An Interview with

BRUCE COLEMAN

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Conducted by William Aspray

on

3 May 2002

Washington, DC

Charles Babbage Institute
Center for the History of Information Processing
University of Minnesota, Minneapolis

Bruce Coleman Interview

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Abstract

In this oral history, software pioneer Bruce Coleman describes his early life and work as a salesman for IBM. He explains his motivation for earning an MBA at the Harvard Business School, and details his subsequent work at a number of high technology companies including integrated circuit maker Logic Electronics, Boole & Babbage, Informatics, Walker Interactive, and InSci (Information Science). Coleman describes software product development, financing, marketing, sales, and pricing at several of these companies, including Boole & Babbage, where he eventually served as CEO, and Informatics, where he assumed the responsibilities of COO.

Preface

As part of its preservation activities, the Software History Center (SHC) worked with Dr. David Allison of the Smithsonian Institution's National Museum of American History and Dr. Jeffrey Yost of the Charles Babbage Institute to plan and conduct a number of oral history interviews of early software company founders and other key industry contributors. On May 3, 2002, in conjunction with SHC's ADAPSO Reunion meeting held in Washington, DC, SHC arranged for 15 individual interviews by historians well qualified by their knowledge and interest in computing history.

The following people were interviewed together with the name of their interviewer:

Bruce Coleman, interviewed by William Aspray
Richard Crandall, interviewed by Paul Ceruzzi
Gary Durbin, interviewed by Philip Frana
Martin Goetz, interviewed by Jeffrey R. Yost
Bernard Goldstein, interviewed by David Allison
John Keane, interviewed by Martin Campbell-Kelly
Ernest E. Keet, interviewed by Philip Frana
Frank Lautenberg, interviewed by Paul Ceruzzi
John Maguire, interviewed by William Aspray
Joseph Piscopo, interviewed by Thomas Haigh
Lawrence Schoenberg, interviewed by Martin Campbell-Kelly
Charles Wang, interviewed by David Allison
Robert E. Weissman, interviewed by Paul Ceruzzi
Lawrence Welke, interviewed by Thomas Haigh.
Sam Wyly, interviewed by David Allison

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

William Aspray: It's the 3rd of May 2002 at the Monarch Hotel in Washington D.C. with Bruce Coleman and the interviewer is William Aspray. Let's start by talking about where you were born and when, and what your early family life was like.

BACKGROUND

Bruce Coleman: Certainly. I was born just outside Boston, Massachusetts. My parents however lived in Connecticut. The advantage of having a doctor as a grandfather is that you could be born free. We moved almost immediately to Philadelphia where my father was in the brass business as a salesman and we stayed there until 1951. We spent the rest of my pre-college days in Bristol, Connecticut, a mill town with companies like Bristol Brass, New Departure Associated Spring and a lot of heavy industry types of firms that started up in the early part of the 20th Century in the Connecticut area. I was one of four children - two boys and two girls each separated by four years so that we could afford to go to college. I did so at Trinity College in Hartford from 1957 till 1961, graduating with a degree in economics. Fortunately like most people I was completely unable to use my economics degree – no surprise. I then went to work for IBM for six years in the Hartford office as a trainee and salesman.

IBM

Aspray: Why did you choose IBM?

Coleman: I chose IBM for a very practical reason. As a part time job in school, I was bartending for private parties; IBM hired me on numerous occasions; I had wonderful times at their parties, they paid well and I enjoyed them. So it seemed eminently sensible to me at the time to take a job at IBM. Obviously IBM was an excellent company to work for. That was the key to the start. The good news for me was after they discovered my technical competence was fairly stunningly low they decided I could be a salesman. So I did that with modest success for four of the six years in IBM. I remember one night looking about the office 6:30, 7:30 at night and sitting at one of 45 or 50 gunmetal gray desks, all in a line. I decided that I looked, acted and thought like about everybody else there. And this is good – they are hard working people, reasonably bright, seemed to care about things and wanted to get somewhere. I determined that there wasn't any reason that someone would reach down in the promotion barrel and pick me. I looked too much like everybody else. I noticed then that two or three of the men seemed to have a better understanding of where they were, where they were going, and how to get there. And it so happened - I don't know whether it was serendipitously or not - that they all had been to business school. A friend of mine had applied for and been accepted at business school. I talked with him about it. So thinking about it I said, "I'm going to need this to make me a little bit different."

HARVARD BUSINESS SCHOOL

After six years I'd saved up enough money at IBM, particularly through the stock purchase plan, to be able to afford most of the cost of going back to business school. I applied to three schools, was accepted in Stanford, Tuck and Harvard. To my great relief, Harvard accepted me because Stanford and Tuck are very quantitatively oriented; and while my math professor at Trinity when I called him didn't quite laugh when I said, "how much will I have to do to prepare?" The answer was lots. So I was able to go to business school at Harvard without the quantitative skill sets the others required. That didn't particularly cause me any stress because I believed then and I'm sure now that the issues requiring business skills as a CEO are not those that are well suited for quantitative analysis. You have to be able to understand balance sheets, basic numbers, P&L, and those kinds of things. Rarely do you get into heavy mathematics to figure things out; and fortunately, if you have to, somebody else can do it. So the other part of Harvard that I liked immensely was the case method. Harvard specializes in mixing a group of people, most of whom have had work experience, together in classes. They have people from government, military, education, business and a nice potpourri because the value of the class comes not from the lectures but from the case method where you debate with the classmates about what the problem is, what the facts lead you to and what the answer is. I was delighted to find that unlike my undergraduate degree, my response was, I could really use this. This is interesting, it's helpful, it's very stimulating and I'll be damned if I'll fail. So unlike undergraduate school, I worked very, very hard and did dramatically better than undergrad work.

Aspray: Did you anticipate that you'd go back to IBM after you finished your MBA?

Coleman: No. It wasn't clear what I was going to do. It turned out that IBM was much more interested in me, not surprisingly, after I went to business school (and I did extremely well there) than they were before. They were interested and they would have liked me to come back, but I had an interesting thing happen. People would ask, "Bruce what are you going to do after business school?" Having been a salesman, it's always important to have a good answer. May not be exactly right, but it needs to be good. And I would say, "I'd like to run a company five years out." Boy, did that have a nice ring to it! Well, be careful what you wish for, for it will surely come about. I didn't go back to IBM, a good comfortable place to go, or to McKinsey or Boston Consulting Group. But I took a job with a bankrupt company nearby. I had a chance to be the number two man out of thirteen. I managed somebody. I never managed anybody in my life before, including myself. And we were eleven days from bankruptcy but they gave me a lot of stock options. I said, "What the hell, you got to start somewhere!" So I think, having said that to people and followed up with doing the things that led me down the path of running something, you build this plan and all of a sudden it happens.

Aspray: That was a pretty unusual choice for somebody coming out of Harvard Business School.

Coleman: Very, yes. And I guess it was a fairly conscious decision. But I knew that I wanted to be running something, be a manager, even though I didn't know then really what a manager or a leader was. But I wanted to do that and the benefit of business school was that it gave me the analytical skills to do what was needed, although it was clear even then that business school doesn't give you the people skills. Many business school graduates don't understand that and expect to go gallivanting off and be enormously successful. Because I had six years of business, I knew some of what I didn't know. So I didn't take myself all that seriously.

LOGIC ELECTRONICS

Aspray: This company that you went to – this was Logic Electronics?

Coleman: Correct, yes.

Aspray: It was in the technology sector as well. Had you intentionally been looking in the technology sector?

Coleman: No, I heard about the company through my broker, who managed to waste six thousand bucks of my money in it, and he said they needed somebody else in the company - you ought to go take a look at it. So I took a look and it was in the integrated circuit testing business. So I said, "What the heck, not a bad place to start." I did that for a year and a half. We made massive progress, which means instead of being eleven days from bankruptcy we were over thirty days from bankruptcy when I left, still struggling to stay alive. The company ultimately was taken over by its creditors. During that time we missed a few payrolls and since I was number two on the miss list, the boss being number one, I had to do a little part time work to be able to afford apartment rent and food and beer. I did some consulting work for Arthur D. Little in the hospital area, because I had sold to hospitals and was very interested in that during my IBM days. So I did some consulting for them, which paid a little bit of my rent money, which I enjoyed, and serendipitously it helped me to meet my soon-to-be wife. A lovely lady who went walking by while I was talking with the man I did business with. I only got a quick look at very good-looking legs and long black hair and I said, "I saw some good-looking legs and long black hair go into an office across the way. Is she good enough looking that I should wait until she comes out and see?" And he hesitated and said, "Well, she's not just attractive? She's very attractive and her name is Pam Morton, she's very business-like but not hard or somber or something like that." So with that in mind I followed her down to her office and asked her out. We were both dating other people, but eventually it sorted itself out.

