

An Interview with
FRANK LAUTENBERG

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Conducted by Paul Ceruzzi

on

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Frank Lautenberg Interview

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Abstract

Frank Lautenberg is the senior U.S. Senator from New Jersey. He was born in Paterson, NJ, the son of Polish and Russian immigrants, and served in the Army Signal Corps during World War II. He graduated from Columbia University with an Economics degree in 1949. Lautenberg helped co-found the early payroll services firm Automatic Data Processing, Inc. (ADP) and served as both Chairman and CEO.

In this oral history Lautenberg refers to his roots in Paterson, which was then still heavily involved in silk manufacturing. He describes his early relationship with silk industry accountant Henry Taub, the originator of ADP (then called Automatic Payrolls) in 1949. Lautenberg remembers the decision to outsource the rendering payroll service, including the intricate financing required in recasting the direction of the company in 1952. Henry became chief planner and strategist. His younger brother Joseph became manager of operations, and Lautenberg became the marketer of service.

Lautenberg describes use of Friden calculators and the Comptometer bookkeeping machine at Automatic Payrolls, as well as later punched card tabulating operations. Lautenberg explains the decision to go public in 1961 to accommodate the major payroll and human resource information needs of employers, and later expansion of company facilities and services like records, brokerage, and time-sharing. He talks about his service to ADAPSO and his Senate race. Lautenberg also deals briefly with privacy and security concerns related to automated data processing systems. This oral history was sponsored by the Software History Center in conjunction with the Center's ADAPSO reunion (3 May 2002).

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.

ADAPSO History Program Frank Lautenberg Interview

Paul Ceruzzi: We're at the Monarch Hotel in Washington, DC on May 3rd, 2002, and I'm with Senator Frank Lautenberg, and the purpose of this interview is to talk about the early history of the software and services businesses, the founding of ADAPSO and other related topics. We'll start with the basics of where you were born and raised, and your education.

Frank Lautenberg: Okay, let me start off by offering not a correction but a difference in perspective. We called it the computing industry in those days, and that's more recognizable by the public at large. There are differences between the hardware side, which was the only side at one point, and the services side which my company pioneered, but there are now many other companies and the umbrella is so large that it casts a picture of an industry that includes the software side and the design side and all of those things, far larger than the hardware side, which no one could have imagined some years ago. I was born in Paterson, New Jersey. Now how personal do you want this to be?

Ceruzzi: Just a brief kind of description of anything that might lead toward how you got involved in this business, that would be relevant.

Lautenberg: Well I don't know about the relevance. You can make your judgments there and you'll have to do your own editing. I was born into a poor working class family in Paterson, New Jersey, which was where ADP was founded. And went to school in New Jersey, public schools, and then went working for the Prudential Insurance company in a sales management training program. I re-contacted someone I knew casually from "the neighborhood". The neighborhood was poor and fairly mixed racially, black, white, Jewish, all kinds of relatively new immigrants.

Ceruzzi: Was Paterson still big in the silk industry at that time?

AUTOMATIC PAYROLLS

Lautenberg: At that time it was. And my father and the two Taub brothers' father with whom I associated also worked in the same type of facility in silk manufacturing. So as luck would have it, I wound up in the same small building where I was assigned where Henry Taub, the originator of ADP, had his office. He had been joined by his younger brother Joseph Taub. And we would meet in various places around the building, typically the men's room, and they talked about the kind of business they were in, and the company was called Automatic Payrolls at the time, and Henry had started this company in 1949 when he was 21. He had graduated from NYU as an accountant and worked full-time while he was getting his education. He finished college at age 19, worked for an accounting firm, and the accounting firm had a client that had a bad experience one time when the bookkeeper didn't show up on payday. And as a consequence, the place was in a state of chaos, because you learn very quickly that the one thing that you cannot miss is a payroll day, because people

expect to get their checks. You've got to deliver. As a consequence of that event, another man who was a partner in the accounting firm came to Henry and said that he thought it would be a good idea if someone started a payroll service. Now I remind you, in 1949 we weren't talking about computer capability. As a matter of fact, even the rawest mechanical equipment was hardly available. So Henry took on the problem of building this business, and he was engaged by himself and maybe one clerk in 1949. I met Henry in early '52 and I was fascinated by the idea of rendering this service on an outsource basis. So I kept talking about it and the more I talked about it, the more I thought about it. The more I thought about it the more I thought it was a great idea.

Ceruzzi: How did he finance the starting of the company?

Lautenberg: The financing was a very intricate, complicated thing. One of the three partners was an accountant who loaned the company \$5,000, and that was it, period. And when the company looked like it was near collapse, which was after about two years and they were doing \$35,000 a year worth of revenues and by then Henry's younger brother had come in and they were just struggling along, and Henry decided that he would give it up. The two partners, the accountant and the accounting firm that he was with, both agreed to turn in their equity, their shares. The fellow who loaned the company five thousand dollars agreed that if Henry Taub would personally sign for the note, he would relinquish his holdings. The other fellows saw no purpose in continuing because it was silly if there was no business. So Henry acquired 100% of the company. It didn't mean anything because it was 100% of nothing at the time. But he persisted. After meeting him several times I offered to go out and try to sell the service, to see what it was like, to see whether in my view it might be realistic. So, on a no-commission, no-income basis I got a few business cards printed and went out on my own at my own expense and I tried to sell payroll services. At the time, ten accounts were producing the \$35,000 a year worth of revenue, and within a few weeks, I had three accounts. So it was a fairly significant increase in percentage, not very significant in terms of revenues, but it occurred to me that this was something that could readily be done. I then negotiated a commission arrangement and continued to sell more aggressively and relatively speaking, successfully.

