came back to IBM in the U.S. Eventually, he retired from IBM and was working with a charity in New York City. I used Marty for a number of substantial projects that we were working on. He was superb. Did a terrific job. Very conscientious. Again, Marty liked to be on long term assignments. He didn't like the two-day, five-day kind of thing. He wanted to be on a two-month, three-month project. I didn't have many of those assignments so that really wasn't a good solution for him but we continued to

work together right along. Those are just some of the major consultants who worked on the BGAI projects.

Company Acquisition Valuations

Jerger: You talked about Felix Kaufman along the way.

Grad: Felix continued to be a friend and a contact over the years but he didn't do much consulting for me. Once we had developed the valuation model that worked, I could do that without his aid. I would occasionally call on him for advice on financial subjects. I remember getting very disturbed talking to him and many others with the changes required by Sarbanes–Oxley. The way the rules were interpreted and handled for an acquisition made absolutely no sense to me from an accounting standpoint. I tried to mobilize some people in the industry to fight the SEC interpretation and they had a very interesting answer to me: "If we go fight the SEC and bitch about the way the rules are being used, what's going to happen to us the next time that we have to put in a 10K or we have to audited? We'd be in trouble." The accounting firms said exactly the same thing. I'd been working with almost all the accounting firms but nobody wanted to stand up.

Jerger: Yes, that must have been disappointing.

Grad: And the problem was that there are completely different rules as to what you can capitalize when you build a product yourself and when you buy a company; this dramatically effects the valuation of the product and the assets on your books. When you build your own product you can't put on any of the costs of setting up the marketing and building up the name, the good will. There's no good will. The only thing you can put in your books, and that's for a very limited time under the current rules, is the development cost of your product, but even that's very limited. It's only after it passes beta test that you can start to build up the costs you can put on there. And it's a limited amortization life, four to five years. So essentially a software company has little to nothing on the books in the way of assets to speak of. Although there is something, and there used to be nothing, but it is still small potatoes. It's not a big deal.

In contrast, when you buy a company you must basically put the entire purchase price on the books: the product value can be capitalized based on the projected revenue/profits of the acquired software; and the remainder of the purchase price is put on the books as goodwill, which is never amortized, but just sits there as an asset.

However, there is a large problem with this and that relates to how you can handle the revenue that you receive. Now, when you obtain revenues, there are two different treatments, one for the revenues from new product sales and the other for maintenance revenue. The new rules

under Sarbanes–Oxley was that you can't take credit for any revenue where you have some obligation to perform in the future. Here is a simple example. The customer has paid for a one-year maintenance contract. Well, you only can credit revenue proportionally over the course of the year as you do the work required. So 1/12th of it can go in as revenue each month. You have to set the other money that you were paid in a deferred revenue category and, since maintenance is a very large part of the revenue stream of any software company that's been around for any length of time, this means a major part of the revenue is always flipped over to the next year.

But there's a fundamental inconsistency. At the time they were setting revenue recognition rules we argued, that the key rule should be: it doesn't cost us very much to do maintenance. This is a wonderful money maker and why don't we put it on the books at the cost of performance, not the price we charge? They said, "Absolutely not. You must put it on as the price that you charge." They treat the software company like a magazine publisher. You put it on the books at the price charged. The view is that you have to give them back that money if you can't perform. Okay. We'll live with it.

Now you have bought a viable company. When you buy it, guess what the rules are? The deferred revenue doesn't go on the books at what the value of the deferred revenue is. It goes on at the cost of performance, which is maybe one-fifth of that. So all of a sudden you paid the \$100 million for a company and yet, you can't put the deferred revenue on your books. So effectively that revenue just disappeared. No one ever got that revenue; the seller didn't get it because it was deferred and never showed up in their P&L; and the buyer doesn't get it (only about one-fifth which is the cost of performance). I don't understand why the IRS wasn't unhappy about this treatment since no one ever saw that revenue and therefore no one paid taxes on it. It just disappeared off the books. It was gone. I tried to get people together to complain about the lack of logic and get the rules changed, but I couldn't get anyone to fight the battle.