Along with that the realization that making one paycheck out of three wasn't going to pay for a wife who was not going to work forever caused me to look for a job. After mailing resumes to all 83 of the venture capital companies in the national list, eighty-three back then as opposed to probably a thousand now, I received responses from three people, all associated with Boole & Babbage, the place I next ended up working with.

BOOLE & BABBAGE

The chairman, Pitch Johnson of Asset Management, interviewed me along with the CEO, and he basically crammed me down the CEO's throat. Things struggled for a while. I was about ready to leave because working with a founder was challenging. It ended up that we cut the company in half, the founder was fired, and I became vice president and general manager, and then CEO about the time that Pitch wanted to go to the 1972 Olympics and he said, “Well, it’s yours, goodbye.” So that got me to my first real leadership position.

Aspray: Tell me about Boole & Babbage, about the company itself.

Coleman: It was one of the early software firms, founded in 1969 by Kolence and Katch. Dave Katch and Ken Kolence had worked together in consulting. Ken had always been interested in measuring computers to figure what was going on in the CDC machines. Dave Katch did consulting to pay the rent and was a little more of a businessman. Ken wrote some programs to figure out what was going on in these big machines. They said, “You know, we really need monitors.” So they built products, PPE and CUE. CUE monitored the CPU and what was going on with it. PPE looked at programs, saw where time was spent in instructions, where time was spent in wait mode, so that both programs and computers could be optimized. They had sold, I think, the year that I joined them half-way through, $1.6 million worth of software. Back in 1971, that was a hell of a lot. That was the good news. The bad news was that they spent $2.14 million and were running out of cash. That’s where I came in. I remember thinking that if we sold these rascals for $7,500 a piece, then you could afford to have field sales people sell that kind of product. The average price of the sale would be $8,000 to $15,000, but we were able to afford a salesman that actually knocked on doors. I remember thinking, what happens when we go through all the computers that we know where they are, IBM machines, what happens to the marketplace? And one of those revelations came, well the market grows, people that say ‘no’ today will say ‘yes’ tomorrow and your product can be enhanced. All those things that happen in any other industry; but this was my first industry, so over time I saw that you could add products and your marketplace would expand and your average selling price could go up. I worked with Boole & Babbage the first of two times between 1971 and 1978, and the company became profitable at about $8 million in revenues, 22% pre-tax and $2.5 million in the bank when I left.

INFORMATICS

I was lured by Informatics, a company from Southern California. Then it was about $55 or $60 million in revenue. I had the hankering to run something larger, and I was recruited to be a group vice president of the software group and ultimately four years later became the COO under the founder, Walter Bauer. And it was a very interesting six years. Ultimately Walter and I got in a disagreement. After six years, we were having weekly meetings and we disagreed about what to do. After one conversation on a Friday where we’d agreed on two paths he said, “No I don’t want to do them-- selling one division and merging the other.” I said, “You know Walt, we’ve got to make this work, and I want this to be successful. We’ve got to have agreements and make them happen, whatever it is.” And I said, “I want to stay here, but I get a lot of calls.” He said, “Gee, it wouldn’t look good for me if you left.” So two weeks later he fired me. He did the best thing in the world for me because I went off to do a turn-around for Walker Interactive in 1985, then a turn-around for Boole & Babbage, a turn-around at InSci and now I’m in my eleventh interim CEO job. Since then, I’ve learned a great deal, had a wonderful time, doing things that I think fit my skills set very well.

BOOLE & BABBAGE REVISITED

Aspray: Let's go back and talk a little bit more about Boole & Babbage. Who were the competitors?

Coleman: Our first competitors were hardware monitoring devices. Let me think if I can remember. There were two people, two companies whose names are escaping me now that had hardware devices and I said, "Well, we can get down to the itsy-bitsy levels and things you can't get, so hardware is always better." But they were solutions in the $45,000 to $75,000 range. It required putting probes on pins; skill sets that many companies didn't want to have.

Aspray: And you were priced at about a fifth of that or less?

Coleman: Well, if you add both together, let's say it's a third of it. Ultimately, obviously software won out because it makes a great deal more sense, but we competed with them - one out of Rockville, Maryland as I recall. They were our main competitors. There was one competitor from SLAC called SlacMon. Stanford Linear Accelerator Laboratories had written this program and put into public use this monitor that wasn't quite as good as ours but that was an early for free competitor. The most serious competitor was Candle Corporation. Aubrey Chernick had started this company and written a better monitoring program than our CUE, and for a while he thumped on the company pretty well. But when I came back - having left the company for seven and a half years and then came back to do a turnaround - part of it was getting ourselves back on an even footing with Candle. Interestingly, Candle and then we went from a direct sales model to a telesales model only. Rarely did they go out to customers, but they could close hundred thousand dollar deals on the phone only. So we learned from them. One of our salesmen that went to work for them was very successful with us as a direct sales person, equally successful as a telesales person. Unusual, because the skill sets are fairly different. The disciplines are fairly different but the selling process is much the same. And he came back to us afterwards. I hired him back and he helped us do 75% of our business telesales and only 25% direct sales. So the competitors were first to try other ways of doing it. Obviously "no interest" is always a competitor or "we'll do it ourselves," although less of "we can build it here" than other places, because writing interrupts and that sort of thing was arcane enough that many companies didn't want to do that. The savings, timesavings, were significant and could pay for the product within thirty days. but it was a young and immature marketplace so the idea that someone should use software was unusual and that you could tune systems required proof and credibility. We did a lot of demos. Give me your data and we'll show you enough to show that you ought to buy.

Aspray: Using their data?

Coleman: Using their data. Extract their data. The tech would go and say, "Now look what we found here, wouldn't you like to have more?" And it worked very well because it was a product and a concept that was absolutely right for the times.

Aspray: I was talking this morning with John Maguire, and their demos were paid demos. Did you charge for your demos?

Coleman: His was a little bit different because they had to put more skin in the game. Half the time we were paid. We'd do a two-day technical study for like six or seven hundred bucks a day. Half the time, if we thought the installation was big enough, anybody who had a model 65, good size machine back then, we figured it was a slam-dunk. We may not be able to sell them but the need was there. So maybe half of ours were paid demos and the others were: let's have a wing at it, we think we can convince them and we've qualified them; we think that they will buy if we meet their criteria.

Aspray: Was there a particular profile to your customers?

Coleman: The most significant profile was having a machine of size at an installation site. A System/360 model 50 back then was on the cusp. If they had a need, if they were having performance problems, we could get them; or if they were a little more advanced in their thinking. When we saw a 65 or anything bigger than that, that was our key. The second thing was, how receptive was the DP manager. If that person was open – say, "Well you could prove it to me" – we'd have a wing at it most times. We'd qualify them to make sure they were serious, they had money in the budget and that sort of thing. If we had an old timer from the old punch card days, or IBM 7090's who said we don't do that sort of stuff, then we'd say, "Well, we better find some good allies there under and around this character or else we won't bother this time." Because then, even though we weren't sure how many we were going to sell, it was a fairly new marketplace and you had other places that you could go - although we pretty well quickly found all the large sites. IDC published site listings, and we found them pretty quickly. So I think those were the two largest criteria that made a prospect a good one.

Aspray: Were there particular industries that you were more likely to get sales in? Were you concentrating in a few of them?

Coleman: Not particularly, because it was a horizontal rather than a vertical sale. Yet insurance companies tended to have larger installations, as did banks. They tended to have big budgets so you went there not necessarily because it was a good industry fit but the other parts of the sale process were right. Lots of machines, money, technical people of competence. Aerospace was obviously a good one, and aerospace sometimes had performance problems by the compute intensive nature of their business that would manifest itself before a traditional payroll or something like that. And as you moved more toward the online era, the 360's became 370's became 3090's became whatever the hell they are now. More horsepower is required. There are more places where poor performance can be hidden and can manifest itself with great pain. IBM's IMS system, one of the first real online systems, and CICS had pockets of problems by the way they were architected and set up and by the way the user implemented them. They could make systems very logy, very low performing or quite good. And now not just people in the information systems department, but executives, were seeing the results of processing. "The damn online system isn't working. It doesn't even work on my desk." Gives you a good news/bad news visibility to higher level CEO's that heretofore was not seen. Reports to the CFO and they kind of do the numbers; but as we became more powerful and communications oriented, computers reached more of our customers and therefore had more visibility. So that too became another criterion as the 1970's moved on and we used more of the communications systems, CICS and IMS, we would look for them and we had products that were specifically designed to tune, to optimize and to account and log for IMS and CICS; so we not only had more to sell with our base products, but we had other specialized products to sell to them as well.