Ceruzzi: Was there something you were doing that they weren't doing?

Lautenberg: I was getting out and calling on customers or prospects, and I had learned that in the insurance industry. I was only there a couple years. And I thought I knew enough about selling that I could, if I could muster up enough courage to knock on the door, that I could get people's attention. Many years later people would say, well who among you was the technical person? None. None among us. Henry was the chief planner, strategist; he was the single founder at the time. Joe Taub had a facility for working with people and getting them to give their best so became essentially the manager of the operation, and I was the marketer. So in 1954, I decided that this was good enough for me to go there full-time and Henry agreed because at that point I was earning more in my little commission than the company was making, so we came to a joint agreement and in January 1954 I went to work for Automatic Payrolls.

Ceruzzi: Still called Automatic Payrolls?

Lautenberg: Still called that until 1957. Then what I negotiated on a handshake was that if things went along well that I would be a partner, and I've always been considered one of the founding partners, the three of us. So this was developed very slowly but constantly and in 1957 we thought that it might be a good idea to try other things, other ways of doing this job.

PUNCHED CARD OPERATIONS

Ceruzzi: Now, up to this point were you using tabulating machines?

Lautenberg: I was just going to answer that. We were using bookkeeping machines and there was a device called a Comptometer and if you had the skilled touch, one could add columns and multiply and do the numerics very quickly and easily and it was better than a conventional adding machine and things like that. We also used a calculator put out by a company then called Friden.

Ceruzzi: Yes, there are some of these in the Smithsonian.

Lautenberg: Yeah? But there is no Friden company?

Ceruzzi: Friden was merged with Alcatel a few years ago, so they're gone.

Lautenberg: They're gone. And we were buying used Friden calculators and Comptometers. We made some advancements. We had a fairly crude bookkeeping machine which simply added columns up and down or cross footed them so you could put them into balance and we could make the entries, the journal entries which was the overall record, and write a check at the same time. For those companies that paid by cash, which was quite customary in those days, we would print on an envelope that was then the pay voucher that could be stuffed by the company. We would deliver that record. Pick up and delivery. Our technology was a Volkswagen. We had one of the largest fleet of those one day. But coming along the way there were hints of technology. Now we're talking about the 1950's. In 1957 we decided to take a chance with IBM and go the tabulating machine route. This was punch cards and you know you could do things much more rapidly than the basic manual system that we were using at the time. But it was a far cry from a major technological change; no I won't say that, it was an improvement. But it didn't anywhere approach the computer capacity that later came.

So we changed the company's name to Automatic Tabulating Service, thinking that was a broader scope. And we punched lots of holes in lots of punch cards and we had a staff, and we had to stagger the hours because the one thing I always believed that it was more important to us to consider the employees' needs than it was to try and get a grand marketing scheme, because if the employees were content on the job (and I won't say that I was a pioneer in employee-relations) but it was a pretty novel idea that we had. We would offer part-time schedules so that, typically, women who were mothers who had kids in school and so forth could work from the early hours. Others could pick up when their husbands returned home so they could come in at four or five o'clock, and we'd operate until midnight and typically it was about a three and a half day principal schedule. We worked five, six, seven days a week. But it was heavily tilted toward the beginning of the

week, Tuesdays, Wednesdays and Thursdays. Monday and Tuesday we'd pick up the work for the week previously ended and then we'd do our processing and we would be delivering our payrolls by hand Thursday and Friday. It started Wednesday but it continued through Thursday and Friday and the companies would distribute their checks. The companies would sign their checks or stuff the envelopes, whichever they had.

And things that I began to see about the personnel or the functional side of things. In those days, especially in the beginning of the 1950's payroll records were considered sacred, and so we would go into companies, I'd call on them and we'd see the owner of a company. In one case it was a brokerage firm, very famous, and the principal partner would sit down at the beginning of the week and work long hours into the night and personally prepare the payroll and he had 207 employees in a stock brokerage firm. Now you're looking back in the early 1950's, that's a pretty good size firm. So I soon discovered that my job as the principal sales and marketing person was to convince the prospect of the wisdom of outsourcing. I was like a missionary and I was surprised when people would say no because it seemed to me that it was such a good idea since we charged 25 cents a person in 1951-52 so you could get a hundred man payroll done for \$25.00 a week. Even though let's say, a bookkeeper's salary then may have gone as high as \$100.00 a week, but you saved that bookkeeper the stress and the importance of getting the payroll out which was fundamentally a basic clerical function. It didn't need much management skill in order to do that. So we'd work the prospect and talk to him about things and I found out it was a very easy sell.

Ceruzzi: You had to convince them that they could trust you, that the information wouldn't be leaked out to their competitors.