But there were always these intellectual challenges. One of the things that made this business so exciting for me was that there were over and over and over again intellectual challenges, how to frame and structure something, how to put it together in a form that would work, how to set up a pattern, whether it was using product/market grids to decide which businesses to go into, whether it was how to do the valuation studies under changing rules from the SEC or whether it was what standard questions to use on due diligence studies, and how to handle changing accounting rules from the FASB. All these were part of the fun.

Jerger: That was your challenge, right. You could always ask people like Felix Kaufman or get help from someone like Sid Dunayer.

Legal Services Projects

Grad: I was always fortunate to know competent people who could help me formulate and come up with answers and then help make the process work. This was a very exciting time for the software and services industry.

Another thing that happened along the way that started in the 1990s was expert witness work. I was called in, I'm trying to remember what the first one was. I think it was this outfit in Texas, Fort Worth, who had a product, a system utility, and they were sued by Computer Associates. They had hired one developer from Computer Associates. About two years later, when the company was trying to sell itself, they had a buyer, I think it was Platinum Software. Charles Wang, the CEO of Computer Associates decided to sue the company. He apparently tracked people who had left his company to see where they went and to see what products came out of there. He then waited to see whether it was doing them any harm or might do them harm and if so, he then would sue. He was very litigious. I'm told there were over 200 suits that he had as of the 1990s. I don't know how much he had after that.

So these people called me in as an expert witness, not in terms of the technology, but because I had done so much valuation work. They wanted to know that if they were found guilty of infringing on the Computer Associates product copyright information, how much they should pay to Computer Associates. In other words, they wanted me to be their expert financial witness. The trial was held over in Long Island and it was fascinating to me. My client was a company whose revenue was maybe \$3 million a year and, at that time, Computer Associates was \$3 billion a year. This is in the early to mid-1990s. And Charles Wang sat in that courtroom every single day of the suit. Why he would do that I don't know. He sat in the courtroom every single day. No surprise, I never got any work out of Computer Associates.

Jerger: Yes, I gathered that. But you were the expert witness on what should be paid at the trial?

Grad: I was the expert witness. On that one, the eventual number I came up with was about \$250,000. They had actually offered \$250,000 to Computer Associates to settle the claim when they were first challenged. They earlier said to Computer Associates, "Yes, we did infringe (because of the actions of the employee that we hired), but we didn't do it on purpose. Your ex-employee did steal the code and he shouldn't have done so, and we're sorry but it's a very, very small part of our product. Nevertheless, we'll give you all of our profits over the past five years, \$250,000, to make this go away. This other company wants to buy us and we'll be gone. We will take the code out of our product, and we'll start with a clean room and do it that part all over again." And they had actually removed the offending code. But Charles Wang said, "Absolutely not." He brought in his expert from some university, a Ph.D., who said that the company should pay \$12 million.

And the judge in the case said, "I don't trust any of your guy's valuations." He brought in his own expert from MIT at \$4,000 a day who came up with his formulation of how you should determine what are the damages in the case of a copyright infringement suit. That has actually become the standard that's used in certain district courts but not in all them. A series of different rules apply. The eventual number he came up with was \$250,000. But Charles was not happy, and would not accept it. He continued to sue them. He sued them in France. He sued them in Texas. He tried to get ITAA, the successor to ADAPSO, to lobby in Texas to get the law changed so that he could retroactively sue them down there. ITAA was ready to do so until I heard about it. I called the executive director of ITAA and said, "Do you know what's going on?" "No, no, we just were called by Charles Wang, who said he would become a member again if we backed his suit and lobbying effort." I said, "Well, first of all, that's immoral but, number two, he's wrong. You should have some facts before you stick your neck out." I got Bernie Goldstein to back me up on that. These are not people just doing the thing that's right for the world. I said, "Look at what he's asking you to do. You don't want to go there." And they decided not to back up the Computer Associates actions in Texas. Eventually, my client paid the penalty and the suits did go away and the company was purchased by Platinum Software.

Classification of Software

Jerger: Let's talk about Larry Welke; you worked with him along the way, too?

Grad: Yes, but that was early on. When I had just become a consultant (or maybe when I was still with IBM), Larry's company was called ICP and it published directories which listed all of the software products that were available for sale. One of his problems was: how do you classify and structure these products to enable people to readily find what they are interested in buying?

Jerger: So you talked to him about structure?