BOOLE & BABBAGE PRODUCTS

Aspray: I noticed from your resume that there were a number of products introduced during this first period at Boole & Babbage. In addition to the time you just told me about, were there another set of new products or does this more or less categorize the new products?

Coleman: There were more, but one of the beauties of being a naïve business leader was I had a very simple strategy. As it became more sophisticated, it became more complex and at the end of the day probably not as good. We were in the performance business. Something came in, a product idea, a company that wanted to sell a product to us or something like that. It was real simple. Does it fit in with what we do? If the answer is yes, we'll take a look at it; if it's sort of close, no. That clarity really helped us. I didn't know then how smart I was. Focused. And damned if we didn't succeed because I didn't know any better. I got distracted a little bit in later years and then saw the error of my ways and came back and got better at focusing again. So we had products for machine performance, the ones that grew out of the base ones, for program performance, as I mentioned for IMS. CICS, for job accounting both for IMS and for normal job accounting, for people who had data centers that wanted to parse out their cost, and a few other specialized products – disc optimization for example was another one. All of them built around the ability to make computer systems and their component software and hardware run better.

BOOLE & BABBAGE MARKETING

Aspray: You told me a little bit about one of your marketing tools, going and doing the test on site. Can you talk about marketing at Boole & Babbage?

Coleman: Sure. Marketing was also traditional in other ways. We found, for example, one very good way to market was to use seminars, educational seminars. We had enough content to bring people to a half-day seminar at geographical locations that we would set up and learn something about performance. We'd talk in general and of course talk about our products, but that was a good qualifier. If people were willing to give us a morning of their time, they would be a good prospect. We also used a lot of literature mailings, mailing lists and drops, teaser drops, followed by more information, followed by more information. We started out by shipping them – here are all the answers in a big old book that nobody read. Then we got a little smarter and said, let's get their attention for a second step. Someone will call you in three to five days. Did you see something that was interesting? Can we mail you something else? How about a case study? We went to automated mailing where we had these folks on the phone calling, or telemarketing, lead-generating people and then telesales people, who would have steps they'd take folks through as prospects. Do they have a general interest? Can I get it specified? Can I send them something else? Can I prove my point? Can we set up a demonstration, a trial a whatever? So we had steps that we went through, and as a part of this we got smarter about optimization. We had a very rudimentary communications systems whereby we could hook people internal to Sunnyvale where our corporate headquarters were or to our branch offices, into dialogues. So they could talk with a customer, order on their PC the next set of information. It would go back to our office, things would get printed out. They would do a pick list basically of information. They could print out what they wanted to see, have the card dropped in and then get a confirmation back when they did their next download. Because we had this Saratoga software system that we had built, it would remind them: you have shipped, you said you would call in three days, it's time to call X, Y and Z. So we had a nicely scheduled combination of follow-ups, different sets of literature to develop interest and to answer questions that would lead them to the sale. And then the specific steps: you do the demonstration, if that is reasonable, and then you close the sale.

INTERNATIONAL SALES

Aspray: Did you have a market outside the United States?

Coleman: We did. Early on we used Cap Gemini as distributors. They had offices in UK, France, Germany, Spain, Italy and so forth. We got only 20% of the action, which turns out to be too little. We ultimately renegotiated but solved it another way too. They sold and we basically educated them and sent the product. We didn't do any real Asia-Pacific business at that time. One of the groups that was a part of the Cap group, acquired by them, decided it wanted to spin off. They were based out of Holland. There were nine of them that started the European software company. There were two gentlemen by the names of Hans Bruggeling and Roger Dickenson and some other sales people and a couple of technical people. We had heard that our competitor, ADR, who had some performance products, so it was a partial competitor although in the documentation area we had a secondary documentation product that we competed with them on, was going to hire these people as the rep firm for Europe. My VP of Sales, Bob Coolidge, came in and said, "You know, these folks are going to spin off, ADR is going to get them, we need to get them." I said that sounds good to me, what do you want to do? He said, "Let's hop a plane." So on a Thursday morning after hearing this we hopped on a plane. Roger Dickenson and Hans Bruggeling met us in London Friday morning and we began negotiating. The end of the negotiation was we had a third ownership in the company and put some cash in. They got 65%; we got 35% royalty instead of 20%. That's about right for what you have to leave for your distributor to be successful. And we were in business. We had marathon negotiations Friday, finished most of it Saturday. Stayed up till 4:30 in the morning with two men that could drink better than anybody else I've ever seen. Finished off on Sunday and then came back to an ADAPSO meeting in Chicago. If there was a Betty Ford then, I should have gone to Betty Ford. But it was a first step – they were a very good sales team. Ultimately, after I left Boole & Babbage, it went public and actually acquired the rest of the European software company and it was made part of Boole & Babbage. So we went from reps to a rep firm that had our products, then to the firm that was acquired completely by Boole & Babbage.

PRICING

Aspray: How did you price your products?

Coleman: When I got there, the number had been set. So on the first two products we sort of went up from the price of $7,500 to $8,800, priced together $15, 500, to $9,800 each. So it was incremental, how much more can we ask as opposed to what do you think these things are worth? With other products we had a chance to say what is it worth. Sometimes it was a guess based upon what kind of value does it bring, how much of that can we prove, and therefore what can we ask. To a lesser extent, suppose they built it themselves, but you see less of that here than you'd see with application software for example. And for some of it there was a competitor or someone that was seen to be competitive so, "Am I worth more or less than they?" And it was kind of comparative. There are other ways of pricing, but that seemed to work. Our products were worth a lot more than we charged for them, not surprisingly. But you had a credibility barrier – what the hell is this software stuff anyhow – to get over, and there are some hurdles if you got over $20,000-$30,000. You know those were big numbers back then and people were looked at a little askance when they said I want to buy some of this software stuff. So that's basically how it came about. It was heuristic; is there some competition out there? Are we better or worse? That kind of thing, fairly traditional.

FINANCING

Aspray: Where did your funding come from?

Coleman: We had funding from several VC firms. A gentleman by the name of Phil Fisher, Pitch Johnson, an early VC from Asset Management, and Bill Edwards provided the initial seed monies that had been put into the company before I got there. After I arrived we were running on our own nickel. Interestingly, I can remember we never missed any payrolls, that was the good news. We came perilously close more than once and had to go pick up checks so that the payroll wouldn't bounce. I recall when my controller at the time, Maxine Heaber, in 1973 came into my office, what a sense of relief I had when she said, "Bruce, we have our first CD in the bank." That was significant because if we had no revenues come in, we were spending $88,000 bucks a month. I had one month's buffer no matter what the hell happened. It was almost like an albatross had come off my shoulders. So we went then from just barely making it to a little money in the bank, and then obviously by the time I left in 1988 we had a lot of money in the bank compared to the size of our business. So I didn't see the funding part of the venture community. Both Pitch and Bill were very helpful. Pitch spent more of the time being a mentor than Bill did. And they were very good people and good venture capitalists. They come in all flavors these VC's, and some of them, particularly the younger ones that don't know their asses from first base, think they're god's gift to you, you know, the MBA who doesn't know anything but has all the answers. They were and are very good people. I was just delighted to work with them and they are friends now.

TECHNICAL COMPETENCE

Aspray: To what degree were you familiar with the technical aspects of your products and to what degree did you need to be?

Coleman: I was technically obsolete in some respects in 1962. Of the six programs I wrote in Phase 3 training at IBM only two of them ever worked. So from that sense I was not a great technician. Didn't have any interest in being one. The flip side of that is being in the business you learn the fundamental architecture and concepts behind how these things work, why they work and why they are important. So I could sound reasonably credible because I understood what the products did, what the measurements meant, how you change things based on those indicators. So from that point of view as the CEO it's important to know what the hell you are looking for, what are the natures of the operating system. And in that first company, particularly where the leverage is. "You know we should look in this area to find more performance" or "Have you looked at job accounting?" "What about other parts?" "What is it that CICS loaded?" The equivalent, like the modules that CICS loads -- I can't recall the name now -- were always a problem on our PPE. The programmer would of course say oh the problem is this mystical bucket. It's over there where they're loading stuff. It was a big hole, and a place where we couldn't account for products. "Well, why won't we go in there and see what we can find?" So I was actually able to direct people to places with payoff. In that sense I think it's difficult to be anything but a short time CEO and not have some understanding of technology.