Lautenberg: That's right. No, not only to their competitors but also to their own employees, because you know their scales weren't always exactly the same. So someone would be getting more than another guy and they didn't want that to get out.

Ceruzzi: Was that ever a problem? Did that ever happen at your company?

Lautenberg: Problems happen. In the earliest days, Henry Taub and I were principally outside and Joe ran the entire internal operation. So people got to know us. Very often I would do the selling, Henry would do the installation, tell the people what they had to do. And we developed some very nice personal relationships. We were young, we were working hard, everybody knew that. The hours were impossible, are impossible to fathom these days. If I tell my children, and they are all educated, about working those hours it means nothing because it's so old-fashioned. Monday would be an eight o'clock to eight o'clock day. Tuesday would be eight o'clock until eleven o'clock at night. Wednesday would be eight o'clock until midnight or later. Thursday we'd start to fall back so we would have about an eight to eight day. Friday we'd wrap up by about six or seven o'clock. We'd start at the same time. Saturday was almost always a full day of work and Sunday frequently. And the three of us did it ourselves. And I have to add a personal note here. We worked so hard that it's incomprehensible. I would get home at night, sometimes at midnight or one-o'clock in the morning, especially if someone failed to show up, especially if we had any kind of mechanical equipment problem, that kind of thing. And so exhausted that I was barely able to roll out of bed the next morning, and the three of us are alive today. Pretty good health,

very good health, when you consider. I think we proved something way outside the computer business and that is that hard work ain't going to kill you.

Ceruzzi: It gives you something to live for.

Lautenberg: The youngest of us is Joe, and Joe is 73 and I'm 78 and Henry is 75 and I left there twenty years ago to go to the Senate, but the fact of the matter is that we had years and years, thirty years of just pounding the proverbial pavement. Because I used to sell during the daytime and then come in at night and do the payroll. Very often I would sell the payroll and have to do the damn thing. So anyway the schedule was rigorous and difficult but we were determined. But I want to point out something. We were not visionaries. Not one of us sat there in the earliest days and said, you know some day we could be a ten million dollar a year company. And we became a seven and a half billion-dollar company. And now we have 44,000 employees today, the company that we started from nothing. And now we can fill in going back. So we called the company Automatic Tabulating, got punched card equipment and we had everybody and his brother trying to sell us their earliest computers. Burroughs, Remington Rand, or I guess maybe called Sperry Rand.

COMPUTER OPERATIONS

Ceruzzi: Or Univac. How about Control Data?

Lautenberg: Control Data really wasn't visiting us particularly. We weren't doing a lot of storage at the time and they were focused more in that area. And different companies would bring us a piece of their equipment to try and see how it worked out. National Cash Register had a posting machine.

Ceruzzi: But this decision to go to the tabulating machines – was that something that you made or did an IBM salesman sell you?

Lautenberg: Well they called on us, but we made it ourselves because our success was beginning to weigh excessively heavily on us. We almost couldn't keep up with the work and in the late 1960's we were almost drowning in our structure. We weren't prepared for the success we had. In 1961, Hallelujah, here comes something called the IBM 1401 and it was pretty intriguing and the IBM sales force was there trying to talk to us about how much easier it would be than with the tab equipment because you had sorters and you had key punch machines and you had tabulators and that was pretty much the mechanical structure of a unit. Something else happened with the advent of the 1401. And that was the beginning of our ability to establish common production facilities in different places. It wasn't realistic before when so much of it was manual. It was still largely manual with the 1401 since you had to punch cards, but it was different. So we could do the programming that was necessary, and then when we made an acquisition in Miami, Florida or Boston, Massachusetts or Cleveland, Ohio, or wherever, we could send the service process out and have it working. It standardized the market. But it wasn't until 1965 when the IBM System/360 was produced that the world opened up. We had quite a good business going by 1961, quite a good business: \$400,000, \$425,000 worth of revenue. I remember vividly because we also went public in the same year. And why we went public none of us ever

really knew. We didn't need the money but it seemed fashionable in 1961 to go public. Small companies went public.

Ceruzzi: Would you have needed the money to buy the System/360 though, because that was considerably more expensive?

Lautenberg: But they were all rental, you couldn't even buy them at that time. It was leased equipment.

Ceruzzi: But the lease was still more money than a 1401.

GOING PUBLIC AND ACQUIRING COMPANIES

Lautenberg: Yes, except that the efficiencies were so dramatic that the cost was every bit worth it. With the introduction of the 360 and the underwriters' capacity to blow that up as perhaps the coming of the space age, it was an appetizing market for a public offering. But there was nothing mysterious about it and the first underwriting, to show you what our poor boy background was, half of that underwriting, a total of \$300,000, 100,000 shares at \$3 a share brought in \$300,000 gross. Half of it was private selling. We were so anxious to put our hands on some money that we sold some of our own stock immediately with the company stock. The company wound up with about \$150,000 in the treasury and frankly again, it didn't mean much, but we had a public vehicle so we were able to use stock to buy little shops all over, little processing shops where two people would have started a business.

Ceruzzi: Were there a lot of them?