Grad: Actually, I set up a complete framework for him to use and it turned out to be a classification that I continued to use for many years. I broke down software into system software and application software. In system software there were operating systems, utilities, languages. In application software you had application development systems and then you had all of the applications themselves. You have cross industry software and then you had each of the industries. So that's the framework. ICP used that for many, many years.

And that's relatively standard now. People use that framework today. Even now that I'm working with the Computer History Museum, I use that same structure to set up categories for an industry timeline and for organizing meetings and proposing directions for the Museum.

Jerger: So are there other aspects of BGAI? Are there other things that you've done? You talked about due diligence, valuation, and expert witness projects. Have you covered all the things that you want to?

Grad: I think there's just two more things I would like to discuss and then I think we've come to a reasonable stopping point.

Jerger: All right.

Computer Based Training

Grad: One is that I had always been interested in computer-based training. I had done work on that at IBM and then we did some work with that at Heights Information Technology Services and then, when we closed Heights Information down, we owed the investors money. A few supportive people had invested in the company and we couldn't pay them off. What I did is I said, "Look, I'm going to keep the computer based training." I didn't sell off that business when I sold the company to F International for \$25,000 or something, all of which for legal fees. I said, "I want to keep the computer-based training business." Since F International didn't have any experience in that area, they were quite willing to let me keep that. So there was no problem. So I kept the computer-based training business and Carol Anne Ances, who had worked in that area in IBM, and I continued to get some CBT projects. We got one very large project with Equitable Life. Allan Hufft had a software company in the Chicago area, and they were building the claims processing software for Equitable Life to enable their health insurance service people to review the claims and to then be able to determine which ones were okay and which were not okay and needed to be challenged. They wanted to automate that as much as possible because to make those decisions you needed a lot of judgment. Equitable didn't have many people with that level of judgment. Allan Hufft's company was building the claims processing software but they said, "How are we going to train the Equitable people to use it?" Our answer was Computer-based training. And so we were introduced to the people at Equitable, worked with them and built a computer-based training systems to do it. And it actually worked.

Jerger: Yes, that's great.

Grad: Equitable was a difficult company to work with. They kept changing management, and they insisted that we use their people to help to prepare the courses, but their people weren't competent in that area. They couldn't learn how to program. Preparing a CBT course is effectively writing a multiple branching program and requires the same kind of thinking as a programmer. The level of detail and the need to be able to recognize what the student was having trouble learning and providing remedial material was not something that they could do effectively.

Japan's MITI: Why was the US successful in selling software products?

Grad: We had something over 200 different clients over the 30 years that BGAI has been in business, not so many in the last few years for sure. We had probably between 700 and 800 projects, maybe more. We had a few clients for whom we did multiple projects (anywhere from 10 to as many as 80 for one client). But for most of them we did just one or two. Obviously, the projects had shifted from companies supporting mainframe hardware at the beginning, and then into the microcomputer area; there was relatively little minicomputer software work for BGAI. It's fascinating to learn of the new products and services that came in with the PC's and the modeling of new markets, particularly getting involved with the home markets and what was being sold there. It was a tremendous learning experience. In a lot of cases, the consultants I used were the ones who taught me about these new markets and applications. They used to joke that after they talked to me for 15 minutes, I could give a two-hour speech on the subject.

Jerger: I've heard that said.

Grad: It's true. I think one of the most fascinating projects that I ever did, and it was done in the mid-1990s, was for the Japanese government, for an organization called MITI, Ministry of Trade and Industry. They wanted to understand why the United States was so successful in the software business and they weren't. A friend of mine, Marty Silberberg, had worked in Japan for IBM for three years. When I asked him why Japanese companies couldn't sell software products, he said, "They claim it's like using someone else's underwear. It's not appropriate. You should build your own." I said, "You know, without a home market, you got a problem." Yet MITI felt that the primary reason for the growth of the software industry in the United States was because we had government financing. They wanted a full-scale study done, primarily of software products, but also of the various professional services and processing services as well. So we tackled it. I put together a team of about six to eight people, each of whom worked on different parts of the industry. Marty Silberberg, Phil Dorn and a number of other people were involved in that project. We went through the available literature, we spent a lot of time on discussion and we put together a 400-page report covering all aspects of the software and services industry.

Jerger: When was this, roughly?