Aspray: Were there companies that spun off Boole & Babbage at the time?

Coleman: No.

Aspray: Were there people who got their start there who were important in the industry later on? Is it a damned-if-you-do, damned-if-you-don't question if you don't mention one of your colleagues here?

Coleman: I'm just thinking. I'm more than happy to share either way. There were people in the company, a couple of them spun out. I'll have to think about it. Nobody who is a luminary now. More Informatics people ended up at other places than Boole people, because Boole was a very small company back then.

WRAPPING UP BOOLE & BABBAGE

Aspray: Are there others things about your first stint at Boole & Babbage before we move on?

Coleman: I was just thinking a little bit. We had representation after a while in Japan. A division of Tokyo Electron Labs sold our first products. The leader was Nobu Kitacogi. Kitacogi signed, came over a couple of times, and I went over there. He was a wonderful man. I remember taking Kitacogi-san out to dinner with my wife. He hesitated for a moment and I filled in a word, shame on me, but I did. He wasn't thinking of an English word, he was thinking of the right English word. He had a remarkable vocabulary as I discovered that night and he was a delightful man, so we had a good relationship and it started out with some negotiations that naturally take forever. Part of it is an interesting story in that we had one large account for $225,000 worth of business, this being when $15,000-$20,000 was a big number, that we had been working on forever and it was about to close. So we said, your normal commission rate is 35% of what you get, because they would price our products off the top of that to make the rest of the margin. But listen, we'd like to pay you only 15% because it's almost done but we want you to follow up on it. Well, it took a long while after that to close and we finally did close five or six months later. So they sent in an invoice requesting their 15%. The controller came in and said, "Is it okay to approve this?" And I thought about it for a moment and I said, "You know, they worked like the dickens to get this business. Send them the check for 35%." And I wrote a little note to Kitacogi-san. I said, "Dear Kitacogi-san, we are honored to have you as a partner, you worked very hard on this account, please accept this normal commission as a symbol of my respect for your work." Sent it off. I had no idea how smart it was, but that's how I felt. It turns out that that also is something that gets you in the grace of the Japanese, by the way their culture works. At that time however I just felt that way. They'd done a wonderful job. It didn't make sense even though I could get them for 15%. Because of that, our relationship at a personal level was very good. They, the Japanese, had a trust of in and vice-versa. That would have come later on if it weren't for this lovely incident that just showed up. And since then, I've done it more on purpose, not to be scheming but to show up front with people who value long-term relationships that you value them and their long-term relationship. So, that was a wonderful "aha" for me.

In 1973 I went to Africa on a camera safari with my wife and my parents, and the local Tokyo Systems Laboratory rep who was just a communications person found out about it, and they sent me a camera, a lovely Nikon camera with lots of lenses and things and I was embarrassed. Because I didn't know what to do, I sent back a lovely small sculpture that was obviously a lot less expensive to Kitacogi-san. But it was a good relationship and it was just one of many to help me to better understand what it means to have good relationships with people. For the moment I think that does that. Where next?

INFORMATICS

Aspray: Why is it that you found Informatics an attractive place to go?

Coleman: In retrospect, I might say damned if I know. On the leaving side, I didn't realize what I had. Small company - wasn't going anywhere. I had a chance to run a $35 million dollar division of a bigger company and I wanted to try that. They were in multiple businesses - that had charm to me. I liked Walter Bauer, I liked the people in the company, and gee whiz, somebody wanted me.

Aspray: Had you invested sufficiently in the software industry that you knew you were going to stay there as opposed to go someplace else in business?

Coleman: I hadn't thought of it. The answer was yes, but it was not a conscious thought. The industry was still evolving. If you had asked me that question then, I would have thought about it and said, "Yes, I think so." But it didn't cross my mind then. Now when I do interim assignments, I only do software.

Aspray: So what did you find when you got to Informatics?

Coleman: We ended up having 17 different divisions of which I ran a few and it was very interesting. I had a good time there. Walt and I squabbled at the end. There are a lot of good people that ended up many other places. I enjoyed working with them all and it was a more complex set of circumstances and it was a good deal of fun. I learned a great deal there; as with all learning some of it didn't show up until later. I didn't know what I knew until later. You think about why did this work? Why didn't that work? Oh nuts, that's why. How silly of me not to see that. Going back afterward and thinking about various parts of the operation. What went well? What didn't go well? What should you do? What would have been better to do? Retrospectively, it was a wonderful education; and they are some people that I always look forward to seeing, that I knew at Informatics, so it was a fun place.

Aspray: Did the scale of Informatics as compared to Boole & Babbage make a difference to the way the place operated?

Coleman: Yes, very definitely so. I took on a different role. I was a group executive as opposed to being the CEO, and I had multiple operations and had to figure out how I can be effective with multiple operations as opposed to being the person that runs just this. I ran a "just this" which was the software products part, but I had division managers in a couple of other places. Equimatics, for example, was the insurance division. I had a couple of managers that would run that. So it gave me some experience running one level above as well as running directly. It was a larger operation. At the end I guess we were a hundred and some odd million dollars in revenue for the divisions that I had run versus the eight million dollars at Boole & Babbage, so it was fun to be on that larger scale. We had international operations, international offices that were ours and so that added a richness to my management experience that was great.

Aspray: What were some of the most interesting business issues that one faced at Informatics? Not necessarily that you faced but that the company faced.

Coleman: One of the key ones was – what did Informatics want to be when it grew up? Informatics was perceived, I think rightly so, as a potpourri of companies. Walt liked to have lots of little things. Liked to buy on the cheap, and unfortunately got what he paid for. Werner Frank was always rummaging around finding distressed merchandise to buy. Many of those found their way to my house when they were thoroughly wrecked. So we were 17 divisions and in those 17 divisions, some with sub-divisions and only $225 million dollars in revenue. So I think something that we never came to grips with was - what the hell is an Informatics? Charlie Wang says, "We're just a big ass company that's makes money on maintenance." Shame on me, I saw that model and I didn't do anything about it before Charlie did and I just didn't go any further. I was off doing something else. So I think that's the biggest single issue: what is your strategy and how do you focus and how do you have the discipline to focus? And one of the difficulties for me was we kept on getting in all these 1-million, 2-million, 3-million dollar businesses and didn't focus on being really good at fewer things. That was a frustration to me. There are lots of things I could have done better – that was one where I felt the whole company and Walter could have helped us do better. The board would say, you know, what's our strategy? Well, nothing came up.

Aspray: To what degree did the Mark IV system drive them?

Coleman: Mark IV was the kernel of the business. Informatics was in professional services as well and they had a pretty good-sized professional services operation. And that was sort of what the company was known for. It was in lots of other businesses. We had data centers. We had two consulting groups. Very different, east and west. The guy in the west was sort of button down and the guy in the east I thought was shady and just a little on the seamy side; but he had the corporation including Walt by the privates. He would bully them and they rolled over. I would have fired him but didn't have the opportunity to do so. We were a mix of things but Mark IV was the first thing. John Postley started that division and Mark IV. And Mark IV was one of those early products that was really good. It was really ahead of its time and it brought a hell of a lot of value. So it's a remarkable start of an era, you know, John Maguire of Software AG in part with Natural and those kind of things took the next logical steps past Mark IV. But Mark IV was the first guy on the block for a long while.

Aspray: What would you say was the role of Informatics in the software industry overall? One of the largest of the independent companies, right?

Coleman: Yes. Well obviously as you had alluded to, it was a proving ground for people. They would grow through the ranks at Informatics and then go off and start something else. And that's always a good sign. Something to be proud of. I think Walt can rightly be proud of the fact that a lot of people went on from Informatics to do some important things.

Aspray: Do you want to mention people? Individual names?

Coleman: I'd have to think about that. They show up at lots of different places if you look at the alumni but I'd have to go back so we'll skip that for the moment – that's a memory test anyhow.

Aspray: Gives a sense of how things spread.

Coleman: As a software and services company, we were wrestling with issues of intricacy by our corporate group and division organization. One layer too many, I maintain, but I couldn't do anything about it. Our reporting was unnecessarily complex but at least it started wrestling with: how do you report in bigger companies? How does the software and services business act as it grows like a bigger company? So reporting, measurement, organizational structure, all of those things we were discovering -- as had lots of other industries in the world. That part wasn't new, but as one of the larger companies in the software and services business we were on the leading edge of rediscovering that for our industry. So I think that was very useful. But it used to drive the accountants crazy by having the chart of accounts changed every year and then make last year sync up to this year. Just awful. I don't know, our chart of accounts was something like 78,000 entries, just staggering. But that's the aerospace background. Let's get lots of information. It's also one of the natures of the PhD in Walt. Get numbers.