Lautenberg: Oh, there were loads of them. And we went to places as small as \$100,000 in revenues to buy a company. Typically they might be doing \$200,000 or \$300,000, not much bigger than that, and these people turned out to be multi-millionaires later.

Ceruzzi: It sounds like it was relatively easy to start a business like this.

Lautenberg: They were similar but not the same, because some of them would do payroll and other tabulating things, you know that kind, because again this was the 1401, even though we look back at it like a relic. But the fact of the matter is at the time it was a very important change in process. So I would start doing the acquisitions. Henry and I both shared looking for companies. And I would go around the country and see what we could buy. ADAPSO came along. I think I was president in 1965 or something like that. Its office was located in a home in the outskirts of Paoli, Pennsylvania, and I went down there to see what it was that I was going to be president of and by then I bet there were maybe twenty or thirty companies in the business. Eight similar. None of them were really directly doing payroll work; they were doing other kinds of calculating. So I went down there and I came to the conclusion seeing the executive who was in charge at the time, an elderly gentleman, and in this little house with a couple of rooms, that it was a good place to live but I wouldn't want to work there because it had no dynamic to it.

Well, things progressed. The stock, which came out at three dollars, went down to a dollar and a half, which wasn't unusual because right around 1961 there was a little stock market

depression, maybe 1962 or 1963. The stock hadn't made much progress. The company went public with \$425,000 worth of revenues. Total profit was \$35,000 and we went to a company called Oppenheimer & Company, a substantial brokerage firm. And the head of the company, when we were talking about it, we were doing their payroll. And the subject of a public offering came up and so he looked at the financial statement and we made \$35,000 pre-tax on \$425,000 worth of revenues and had \$25,000 net after tax. So he said, hell, I have salesmen that make more than this and I immediately asked if he had any openings because we were really struggling so hard. But it was quite a significant step because that stock, anybody who owned that stock and kept it, now it's forty years, has made a lot a lot of money because a hundred shares of stock that cost \$300 is worth presently about three million dollars. But very few people held on for forty years, myself included because of my Senate service, but that is another story.

SELLING PAYROLL SERVICES

Ceruzzi: You were talking about payroll. There are two questions that I wanted to ask. Did you appeal to companies that had some particular quirk in their payroll, as they had to follow some government policy that required them to do something that wasn't straightforward, that made it more attractive to go to you. That they couldn't do it in-house or didn't want to do it in-house?

Lautenberg: Well, the notion of outside service was beginning to catch on. I think it is fair to say that we were pioneers in the outsourcing side of things. But, once people saw the value, it was such an attractive thing, that's why I said I felt like a missionary. I don't know how they could have said no, based on the logic that I saw. We had a funny incident that I recall and forgot to tell you about. In Paterson there were a couple of furniture manufacturers. We developed a relationship with this one company. They were very nice people and the bookkeeper and the office manager in particular really liked what we were doing, these young fellows working hard to accomplish something and all that. So when we got their company – which was about 400 employees – it was a very big account. We got another furniture company sometime later after we had been servicing this one, and excitedly told our friend the bookkeeper that we had gotten this other furniture company. Well we got a call from the bookkeeper who was weeping as she talked to us saying that her boss found out that we were going to do this other company's work and that we could have a choice, we could either have company One or go to company Two, a much smaller company. Well, it was a macro decision in a way, because the question was whether we were going to knuckle under to the pressure. We immediately came to the same conclusion. If that's the price we have to pay for our independence, that is the price we're going to pay. And we did that, we took on the smaller company and we lost the bigger one, and it hurt but we had a measure of pride that helped us steer our way through to the future. So, things went along. Growth was rapid. In 1961 we did \$400,000 worth of business. We had another underwriting in 1965 that was purely company stock and I'm not sure about whether or not we did sell some personal stock in that underwriting. Then we had another one in somewhere around the later 1960's. And never needing the cash, never needing it. But each time it was to broaden our public persona and at the same time to give us an opportunity to have more liquidity for acquisitions.

Ceruzzi: So, you actively opened up branch offices geographically outside of New Jersey and, bought companies and then you turned them into branches?

Lautenberg: Yes--almost every one of those were small companies typically. Almost every one would get stock as the medium for the sale and they would have an incentive agreement so they would get some amount of stock and some options.

Ceruzzi: Would they change their name?

Lautenberg: Oh yes, we would change it. We started to build consistency and I think it was 1967 when we started to copyright the name.

AUTOMATIC DATA PROCESSING (ADP)

Ceruzzi: So the name changed at some point there from Automatic Tabulating?

Lautenberg: Right, first Automatic Payroll, then Automatic Tabulating then ADP - Automatic Data Processing.

Ceruzzi: Was that suggested by the IBM salesman?

Lautenberg: No, that was suggested by me. And we went out and we got a logo and so forth and we persisted and even when we listed on New York Stock Exchange we couldn't get the symbol ADP because it was held an Australian bond that matured many years later but we're now ADP on the stock exchange. But also if you go to Paris for instance, if you go out to the airport, the reference is to ADP, having nothing to do with us but rather that's their name and acronym for the DeGaulle airport. And the US government uses ADP as a word indicating a particular type of work that goes on in government.

Ceruzzi: Right, automated data processing.