Grad: 1996. There were multiple reports, one on software products, one on the other services and certain special summaries on costs and markets. We did financial analyses, who the big companies were, what their profitability was, and my conclusions as to why the US companies were successful. Yes, the government-sponsored work had been significant early on and in some specialty areas, but by the time IBM unbundled its software and the independent software companies came into existence, there was very little government support.

Software product development in the 1970s, 1980s and 1990s was not, in the products areas, dependent upon government support. In the 1950s and 1960s there was a lot of support, but not for software products. We said, "Yes, there was government support but much earlier on." We said, "We believe that the difference lies in entrepreneurship. The people in the United States are willing to take high risks. Anybody can go out to their garage and build something and try something and take a chance. They're not company men, a lot of them. They will just do it."

While the growth in the computer manufacturing companies (IBM and the others) has been primarily with the operating systems and system utilities, the growth of application software products is a different ballgame; this growth came from independent software companies, individual entrepreneurs. For the PCs, we had very strong, very bright people who were willing to take risks, even to invest money their own money. We call them Venture Capitalists and we encourage those high risk investments. I said, "The whole economic and social structure made a difference."

Third, we have a large internal market in the United States. And for the both the mainframes and for the PCs, we essentially had a single platform, a standard platform, to enable companies to sell to a broad market. This was true in the mainframes (with IBM's OS and DOS) and the PC's with the MS/DOS and later the MS Windows platforms.

We really didn't have a standard platform in the minicomputer world and we didn't build a lot of significant software companies in that area since there wasn't a single platform. There was DEC and there was HP and there was IBM and but none of them were big enough with common applications. And then, of course, with the PCs Microsoft ended up producing the standard platforms because of its agreement with IBM which permitted them to sell the same operating system to all of the IBM PC clones. It wasn't established through a standards committee, but just happened when the IBM PC (and its clones) became the go-to platform. Apple, although it had fine products, would not give open access to application developers, nor let any other manufacturer produce Apple clones. In some sense that's the advantage of a monopoly or semi-monopoly like you had with IBM and, later, with Microsoft. We also pointed out that the companies had strong salesmanship with effective and large sales forces.

These new software businesses were able to be financed by Venture Capitalists because there was a well-defined exit strategy; there was a clear path to be able to find other companies interested in buying successful new startup companies. In other words, when your company got big enough, you either could go public or someone else would buy it. And 90% of the companies didn't go public but were sold to other companies. Sterling Software and Computer Associates and Platinum Software would buy up the companies that were in their areas of interest.

In Professional Services and in Processing Services there was the same kind of amalgamation through purchase of local companies. AGS Computers, Keene Associates and others bought the professional services companies and United Data Centers, ADP and others acquired processing services companies. For instance, Professional Services companies could hire the best programmers and analysts who would come to work for them because they would be bored in the big user companies. And since the big user companies wouldn't pay them enough money, they could make a lot more money in the Professional Services companies. Processing Services started out being completely localized. (They were called Service Bureaus and eventually much of this business went to the time sharing companies.)

So, the MITI reports went through the entire range of software and services activities and we sent it off to them. They sent us back a whole bunch of questions. We responded in detail to their questions. But I still felt they never got it. At the time we were doing this, asking people questions about the industry, their opinions and reasons, I got a lot of flak from people in the industry, from ADAPSO members.

Jerger: Really?

Grad: Because their view was, "Don't tell them what we're doing because then they'll figure it out-- look what they did to the hardware people. Look what they've done in televisions. Look what they've done in these other areas. They'll do it." I said, "You know, I can tell them all I want to, but they can't do it." That was my opinion. I don't know whether it still is. They have never become a significant software or services player. Actually, even virtually all the European companies have not been very successful in becoming significant players in the software products businesses, with just a few notable exceptions like SAP. Some European companies did succeed in professional services. For instance, US-based CGA (Barry Goldsmith's company) was eventually bought by Cap Gemini. We felt that they bought the company so that they could use the company's initials for Cap Gemini America. <laughter>

Slowing Down at BGAJ

Jerger: Starting in the 2000s, you've kind of reduced your role of billing paid work for BGAJ. You're involved now with the Software Industry Special Interest Group at the Computer History Museum in Mountain View, California. And you've delivered innumerable hours, innumerable, to collecting the history of the industry.