Well another element of his nature was, he'd get a lot of information but it was difficult to get him to act on it. And there is an interesting third part of it that I saw somewhat in Walt and I see in other CEOs, entrepreneurial CEOs. If you look at the characteristics of people and in which areas they are off the center of the bell curve, one of the things you see in entrepreneurs is they are more paranoid. Now let me describe this; it's not "somebody's out to get me" – that too perhaps, but the clinical definition of a paranoid or one who displays those symptoms more than average is a person who starts with the answers and then passes data until that data corroborates those answers. It's not "I'm out to get you"; but if you think about it, somebody says you can't go into that business, you don't know a damn thing about it, you're too young, you have no money, the big competition is going to kill you. "Don't tell me that. I know I can, I'm going to go out and do it and I'm going to make it happen." So it's that very characteristic that gets people started. It's that very characteristic that if you get in trouble as an entrepreneur it will come back and bite you. I'm not going to listen to the facts. I'm going to start with my predispositions that may have been very tuned in to the industry I started in or that time in the industry. But after a while I lose touch. I still have the answers, but I'm off track and I won't listen to other people. So it's the idea of direction, motivation of other people. So one of the interesting things – we had all this data but sometimes we wouldn't pay attention to it and sometimes Walt and the rest of us would have A+B=C conversations where you'd come up with that. I finally figured out after the fact what it is that was different about him, because I saw it in other people. I saw it in other entrepreneurs. It's an interesting observation about how people work, what kind of skills, the strong part, and what kinds of weaknesses they can generate, the weak part, that drive a person into being that leader or that entrepreneur.

STERLING SOFTWARE'S ACQUISITION OF INFORMATICS

Aspray: What's your analysis of what happened to Informatics over time? I understand it was one of the first companies that was subject to a hostile takeover at the time.

Coleman: Yes, it was kind of fun. It turns out that I actually played a part in that. Walt and I disagreed. He fired me so before I went off to do a turnaround at Walker Interactive, I said, "You know the company is running at about fourteen dollars a share, my calculations of the break-up value was about thirty-five dollars a share if we broke up the pieces. Let me see if I can get somebody to fund me and I'll buy the rascal." There is a lot of margin between fourteen and thirty-five. So I went around contacting a number of people. I couldn't get anybody to want to do a hostile. A side effect of that was Walt got wind of it and he started contacting people to be his white knight. Sam Wyly and Sterling Williams came in as possible white knights or somewhere in between and then they said, "We have a black hat too, why don't we put that on?" And so they ended up doing a hostile takeover on Informatics that was obviously successful. Sterling is a smart businessman. After the hostile takeover happened and I was running Walker Interactive at the time, he said, "Can I buy you dinner?" I said, "Sure". We had dinner and he said, "What would you have done if you were Walt Bauer? What would you have done?" So I went through the list of the things that I thought would make us a better company including getting rid of a huge amount of overhead that we had. Parsing out some divisions and that sort of thing. He did all that and more. He's a very smart man. He knew what questions to ask and how to extrapolate and take it further. And so it turns out that indirectly I was a contributor to that hostile takeover. Obviously and not intentionally although I would have been very happy to buy the company myself and make something of it as he did. So I thought that was sort of interesting. And I went on and did some other things and ended up in a place where I think I bring a lot of value and I enjoy immensely, doing these interim CEO jobs, just an extension of turnarounds that I did for a while and Sterling got himself a great start.

TURNAROUNDS – WALKER INTERACTIVE

Aspray: I don't know the industry that well. What has been the fate of Sterling Software?

Coleman: Sterling, well it's a Pacman industry. Sterling made a lot of acquisitions and then Sterling was acquired by Computer Associates who buys almost everybody. They are the buzzards of the industry. One of the fun things – after Walt and I had our parting I took a job to do a turnaround for Walker Interactive. A gentleman by the name of Jeff Walker had started the business as a consulting business, made a software firm out of it, gone through twenty-one and half million dollars of venture capital money -- in 1985 that was a slug of money -- and I had an opportunity to sort it out afterwards. We first tried to sell the company. The balance sheet was so bad that even Tony and Charles Wang wouldn't buy the company and I remember Tony saying to me, I could give you a buck for it, but we're taking on too many liabilities that you can get away from because you don't have deep pockets. We had leases everywhere for example. So that was a besmirchment on my career that I couldn't even sell the company to CA. Well, I solved that problem several companies later with InSci and sold them so I kind of got that black mark off my list.

Aspray: So why did you go to Walker?

Coleman: Even back then I liked fixing things, and Walker needed a bunch of fixing. It was in downtown San Francisco, which I thought was a great location and so I said, "Let me take a shot at this." So I went there. Basically I had a sense of the industry. I had an early on sense. I kept on getting things that were broken. I did them at first at Informatics because who else would give you a shot at it. And after a while you know Werner Frank would get this division, muddle around with it for a while, it's broken so he'd say here, "You take it" and I'd take those. And so it seemed like a normal extension of the things that I did.

Aspray: So walk me through what you did at Walker to turn things around?

Coleman: That's very interesting. We attempted to sell the company. Having been unsuccessful, with no money in the bank it was time to do a major cutback. I brought in the management team on a Saturday and I said, "Folks, CA was the last ones, they said 'no'. We got to make some decisions." So what we did was, we did a bucket of dollars. I said, okay first thing we're going to do is decide how much money that we can count on to come in every month. We had maintenance dollars that were a very high probability coming in, we had one deal that we closed, maybe a month, small deal, a little bit of professional services. That was how much we had to spend. So here's what we're going to do. We're going to figure out how much we're going to spend and we're going to spend it and the rest of us if they can't be afforded, we're going to lay off. So the team, the VP's and I went through the exercise. What's the first thing – got to pay the heat, light and power, subtract that out or else you don't have a place to live. Telephone bills, subtract that out. And we did that and we said okay, first person, someone to answer the phone? Subtract that person out. Second person – people who support the product – because it would get maintenance, and we went through that exercise and ended up. We had 192 people and we ended up on Monday morning with 72. It was tough. It was one of the harder days. I'm better at that now because I know that it's got to get done. I knew it had to get done. It's either you do that or else the whole company dies. But emotionally it's easier now because I've been through it. It was tough for everybody and I was one of those everybodies. Many of the VP's ended up firing people, and firing themselves at the same time. So we went down to about a four million dollar run rate. The company stayed alive.

I was brought back to Boole & Babbage to do a turnaround. I'm a sucker for that. And gave the management of Walker to the number 2 guy there who eventually took it public and made a little money for himself and a little bit for the rest of us. So it was – we went from sell the dang thing, cut it down to make it work and then one of the interesting parts that I think plays out on the larger scale of how do you run your business. We said, okay folks, we're going to do a three-month plan. Fairly specific and another three-month plan at least in general. We ran around. What are the half a dozen or less things that we have to do this month to survive? Next month, the month after. After four months we'd gotten to six months worth of stuff, so we'd do it again. Every Friday we'd go through and say how did we do? Then we'd have a meeting with the employees. Here's what we said we were going to do. Here's how far we got. Interesting, the first Friday after our Monday layoff where there is blood everywhere. We're having pizza and beer and we made it through our first week – celebration. And a couple of guys came up and said, what took so long? What do you mean? We knew what the goddamn problems were a long while ago, what took so long? So we talked about that, there's always, what took so long. Rarely when there is something difficult to do, do you say, "Oh shoot, I did it too soon," whatever that is and this was no exception.

The reason I have a job now is because people can't handle the "what took so long." So, it's hard to do. It's hard emotionally, intellectually, and also if you've been at a place for a while, it's grains of sand, you know, this pile of sand gets bigger and bigger, grain by grain, I can't quite see it coming. I'm in the forest but I just see the trees so you become part of the problem. At any rate, it was a wonderful experience because things were very basic. What do we have to do to live? You know, you're in the ER, you can't cure yourself and the doc says, "I got to do something. I either whack off your arm and you get a shot at living, or I don't and you're dead." So in this case an arm and a leg. We whack off an arm and a leg and you wake up the next day and you say, "Oh my god, I'm still alive" to the people around the table, "I'm still alive. Man it's hurting like a son-of-a-gun. I'm not sure I want to be alive." And then you go through that healing process much like a patient going through surgery does, and after all, I go into rehab and then I'm damn near whole again. I'm not the same person because I've learned physically and mentally but it's that same kind of process.