Lautenberg: But we were able to copyright the name and continue expanding and we'd go to states where the service wasn't available at the time so the name became, had meaning. It was like IBM.

Ceruzzi: And you had headquarters along the New Jersey Turnpike which everyone sees as they drive by.

Lautenberg: It wasn't the headquarters but it was a significant office. We have several offices in New Jersey. But we are, if not on the Turnpike, on major highways. So much went into the thought process for this company. I used to pick the locations and I picked them for the convenience of the employees because that was always our magic potion --to have contented employees. Stock options down to the lowest level supervisor. Five people would personally get stock options and a stock purchase plan for employees, 15% discount if you buy the stock. All these things to engage these people as partners, in fact and in incentive. So they felt good about the company. And I tell you this, not to brag, but we had several attempts to unionize. I came from a working class family and my father and the Taubs' father always believed that they needed unions to protect themselves, to get a decent wage

especially during the Great Depression. And what happened then was people could be laid off with a day's notice. And as a consequence of that they (including my father) had to go and try to make a living. So they would buy a little local newspaper store or something like that and try to do that instead and then they would exhaust themselves working so many hours. And we'd go back to Paterson to my grandmother's house. She had a two family house. As a consequence I went to thirteen schools in twelve years of public school. That's why I didn't have a lot of friends along the way; it was hard.

But we were always thinking about the employees. We'd give scholarships to deserving offspring of some of the employees. We'd limit it, we couldn't do it with everybody and we pursued continuing education opportunities for our employees. We'd pay for things. And thus when the unions tried to organize us they never succeeded and I was listed or charged with being a union-buster by an opponent in my first Senate race, and nothing could have been further from the truth because I still retain a lot of working persons blood in my body, having seen my father struggle to make a living and how much it meant. The years in poverty meant a lot for both the jobs and myself in building the kind of character that it took to create this company and to keep it moving. In 1969 we were so overwhelmed with the rapid growth, again having gone from a half a million dollars in eight years to maybe ten or twelve million dollars of revenues, is quite a change. And again the business wasn't mechanical; it was that the client didn't have online input as they do today.

Ceruzzi: It was still punched cards.

Lautenberg: It was punched cards and more Volkswagens, and Volkswagens because they were so economical and you could park them if you had to. We then had a real shift in management. Joe Taub retired from the company because he decided that he didn't want to do it anymore. We were still very close friends all three of us, and we changed the focus and I became the president of the company and we went looking for new and different opportunities.

OTHER SERVICES FOR ADP

Ceruzzi: Opportunities besides payroll. Other things that they would outsource.

Lautenberg: Right, right. And that went on as early as 1963 when we began to look at the brokerage business. That industry was - the volume had started to stretch their capacity. And we were persuaded by Oppenheimer to try and develop a records service.

Ceruzzi: The so-called back office?

Lautenberg: The back office, and Henry took that on as a personal assignment and he moved to the New York operation that we had and through some years of struggle he literally all alone built that part of the business, which is the second largest part of the business. Then as different acquisitions came along, there was a company in Ann Arbor, Michigan that was doing online work. We acquired that company.

Ceruzzi: Do you remember the name of it?

Lautenberg: I'm pressed because Tymshare was our competitor and not the company we bought.

Ceruzzi: Well I want to get to the whole transition to online in a minute but we're still with the System/360 and you had to hire programmers didn't you? What was that like?

Lautenberg: Yes. Sure we hired a lot. Well for us it was a total novel experience but we brought in executives, we brought in a fellow named Bruce Anderson who had been with IBM at one point. We brought in a very strong manager who succeeded me as chairman and CEO when I went to the Senate. And we hired technical people along the way and we were a pretty inviting place to come to work because we were so far advanced and we were making lots of money.

Ceruzzi: Was it hard to identify what kind of person to hire because at that time it was an unknown profession?

Lautenberg: Very difficult. But luck was always on our side. In addition to willingness to work as hard as we had to, to make it succeed, when we started the brokerage business, we brought in a couple of fellows whom we had met who worked in the brokerage area. So we separated the service expertise in many cases from the processing expertise because one didn't have to have that knowledge all bundled into one person. So I think that we deserve more credit for starting the service business than we do for being in the computer business. People today ask me again who had the expert computer knowledge.

Ceruzzi: Well, that's one of my questions.

Lautenberg: Well none of us, not one of the three of us. But what we had was the tenacity and strength to stumble through the mistakes and we had lots of them. My gosh, even when we had the tabulating equipment I remember temperamental tabulating managers. One guy lifted up his shirt one night at two o'clock in the morning or three o'clock in the morning and he had tape across his back and he said, "this is what this company has done to me and I'm going to quit." And I went, oh my god, Henry and I practically were brought to tears because the prospect, if you lose a guy like that, but it also taught us more independence and more resilience. I told you about the furniture company, but we also learned a lot from just working with these people. We once took a fellow who was getting married and wanted some time off. He was one of the tabulating managers. He wanted to go get a marriage license and have it to get married, so we took him down to the county courthouse and got his marriage license and we gave him a few hours off to get married, and he had to come back to work because we were so desperate. Then for another fellow in the company, I accompanied his wife to the hospital to have a baby and you name it, we did it. One time a fellow had his fiancé coming in by plane from some distant point, and I went to the airport to meet her and greet her and bring her to the place because we didn't dare let those guys out, we almost shackled them to the machines because we couldn't afford to be without them.