Grad: Well, something happened in 2000. 2000, of course, was a millennial year and all of the programs had been written with two digit years leaving out the 19. And now all dates needed to be converted to 4 digits. With all that fear about what was going to happen, which was called the Y2K problem, the professional services companies had a bonanza and were growing outrageously up to that point. You then had the dot com bust in 1999 and the Y2K

frenzy was over. This led to a serious drop in the stock market values and to a business recession.

By this time, the mainframe companies were in a pretty stable situation, but didn't have any growth. Most mainframe companies did not migrate either to minis or micros. And the mini companies didn't migrate to the micros. The microcomputer companies didn't become the big players in the Internet and World Wide Web. So my contacts, which had been built primarily in the mainframe era, got thinner and thinner. And many of the people that knew me weren't around anymore. Broadview Associates was no longer the key player as far as mergers and acquisitions; they were still significant but the regular M&A firms had found the computer industry and those firms had taken over much of the work in that area. Business was slower which was okay. I had done reasonably well. From 2000 to 2005 it was definitely slower with fewer new projects. My biggest client, Sterling, was now gone. They had been 50% of my business and, they sold off Sterling Commerce to Southwestern Bell and Sterling Software to Computer Associates. That last sale certainly amazed me because Sam Wyly had such negative feelings about Charles Wang and Computer Associates. But while he had a great deal of concern about that sale, because Sterling Software was a public company, he didn't have a choice. He had to get the best price for the stockholders. Since then, he has sued Computer Associates a couple of times. He's had a proxy fight and so forth. He still has very negative feelings.

So the business environment was changing. My skills were less valuable in some of the areas that were coming up. I didn't have the kind of Internet skill or World Wide Web skill that I had in the other software and services areas. I ended up doing considerable work during that period for a company called First Dallas Limited, which was run by a son-in-law of Charles Wyly, Sam's brother. Sidney Dunayer got deeply involved and through him I did get a big education in the PC field and in what was going on with the Internet, but it still didn't lead to any significant new clients or projects

Jerger: Well, that was a dramatic change.

Grad: But the whole run was fun. Since 2005 (it is now 2008), I have had just a few projects. The most interesting was last year and that was for my grandson, Rob Kalin, who started a company called Etsy which provides an eBay like service for hand crafted goods [note: Etsy went public in 2015, although my grandson is no longer involved]. I'm essentially out of the consulting business. But if someone calls me and has a project, I'd be glad to do it if I think that I still have the skills needed.

Jerger: You'll never retire. You're just going to keep doing some other things.

Grad: I am doing some consulting work for one of my sons who has a life insurance agency in New York. I've been helping him on the financial side of the business. But, meanwhile, the bulk of my time is now spent on the collection of software history and I'm working with the Computer History Museum in Mountain View, California through an organization called the Software Industry Special Interest Group. Luanne Johnson and I formed that in 2000 as the Software History Center. We ran it for about five years as a nonprofit, but we ran out of money and so we joined the Computer History Museum. This is run on an almost pure volunteer basis at this point in time.

Jerger: Burt, you may be unique in the software services industry. It's hard to find people who have been in it as long and who have the same breadth of knowledge. There are some other people who have been there for many years but I think you can appreciate the definition of unique. It's more than special. So with all that, what result or process or event with which you've been associated has given you the most pride or pleasure? You can add two, three maybe but if you had to pick one, is there one that says, that was just it? Or two or three?

Grad: Well, I think, in terms of the relationships, the two that stick in my mind as being the most significant were Informatics and Sterling. And since they merged together that was sort of a continuation. That was the most significant. I felt I made a difference for those companies. And I kept learning over all of those over 20 years of work with those companies.

Jerger: You made a difference to those companies and to the industry itself.

Grad: I think so. The other significant relationship-- and I'm trying to think of in terms of Burton Grad Associates-- was the work with ADAPSO. I always felt that that I made a significant difference in the industry, through the various things I've been able to help to resolve for the industry and the trade association, both as an IBM representative to ADAPSO and later as a BGAI member of ADAPSO.

Jerger: Yes, you talked about ADAPSO being your marketing source but people may not appreciate that what you did was to provide a huge service and intellectual strength to the industry along the way. And, while you ended up getting business from ADAPSO members, you were not a pitch man. I don't remember at any session ever that I was at where anyone could ever say, "Oh, Burt was pitching something." No, you were always pitching the industry, you were pitching quality, you were pitching fair business practices, not yourself.