TURNAROUND PRINCIPLES

Aspray: At the risk of possibly taking us into the 1990's, how long does it take for you or another executive to come in, assess the situation, figure out a plan to do things? The second part of that question is, how much similarity is there across these different companies in the software industry that allows you to do these kind of things?

Coleman: There are a couple of layers to that. After two to three weeks I've got a pretty good idea, after two months it needs tuning. So three weeks – the first – yes I got it, although along the way – three weeks, two months, six months. And the problems, you can get a great clue to the problems by looking at the CEO. The boss casts a long shadow. So if you see a CEO that has been unsuccessful and they are an engineer, a sales person, an accountant, a something else. You say, "What are the mistakes, what are the hurdles of growth that person necessarily would not have gotten over that I'm likely to find?" And by god there they are. Salesperson always sees things in rosy terms. An engineer engineers the hell out of it, doesn't have any sales and marketing, doesn't give a hoot about it. So those generalizations become more likely to be good clues to start with if the person is failing.

So you look at the top, look at the finances, don't run out of cash, what do the numbers tell you. At this last company that I'm running now I did a layoff in less than two weeks. I knew it had to be done. Got in there and figured it out. Bang, here's what we're doing. And then started digging into the other things. And you can ask a few questions in each area. For example in development – tell me about your development methodology? And wait to see what comes out. Or, how many test regression analyses do you have in your test bag? And wait for the answer to come out. Or, tell me about the sales process? How do you find leads? What percent closed? What's your pipeline look like? How big is it compared with the monthly run rate? So you learn after a while some questions, but what took me a while to figure out is, you can ask those first questions and you can be pretty darn sure of what the answers are after a couple of clues. You don't have to wait too long. Earlier on I'd wait longer, I'd get more data, I would watch it for a while. Now, my wife is finally getting through to me because she can read people in a heartbeat. Looks like a duck, talks like a duck, and walks like a duck. Get on with it. Go find out right away and do something about it. If it's an incompetent executive, do something. If it's a broken process fix the sucker or get somebody else to fix it. So I guess the answer depends on the person but there are certain things that you look for in each area; in each industry that are lead indicators. And you look at the data, the numbers involved and after a while, after being hit on the side of the head by dumb things you did and seeing it in other people, you say, okay, I've seen that before. Here's what we do.

SOFTWARE INDUSTRY CHARACTERISTICS

Aspray: So your answer is, some things are pretty generic across industries. You could see anyone in lots of different small companies, industries having given the same kind answer. What are the special aspects of the software industry?

Coleman: True in any industry. What is different? Well, manufacturing is different from software. Thank god, I don't have to mess with inventories. But you learn after a while even if you're not technical, what is a good manufacturing process. That it is replicable, it's maintainable, it's expandable. Architecture, process. So you have to know enough about the industry to know what the leading indicators are and have an idea of how to get them fixed--even if you're not the right person to fix them and surely I was not. So what questions to ask in interviews to hire somebody – how do you do it? You become more familiar with the specific leading indicators in each area, sales pipelines, pricing, sales model, marketing approach, development, how you support, what kind of support automation you have. All of that gets tuned by industry. To a certain extent even within the industries that software includes.

You also learn what people in the industry to call. I need an answer in this area. Who is an expert? Do you know anybody who can run this job? So it's the nature of the good old boy, good old girl network and then just getting older. Getting older applies to a lot of things. I can and I find that I do help people in general business. I am a member of SCORE, retired business people that help companies *pro bono*. So I do a little of that in Taos and Santa Fe and I help some local charities as well. And there are some fundamentals. Do I have numbers to tell me about the business? Even the P&L and cash flow. How do I sell? What kind of people policies do I have? What do my people look like? What does the organization look like? Draw an organization chart with no names on it. That will tell you lots of things about it. So lots of those things, particularly the fundamental things that show up everywhere. So yes, I could go into other industries and make a significant difference. A little bit better at it in software since I could get started a lot more quickly; but you're right, there are some fundamental things that you have to do every time.

Aspray: Is there any part of the software industry where the business operates in a different way from the other parts of it? Something that just has different business models or different critical factors or whatever they might be.

Coleman: There are variations on the theme. Some of them come to mind. Enterprise software has its own set of activities, its own model for success. You have to deal with big companies, their channel is different, their expectations are different from selling to consumers or selling to specialized areas which are not necessarily big business. So big business, big software, big business, little software that proliferates. Smaller businesses and then industry specific. So if you look at the product – how big it is, who it sells to, is it one off, how do reach your marketplace – through direct sales, indirect sales, different channels. Those are the first cut differentiators. The expectations of the buyer. If it's a $99 dollar product, there are some different requirements, different expectations from the market, different ways of being able to reach that buyer and selling them that makes sense. So I'd say that's probably the biggest part. And then there are some technical issues depending on what you're doing and how. Applications are a little bit different from utility software for example. It's interesting to note, if you want to know what products will be successful in the systems tools utility marketplace – it's easy. You look at the first product that showed up for mainframes. They replicated themselves in some form with minis. Then with micros, then with client server and now the Internet models all have the same kinds of tools. Now we call it the ASP model instead of timeshare or datacenters, but it's the same deal, the same fundamental needs depending on which of those markets you are serving. So I guess that is the biggest single aspect that I would say. Multiple users maybe.

Another interesting thought is that there is another revolution that is happening in the amount of raw computing horsepower and what does that mean. I'm running a little company in the many-to-many sales management business. XRM is what they call it. We use a pub sub model. Well this effective way, when you've got rep firms representing lots of people that have to publish out and then manufacturers that have lots of reps that have to publish out, it's a good tool, but a 256K P3 is a great pub sub engine whereas the biggest computers were needed not very long ago. Another interesting thing that happens is that you can use technologies that were much too fancy for the size and for the money in the marketplace not very long ago, but now because the hardware and the software has been replicated enough times that it's affordable and stable, you can apply those techniques. So that's a variation just occurred to me as I was thinking about what is it that's different about this company from the generation before and how they did business. So there is the Moore's Law effect as well.

BOOLE & BABBAGE – THE SECOND TIME AROUND

Aspray: Anything else you want to say about Walker before we move on? So why would you possibly want to go back to Boole & Babbage after you left?

Coleman: You always want to go home.

Aspray: You never can go home.

Coleman: That's right. And I knew that. You really cannot go home. After two years I was very unhappy there and ultimately went off and did another turnaround. But I couldn't resist somehow. It had been my first real management job. I had been successful. I had left not feeling unwanted but just perhaps underappreciated. I don't take much care and feeding. You know when somebody approached me it didn't occur to me to say, you know, they really want me here. I'm just, you know it's just my job. So when they came back and said, "We need you." 'We need you' is very powerful. So that's what did it. In retrospect you can't go back. And one of the fun things that happened was, this is 7 years later. You have a tendency to get your exercise jumping to conclusions when you come in new to a place. Looking for how the other guy was stupid – that's just part of what you do. I remember one day saying, it was really fun – now why the hell would you do that? I said well, hold that answer because I did that seven years ago. I was the stupid guy. It was fun and you need that to keep your perspective on life. We do the best we can with the skill sets and the information we have, and it's very useful to remember that. Some people, particularly executives, try hard but they are not a good fit. Once in a while they're not good people. Those are the ones I don't have any use for, but the others, well, you know they do the best they can. It may be stupid because they don't have the right skill sets or personality type or whatever the hell. So that's why I went back.

Aspray: What did you find when you got back to Boole & Babbage?

Coleman: They had lost about three and a half million dollars on about twenty-eight million in revenue. Instead of having two and a half million dollars in the bank when I left, they owed the bank two and a half million dollars. They had just kind of gotten out of control.

Aspray: Was their business down?

Coleman: Reasonably, yes. Just not well managed. I made a mistake that I didn't make after that: keeping two of the people who were there. The ex-CEO as a technology guy. He wasn't a bad technology person but he was poison as the CEO. You need to have new people. You've got to move on, get the old guard out. I didn't do that and it was maybe part of why it didn't work so well. Now two times out of eleven I've agreed to keep a founder in a different role for a month. But I always preface it with 1) you're telling me I have the absolute right to fire that person if they don't work out. Correct? Yes. 2) you know that it's probably a 95% chance that it's not going to work. Yes. All the others, out and those two didn't work out and they were out within less than thirty days. You can't go back to being someone else in your own organization.

Aspray: Were a lot of the same principals there as when you left?

Coleman: None of them. Two different sets of management later.

Aspray: That's a pretty quick turnover.

Coleman: Yes, it didn't work. It was fascinating to go back. I knew I couldn't go back, now I know why.