Ceruzzi: It was a different time I guess.

Lautenberg: Payroll and brokerage were equally demanding. But by the time we got to brokerage we were a lot more sophisticated. We went into New York, on lower Broadway and we took over the facilities in a building and put in generators and all that in New York City it was pretty demanding. We spent more than the building was ultimately worth. And I wanted to buy it at the time and one of the directors said no, no, no, no. But these things didn't matter. But along the way there were so many incidents and I think that's of less interest to you than the company history.

Ceruzzi: I guess I keep getting back to this notion that you mentioned when there is this sort of public notion of space age and very highly technical MIT mathematicians, and yet you somehow managed to steer your way through all that.

Lautenberg: Because we reduced everything to its simplest terms. That was the way we operated. This is what we want. It wasn't complicated. You do this, you multiply this by this, you take out these taxes.

Ceruzzi: But you had to have some understanding of, let's say, Cobol as a programming language.

Lautenberg: Yes, that's right, but I didn't have to. We were smart enough to find the people who could, and one time we bought a little company of a few programmers. We bought another company that had other skills around the equipment and it was a constant pursuit of qualified people and we would get them.

STOCK PRICES AT ADP

Ceruzzi: Did you have this problem, I guess they call them the go-go years where the stocks of all these little companies were shooting up, and it was kind of like the Internet bubble only it was the late 1960's, wasn't it? People would leave established companies and join a start-up.

Lautenberg: It didn't have quite the buoyancy that we saw later in the stocks on the NASDAQ. You know where these things were produced as ideas with no business and the stock would come out and double or triple in value. But ADP has the longest growth record of any company that publishes its financials in America, in other words public companies, not private, of successive quarters of growth. We've grown by at least 10% a year for 40 years and we did it before that, but we weren't public before that so it had no value. We have the highest Price-Earnings Ratio stock of any company by far. I mean the number two to us is so distant and I can't give you the precise number of quarters but there used to be a list put out called the Nifty Fifty and I think it was Kidder Peabody and they listed the number of quarters that we were in the top fifty P-E's and always nearest the top. IBM, none of them, had the record that ADP had, still doesn't.

Ceruzzi: So you could retain programmers.

Lautenberg: Or we could acquire. Listen, we have a strong alumni association of people out there, of people who went into competition or went to other companies, of course. We have those things. But the basic core of the company – today the chairman is Art Weinback

who was my second handpicked choice to succeed me. The first guy was there 15 years and he retired and now there is somebody else there and when he makes a speech to the employees there are immediate translations in ten languages – to show where we are. I mean I've been in Holland and saw a little, it wasn't a Volkswagen but another small type car that said ADP on it an you can see the same thing in France or where-have-you.

ONLINE OPERATIONS

Ceruzzi: Okay that leads me to another question. You mentioned the Volkswagen. At some point you move from hauling these things around to transmitting things electronically. How did that happen?

Lautenberg: Now we still do a lot of that. Now remember I left the company in 1983 when I was elected to the Senate. So even when I came back to see what was happening as I would do on occasion, I would go down to our principal office which was on Route 3 in Clifton New Jersey. We were there from 1968 to 1983 (?). When we built that office it was really quite a grand edifice for us and I walked into the computer room and was stunned by the emptiness in the room and I went to a couple of the supervisors and said, what has happened to business here? He said, the business has increased substantially but compaction (?) and output; all these things came into being in the years right after 1982-83. That's when these things really began to happen.

Ceruzzi: The early 1980's?

Lautenberg: Yes.

Ceruzzi: In doing some background reading along with the go-go years there was all this stuff about time-sharing, which proved to be kind of a disappointment.

Lautenberg: Yes, because it was functional only without any application processing. So it was, listen, we used to deliver the Townsend Greenspan econometrics database; they would design it and they would market it and we would manufacture it. And Alan Greenspan went from ADP to the Feds directly.

The fact was that IBM was our biggest supplier. We were a major customer and they were our biggest competitor at the Service Bureau Corporation. I went up to see Mr. Vin Learson who was the chairman of IBM and who was the first non-Watson to chair the company. And he was a pretty tough guy and I guess I must have been tough too. I went to tell him that we were very unhappy with the relationship and we were even then among the largest non-government, non-military contractor customers of IBM, certainly in the eastern region. Well he scoffed at that. He said, "Oh my god, look, I've got your annual report here, look at the growth that you've had." So I said, "Who are you to decide how big we should be? Is that enough for you? Well it's not enough for me." Then they sold SBC to Control Data, which still didn't do them a lot of good. And in those years while we were competing with IBM, we were often ignored deliberately by these larger companies who thought that we'd never survive. We had one meeting in which the report had come back from an investment banker and we went grudgingly to a meeting arranged by a Wall Street firm that we knew very well to see if these people would maybe want to try to acquire ADP. We weren't

interested in selling it but we were compelled by personal pressures from these people to go and they came to the conclusion that we were nice guys but we weren't really going anywhere. And we've long since dwarfed that company in size and growth. But when time-sharing came along it began to revolutionize the business. We were in online services, not time-sharing.