Grad: I couldn't do it.

Jerger: I understand.

Grad: For many others, that was their thing. Bernie Goldstein went there to pitch his merger and acquisition company. Walter Brown pitched the use of his consulting service. They always provided great value but it was something that I wasn't comfortable doing.

And that's, of course, how I learned. By running the quality committee, I learned about things that I could then use with my clients. By running the technology group, I learned about everything going on, which I could now bring to my clients. My clients were in every part of the software and services business, so I didn't know what I was going to get into next. The more I knew, the more I could pick up the knowledge and apply it in my consulting practice.

Jerger: Yes. The industry has benefited significantly from that.

Grad: The only other thing of significance, in the end, is collecting the history of the software and services industry; that is something that I hope has the greatest long term value because, again, I feel I've been in a special position. I have been there from the beginning and I happen to have been at key events in the industry. I have even joked is that I am like the fireman who has been at all of the big fires. I'm not the arsonist but I seem to show up whenever there's been one of those special occasions. I've had the privilege of being in the industry forever. So it's not what I've done personally but it's what I've seen done, basically living a life in the software industry. I've been in this now since 1954 when I worked on the Univac I at GE and then the 18 years with IBM and finally having that privilege of working with many of the independent software companies over that last 30 years. The industry has been a very special thing for me.

Jerger: So I thought I'd ask you, what do you think will happen over the next ten years? What's going to be a wow factor or something new or special?

Grad: My ability to predict is not good. I'll tell you one short story on that. Then I will tell you my prediction. The short story is I worked for a company called Expert Systems, which was providing home use software on PCs to lay out your office, lay out your home furnishings, plan your travels, and so forth. They had a series of these little software programs. They sold them through Walmart and other retailers for 25 bucks. This was a part of the business I knew little about but the company needed to have a valuation study done. So I did a valuation study of the company which enabled them to put a value on their balance sheet. A few years later the IRS challenged them on the valuation. At the time that I did the original valuation, everybody used MS DOS (or PC DOS) and all of their programs were written to run under those operating systems and they were quite successful and some programs did wonderfully. So I did my predictions based upon MS DOS being around for a few years since Windows 1 had failed and Windows 2 had failed. Microsoft was talking about Windows 3 coming out, but I thought that it would be another dog.

Of course, within six months of Windows 3.1 coming out. The DOS market dried up completely. And Expert Systems had no products that ran under Windows so all the products I had put on the books as assets, to be depreciated, were suddenly worth squat. And so the IRS challenged the valuation. They said, "Where did you come up with these numbers?" So, I had to write an explanation in which I said, "This shows how good a predictor I am." At that point in time, I had in my notes that MS DOS was going to continue to be the dominant operating system; Windows will come in but it'll take about three years for it to become a leading operating system and it will only pick up the business not the home market. I said, "I'm just dead wrong but, at the time, that was my honest belief." Anyway, the company had to pay some extra money because the IRS agents couldn't understand that instant Windows dominance wasn't obvious.

Jerger: That's one of those "you had to have been there then" to have come up with that.

Grad: So, I have don't have a great track record on predicting the future. Almost everything that has happened that's become a big market in the last few years has surprised me. The cloud market idea, I can't imagine it. I can't imagine trusting all of my data and all of my software to somebody else but who knows? Microsoft seems to be losing in those battles against the people who are taking that other approach. It doesn't look like there's a big business for selling software products per se any more. Whether they come up with a new model of some way of charging for software as a utility or charging a rental structure or something like that, beats me. But there probably needs to be a new pricing model. The current pricing model does not encourage product development. You see the end result, which I think is very fascinating, is the use of open source code and how that's going to affect the market. Many of the people I know who are really skilled use open source because it's quite good. The amount of money you make off of that is very different. You can't create a company of any real size around open source. It just doesn't work. So I'm thinking that that business will change dramatically. Interestingly enough, the professional services business is still going strong; it still seems to be a money maker and there are still many of these companies around. They aren't the size they were at Y2K but they're still doing well. What a wonderful industry and I've had a wonderful life in the industry.

Jerger: Thanks for your prediction or non-prediction after all you've done. Thank you.