Aspray: What did you do?

Coleman: The fundamentals of a turnaround. Get the expenses from out of control to in control. Focus on the sales process. Make some changes to more telesales versus direct sales. Focus on the competition more.

Aspray: There was an acquisition during this period of time. What was the effect of this? Is there a story there that's worth telling?

Coleman: There may be. All I saw at the end of it was that Impact was a terrible acquisition. It's just that the people didn't perform well in our company. The company didn't turn out to be anything. I think the company was bought, I believe I'm correct, to get the management and the management didn't work out.

ACQUISITIONS

Aspray: So maybe this is a good time to talk a little more generally about acquisitions and their success record in the software industry and in general.

Coleman: Seventy percent of all major acquisitions fail by the measure of the people who did them, which means the real failure number is probably higher. I think that's one of the problems with the HP/Compaq merger. The odds of that working in my estimation are zero. And it starts out when the HP board of directors hired a lady who wasn't culturally or experientially right for the job. She had never run a company before. She was a VP of Marketing for Lucent. And now she's destroying lots of value. Flying around in a G9 Jet and getting a big bonus whether it works or not. Acquisitions are hard to make. They are even harder to make effectively. It's fairly typical. I've seen this in the software business when you think it's over when the ink is dry. And of course that's just the opposite.

One acquisition I made was an accounting software company. Richard Brock and Charlie Papparelli had this accounting software company. Software for accountants. It was a nice little 2.4 million dollar business growing to 4.4 they thought. But it turns out that in three years they were about a 35 million dollar business. It was a great acquisition. It worked very well and there are several reasons it worked well. The strategic fit was good. The leaders were good. We helped them but didn't over-help them. We had an integration plan that started before the day it was signed and we kept after it for at least a year and a half to make sure we were being helpful when we could; we helped them be successful, we got out of their way. There was lots of communication. It went very well. It was best acquisition I've done. It ran well, those guys made a lot of money, we made a lot of money and it was well done. There were a number of ingredients that I've alluded to. Number one, you got have a good reason to buy. It's got to be a smart reason. It also has to match your strategy and your skill sets and your culture and your willingness to work hard. Whether you have a rep or a sales person, you still have to manage them. Whether you have your own division or one that you buy, you still have to manage it. So it takes a lot of work to make it successful. It's not a silver bullet. You can't buy a company for its management. You can't buy a company to bail yourself out. You can't sell your company to get yourself out of trouble. Companies should be bought and not sold. So, if you add all these things together, it's hard to know what you don't know in a new company or industry. You don't know what you don't know. You don't know what questions to ask. It's a new business. It's new people. You don't know where the bodies are hidden. It's hard to evaluate. Then you expect that miraculously things are going to work out.

So, then you do something like Charles Wang did. He had a formula and, by the way, I respect that formula and I respect the way he dealt with things because once I wasn't acquired and once I was. CA says 90% of you folks will know whether you have a job before the deal closes. The other 10% within 30 days. They meant it. The other thing they did is they cut people out that should have been cut out before if you want to survive. We can argue whether they should invest in engineering or not. That's a business decision as well as anything else. They had a model, they had a plan, they followed it. They knew what things made sense and how to make them work, and what didn't. So in that sense, they had a very high success rate. Because they knew what they were buying – they were buying maintenance revenue. Some others don't work as well because the big guy buys the small guy and the big guy may not be as capable as the small guy or strategically it doesn't make sense. Or lots of other things. I didn't put enough energy after the deal was signed to make it effective. I got too much in their face. I ignored them and they went off on their own. Hard work. So I think that's why the odds of success in acquisitions are low. They were probably higher in the software business earlier on because there was more market out there. You could buy something whose market hadn't been consumed so it would do better on its own despite you sometimes. The more maturity, the more proliferation of products in the marketplace, the harder the game becomes, the better you have to be at execution of that acquisition and running the business afterward.

INSCI

Aspray: Why don't you tell me about your move to Information Science and what you found there and what you did there?

Coleman: InSci, Information Science, was probably the toughest two years of management I've ever had in my life. It was a company with old technology although we all thought that it was in better shape than it was. It didn't even handle DB2, much less client server. This was at the time when PeopleSoft was working on a new client server product but it hadn't come out yet. Ours was an old product, poorly constructed, not easily changeable. In a difficult market we had no money, and it was just tough.

Aspray: Did you know that when you went in?

Coleman: Not exactly. And Lee Keet, who brought me in, didn't know it either. He was an entrepreneur; he saw the opportunity instead of the manure around the pony. I don't think he saw how much in a state of disrepair the technology was, but neither did I. I took his word for it, shame on me. And it was such a struggle. We did a layoff. Four and a half months later we had to do another layoff. We had to kick and scream and claw for any business. We put on a front end to our ISAM product and VSAM product to make it look sort of interactive. It was a GUI front end from Dewpoint Systems and some services in there and making one sale kind of kept us alive, but it was a very hard two years. It was a dog that wasn't going to hunt.

Aspray: What happened to the company over time?

Coleman: We stayed alive and after two years I approached the board and said, "Folks, I believe this is a company that needs to be sold. There are a couple of other alternative ways that you could take the company. I don't believe in them myself and I'm not the right person to do it if you believe in them." It never occurred to me before that to unhook me from the strategy. If this is the right company strategy, you have to do it. Then the light bulb finally went on when I said, "If you don't believe in it, why would you do it?" This is a hard enough row you've been hoeing for a while. Why would you do something that you don't believe in at all? So I said, "Three alternatives – two mixed/matched professional services and one sell the company." The board voted to sell the company and I sold it to Charles Wang and Sanjay Kumar. So I got that besmirchment off my record, and it was the right thing for the company. It was. Because it was so emotionally hard, I think it's where I learned the most. If you're lucky with the pain of life, you get some learning and on this one, during it and particularly afterward, I thought about what I'd learned and it was really terrific. I wouldn't want to go through that again but if you put it on the scale of learning and of growing, boy that's where I did some. What I can bring and what I can not bring to the table. Because of that, I believe I'm more effective at what I do. I'm certainly very much at peace with that and in looking at my results in the eleven companies since then, the scorecard that I keep for me is a pretty good one. Some I've done better than others. Some I've done a wonderful job at, some very respectable, and some in between. But that experience at InSci clearly helped me deal with difficult things faster, more directly and with less taken out of my soul, than it did there.

Aspray: How good an acquisition was that for CA?

Coleman: Okay. They didn't expect it to be a growing business, so they bought it basically for maintenance, plus some technology because it had an HR business that they wanted to use. They got their money's worth from the maintenance part and they got some value out of the technology as well. I've not gone back to ask them that, but that's just early-on feedback that I got from people in the business who stayed with CA. So they knew what to look for and how to look at it, and I respect that.

INDUSTRY THOUGHTS

Aspray: What would you like to talk about that we haven't discussed so far?

Coleman: Well let's just think about that a minute. It's interesting to watch the evolution of an industry, and I tend to be a mechanic. I get into a company and I go fix things. That's what I like to do. I'm less of a strategist, less of a long-term thinker. In some sense I have to do that in each job; depending on what's there, you build a strategy. You take a look at the trends in the marketplace and that sort of thing. I certainly can do that; it's just that I don't do that as often, by predilection. . Certainly back then it was. We had to discover a brand new industry with new and evolving technology with rules that had to be developed. Sure enough some of those rules are just like the ones we talked about before, that are true in every industry and every business. You have to follow those. We found some of those and some that were somewhat different and unique to the software business, so I think it would be interesting to see as you go through these histories, not just what happened but how to paint the maturation and the growth of an industry. Plot that in its volume, its depth, its technology, the growth of the nature of the people in that industry, its leaders then, what they were and their skill sets and what they or their successors have become. In general I think you'll see a very interesting plot of maturity, of markets, of people, of sophistication of technology of software that kind of go along the same kinds of things. You know you've seen these industry maturation curves and product curves. I can see that and I saw that a little bit as we're going on, how you can just plot what's coming next, what's required next, skill sets, products, technology, organizations, organizational skills, what they have to look at in marketing and sales. Add to that the Internet, what fun. And how that changes everything. So, as a reader of history, since I was not a history buff in college and was glad when I was through it, I would look to this as much for what can I learn from it. Just as I'm thinking about things now and trying to learn from them, but what can I learn from what happened, that I and others can apply to make us a little bit better going forward. That would be the excitement for me. So you've used up probably 97% of what I know. Doesn't take long. Anything else that comes to your mind?

Aspray: I have a few other questions.

Coleman: Okay.