Ceruzzi: Right yes. I want to keep that separate.

Lautenberg: Because the time-sharing business was really in the final analysis not the business for us. It was however, an introduction to a process that was very helpful. Also in this period of time in the 1970's we acquired a company out west that was doing automobile dealer services, parts inventory and sales records. So we adapted that application and then we acquired a company that did insurance claims, digitizing a voice so a claims adjuster could go out and look at the car and it was a headlight and it had screws and nuts that had to go in there and so they could right then and there a write check for the claim and be done with it. So that is a significant part of ADP's business. There are all kinds of adjunct services related to payroll today. And no longer does the check get printed by a printer. We bought millions and millions of dollars worth of paper every year and now we buy blank stocks and we imprint everything including the magnetic code, including the logo, the color, the check numbering, the whole thing and goes right to it. And in some cases they transfer the funds to us and we then we just process everything including the tax returns.

Ceruzzi: Do you do direct deposit of the payroll into the employee's checking account?

Lautenberg: In many cases.

Ceruzzi: But this transition though, I guess it must have been a major decision for ADP to go ahead and move away from punched cards.

Lautenberg: No because we had to. To move away from punched cards was easy. We were forced into it. Suddenly there was another way to do things without hundreds of keypunch machines around and the difficulties of working with so many people all the time.

Ceruzzi: You had to send cards to some remote job entry or whatever they called it at the time?

Lautenberg: Yes, well that came fairly late in our existence.

Ceruzzi: What year approximately would that have been?

Lautenberg: I would say late 1970's and remember we're talking about a history now that's more than 50 years long. We started in 1949; we're talking about 53 years now. I mean that's, you know you go back 30 years, 25 years and we only had half the existence at the time of the company. So we started, I would have to say in the 1970's with the opportunity for some assigning of the input responsibilities. Cyphernetics – that's the name of the Ann Arbor company.

Ceruzzi: And you bought them because of their time-sharing programming staff?

Lautenberg: Well time sharing and you know with the possibility that it would help – I guess down deeply we knew that we had to have the capacity to afford ourselves redundancy in the event of, we had a couple of incidents you know along the way with a fire or something. So we felt a need to build redundancy into the system so that we could transfer from location A to B and C and so forth. That was one thing. The second thing was to be able to export our programming easier. To have these folks do some of the program design that we needed because they were in place with a lot of skilled people. Ann Arbor as you know, a very busy place in that kind of technology. It took a bold stroke, and I would have to say here it was Josh Weston, my successor as CEO of the company who came in 1983. I was elected in 1982 and I took off in 1983. And he was the one who really pushed this notion of getting the customer to do more, and the customers in exchange for that got a better handle on what was going on because they would also get some data that they could use to monitor the input and the whole thing.

Ceruzzi: Statistical data about their employees?

Lautenberg: See, principally we're talking about, although not exclusively, hourly workers. In the earliest days Joe Taub had a particular skill in records – he was very good at that. And Joe actually taught people to analyze a time card in a flash. Now you sit down and you say okay here you know the time is 7:04 in the morning and at 7:10 they're docked an hour and they worked until 5 o'clock. How many hours are involved and some of them were eight-hour days, and some of them were forty-hour weeks before overtime started. So we could transfer a lot of that decision-making to the computer, but in those days it was manual. No one knew more about payroll than we did. So, now we make these next leaps through the technology and the business changes. Josh Weston comes along. Josh was very bright, very focused and his calculations said, with lots of people involved, that we could offer (and here I may be overextending a little bit, perhaps it ought to be verified) an on-premise computer practically for no cost that we would underwrite the cost of the thing. And that's where I'm not sure, whether we just gave these things away or whether there was an initial fee for doing it. I think we gave them but I'd have to confirm it. And we retained ownership of the whole system. I once got a call after I was in the Senate from a man I knew personally - I know a lot of people in New Jersey - who said to me, Frank, what happened to your company? I need your help. He said I had my accounts receivable ready to go out and the machine stopped working. Now he was getting that input at his end. So I said, Gee Whiz, that's terrible you know. So it was the end of the month and I'd run off and part of what happened as I was told from the ADP office was if you tell this guy to pay his bills then we'll have his service continued, but he hasn't paid us. So I called him back and I said you better pay your bill. Well I may be a little late. I said, pay your bill and you'll get your service restored. But that's a good way to move the cash along. You know. So it was kind of novel but the thing really took off, and I would say now that there are hundreds of thousands of devices out there. ADP has 500,000 clients. We pay 33,000,000 people per pay period – their paychecks. Think of the enormity of the figure. 23,000,000 of them are domestic United States so that's, how big is the work force today? 150,000,000 or so, I don't know. I think we pay one out of six people in America; they get an ADP paycheck. Plus there are competitors around who have shares of the market but when we started it was almost zero. And here today there is something called the Hall of Fame of Information Processing. It's in Dallas Texas. When I

went to the Senate, my colleague from New Jersey was Bill Bradley so I used to make speeches about the fact that New Jersey was the only state in the country that had two Hall of Famers in the United States. I said, Bill, you may not know was in basketball, I of course as you know was in the information processing hall of fame.