Aspray: You characterize yourself as a mechanic. And you contrasted that with a strategist or a thinker. Who are examples in the software industry of excellent strategist and thinkers?

Coleman: I would say that the first person that comes to mind that I know who is a very good strategist is Rick Crandall. He just has a way of looking at things differently. He is in a roundtable with me, and I've always delighted in his ability to see things differently. He's the one person that comes to mind that's very good at that. I think Sterling Williams is a trendsetter. Sam Wyly I wouldn't think so, he just came along for the ride. Probably Cullinane, in his time, saw something a little different, a way to do business, how to get somewhere. He had a good visionary look. Some others that may show up, but those are the ones that bubble up to the top first.

IBM

Aspray: Other than talking about your own personal early career, I've heard extraordinarily little, if anything, about IBM in the rest of your interview today.

Coleman: That's true.

Aspray: When one hears characterizations of the software industry, one hears of a big brother sort of characterization of everything that's going on in this industry. Do you want to reconcile this?

Coleman: Surely. IBM was very much a concern of all of us. What IBM did, where they competed, what policies they set, what pissed them off, very much played a part in our lives. So we thought a lot about what IBM did, might do. In my product lines I thought about it. In the policies of what IBM would let us have access to on the software level was always driven by – they are the guys in the marketplace who control the accounts, who control the hardware/software that I must interface with. Who can tell their customers, buzz off of these guys or not. So, I didn't mention it because that was part of the milieu and you just sort of lived with it, but it very much was a part of my everyday life. I was less "They are out to get me" than others. But because I saw them as a very pervasive big market factor that would do things in its best interest, rather than "They are out to get me, they are out to make a lot of money, and if I'm in the way, I'm in the way." And there is a little bit different flavor in that view. We were nits back them, except when we were a thorn in their side. So it's more what they did and whoops we squashed them, oh well. IBM was big enough that they had people say, "you know these software guys are going to be a threat. I think we need to cause them some heartburn." That's true too. So my thoughts about IBM: would they come into my business? Can I get access to what I need to be successful? At an account level will they cause me help or trouble? What's coming next from IBM in hardware and software and how can we capitalize on that? So you're always looking to see, because they are the leader in the marketplace much like Microsoft in the next wave was. And so that was always a part of everyday life.

IBM AND MICROSOFT

Aspray: You've led me just to my next question, which is: do you wish to make some remarks about comparing IBM in the mainframe and mini era with Microsoft in the personal computer area?

Coleman: Well, there sure are a lot of parallels, aren't there? One of the parallels is, even though folks grouse about both of them, they did remarkable things for the marketplace. They validated the marketplace. They gave a protective umbrella under which you could compete if you were careful. They created huge amounts of opportunity for success, for revenue and for wealth. Both of them. IBM was a little bit easier after the consent decree to kind of dance with the elephant without getting killed. And I think if you look chronologically, Microsoft and IBM were just as predatory -- it's just that IBM got whacked up aside the head with the Justice Department. They were then more careful. And now Microsoft is going through that too. I mean the good news of that is that IBM and now Microsoft will behave a little bit better. The bad news is it seems to hurt business. You know, nothing particularly good comes from these consent decrees and these legal things. They are much too late. They tone the market and I guess that's a use, but they also cost us progress, so I'm of a mixed mind. I'm not so much "get the bastards." Make them behave a little bit better, but don't try to get the bastards. The difference in terms of – do I want to annihilate the rascals or do I want them to behave a little bit better so I don't get killed?

GREED IN BUSINESS

Aspray: Somebody said to me last night that the difference between attitudes towards IBM and Microsoft is that IBM was feared but Microsoft is hated. Do you want to remark about that?

Coleman: Interesting. My exposure to Microsoft is less so, I'm not sure. I've heard that said but I don't know why. What do you think? Give me something to feed from. Why do you think people say that, the fear versus the hated?

Aspray: I think it may have to do with a few things. It may have to do with the fact that IBM for a very long time, even before they got into the computer business, was watching the government over their shoulders so they welcomed having small competitors whereas Microsoft would just as soon wipe them away. Another is that there may be a difference in attitudes about, I don't know, greed is too a negative a way to put it. But there is a difference in attitude today compared to the past. There may be some other reasons. I'm not sure.

Coleman: Let me just give the greed one. I think people, particularly those of a mind to "control those bastards," or "the rich are too rich," or you know "we need everything controlled so that life is easier" – see greed as a convenient way of describing things. Not to say there isn't greed. But there is a relatively small percent of people that make things happen, that cause a lot of opportunity, that spills into government, education, health, and so forth, the wealth of a nation, that they don't get. I think too many people see this as a zero-sum game. Life isn't unless you choose to make it a zero sum game. If the market grows because they are successful, it doesn't take it away from me. It's more taxes, it's more opportunities, but you know if I'm not one of those folks that feels that they can be successful sometimes, I want to hide a little bit. So I would first comment on the issues of greed. I'm not sure necessarily it's greed *per se* in the sense that sales people in the Maslovian hierarchy are a lot higher up on money than the rest of us. You know, we're number five to number seven depending on what study you use in terms of what gets us up in the morning. So take the word greed away - take success, performance, being the biggest, being the best, all those other things that aren't necessarily greed as the pejorative part of it. Then I would say, yes, let's get those sons of bitches. We want it all. We're good. They're better in their time than the IBM of the mid-era in terms of being tough hard competitors.

If you look further back chronologically so they are in sync, IBMers are just as tough. The cash register boys were just as tough in their milieu. So I think that's part of what it was all about. We're going to own the world. And people get in the way and sometimes the big guy with the clout can squash people and sometimes they do it with clear intent. Some of those folks at Microsoft think: "I want those suckers out of business. And let's make it real hard for them. We'll go down and visit the IT people and tell them why they're not going to do business with them. Or you better put that software on your PC's baby as a distribution or guess what." By my value system, that went beyond the pale of dot-com competition. In that instance I think you need a more nimble government that can grab them early and slap them up aside the head instead of waiting forever and taking ten years in anti-trust. So that, I absolutely agree with. There's ways of comporting yourself in our society that you can argue whether they are right or wrong or not. I would argue, for me they're right and more importantly they create an environment that's a better environment for any measure of success that you have. It's better for society if you comport yourself in certain ways. So, I can understand hate, particularly when it's not the cash register boys ripping out somebody's cash register and smashing it, because we can't remember back that far, but it's the analogy to that.

GOVERNMENT AND SOFTWARE

Aspray: We've talked about consent decrees but we haven't talked about the government very much. What kind of shaping influence did they have on the software industry?

Coleman: Fortunately, not too much. My view of the government in general is very much a libertarian one that if you look at government, they are pimples on the tail of progress. And the government didn't understand what this stuff was about, fortunately for us. So they just kind of stayed out of our way for a long while, and then, oh my god, they're too successful. Let me see if I can stop them. Some of this business on controlling information, charging for emails, you know, databases in the sky. The government is doing its best to screw up a good thing now. Hopefully they won't be able to do it. Governments and particularly politicians are very, very un-useful in many instances. The only way you can control them is much like a cancer. Don't give them a blood supply. It sounds almost cynical, but based on history I think it performs pretty well to that model. You need government for certain things, law and order and rules and regulations to a certain extent, but there's no good control over government. You can argue. Oh these bureaucracies of business are, ultimately somebody's going to get bought. You know, you're going to do a management takeover or junk bonds or something. Unfortunately, you can't take over government.

ADAPSO

Aspray: Last question. Can you comment on the role of ADAPSO in the growth and development of the software industry?

Coleman: Sure. I saw it from the inside out so it's a touch self-serving. I thought from the little exposure I've had to other industry associations, that it really was a great facilitator. We learned mechanical skills by the seminars we had. We learned what other people were doing. We networked. We saw the world through the eyes of government, bank, education - people who would come to speak with us; we saw the world as reflected from them. So we had a series of things that helped us. I thought for me at least in my day-to-day how do I do business and then, what the hell is going on here? How do I meet other people? How do I grow? How do I sell? Information on all the other things around the industry and it helped us with government. Clearly helped us with IBM and others in the business so I thought it brought a great deal of value. I looked forward to going to industry association meetings, ADAPSO/ITAA and that these were times very well spent. I got a lot of content. I'd bring the tapes home and I'd listen to them. I'd call people that I met. You know it just was an opportunity to see a changing and burgeoning world where the rules and the directions weren't too clear from lots of different eyes. It was extremely useful. And I'd do that over again.

Aspray: Well thank you very much.

Coleman: It's been fun.

Aspray: I agree.