Ceruzzi: Both are pretty well known these days.

Lautenberg: So I said, and kids would chase me for my autograph and try to make light of me of course I think it is light (?). Here I am considered a pioneer in information processing and in some ways I'm very much so, but not from the technical side.

APPLICATIONS AS ADP'S FOCUS

Ceruzzi: Well that is an important part of the story, because obviously what good is the technology if you can't market it.

Lautenberg: The applications were our specialty. That's where we really shone. I think we are probably the second or third largest producer of Wall Street records, of brokerage records. We go from the front end where the sales person and in some cases the client can indicate directly what they want to purchase. It's electronically traded. If you want to buy a hundred shares of ADP you can enter in some cases on their own or they call their broker and he enters. The trade goes through automatically, and in some cases without any intervention manually and then the whole thing goes through, the confirmation goes out, the monthly statement is done and all of the billing. You know it is quite a process.

Ceruzzi: I guess there are, I know I need to get to the ADAPSO story, but I want to go over one little thing and maybe we can take as much time as you want. Is the PC and Microsoft threatening ADP's business model? Or has it threatened it? Or will it? Can it? Is it a threat?

Lautenberg: I guess it is possible that it can, but it hasn't. It has enhanced ADP's services. That enabled us, you see, because there's so much more now that happens. The volume of data that are accumulated by ADP is second to none in the world. There is no place that has fresher data than ADP. No place. Because we can tell you across this country and in many other countries with broad enough samples to say, okay, the workweek was extended by so-and-so. And we can break it down even into smaller areas and regions, and the average hourly rate and how much overtime was worked and how many new hires there were relative to the base payroll.

SECURITY AND CONFIDENTIALITY

Ceruzzi: That raises an instant question about security which was right there from the start, but it started with not wanting one worker to know what the next guy was making but now it almost has international implications.

Lautenberg: You mean whether someone can access our files?

Ceruzzi: Because of what you know, or what knowledge is in the company.

Lautenberg: I assure you that first of all if we do publish any statistics, and this has been a hope of mine for many years, an index of sorts, it's done with anonymity. There's no names or anything else. And I assure you that without being personally on site is that the security of our systems is sacrosanct.

Ceruzzi: Well it always was from the beginning.

Lautenberg: Always, and that it was better off-premises. We have redundancy all over. When the terrible day of 9/11/01 arrived we were called (please verify this before it is published) by Cantor Fitzgerald. To my knowledge they were not a client before and there was no question about price or time. Can you help us get back up? And we had them back up in two days after that. By the Monday after the Tuesday, I think it was Tuesday that the assault took place, we had them operating. And they lost lots of people. One of them was my daughter's closest friend because my daughter had worked with this woman at Lehman Brothers. My daughter went off to law school from there and this young woman went to Cantor Fitzgerald and left three children behind, it was terrible. So we were able to get them up and going no questions asked, ADP had the capacity. The capacity is enormous, when you think about the amount of data.

Ceruzzi: But it may be a good thing that people don't know that necessarily, that it might frighten people.

Lautenberg: But there's always backup, always backup.

SENATORIAL CAMPAIGN AND ADP

Ceruzzi: I just want to talk about your involvement first in ADAPSO and then if it's connected to your involvement in New Jersey politics and in the Senate. Was that something that was good for the company or was it something that you personally decided to do on your own because it was of interest to you?

Lautenberg: It had no connection with the company. In my first campaign, the first time I ever ran for office I was in an eight-person primary in New Jersey. My theme if you will, was ADP. If he can build a company like that and bring that influence in the government, what value. And I literally made ADP the campaign. That was my mission.

Ceruzzi: But did other people in the company – was there anybody there that didn't like that you were doing that?

Lautenberg: No, no. As a matter of fact. The joke went around the company that if I knew I was going to win I never would have gone into the race because we were sitting on top of the world. I gave up a major fortune, a major fortune by leaving the company at that time, by selling most of my equity shortly thereafter because I was asked by a reporter, hounded by reporters, about what would I do if it was a conflict. I said I would recuse myself. Oh well that doesn't matter. But we didn't do any government business, federal government business. Had no bearing on me.

Ceruzzi: How did the federal government do its payroll?

Lautenberg: Well poorly for the most part. And now I think we do have some parts. I'm not sure about the federal government, a lot of state governments. A lot of city governments use ADP but for different things, primarily payroll but we supplied the service for them, but in those days when I left, when I decided to run, my announcement was in ADP's parking lot, because ADP is my credential. I mean we started with nothing. And under the old-fashioned American system. My education was post military on the GI Bill. I went to Columbia and hell I never, we wouldn't have been able to afford Columbia. I enlisted in 1942. My father was on his deathbed, he was age 43. He died in the next couple of months after I enlisted. My mother was widowed very, very young and our sights were strictly limited. When I got out of high school I got a job loading milk trucks, physical manual stuff. That's where my horizons were. And when I went to Columbia and I stood some couple years later with Dwight Eisenhower who was the president of Columbia, with my mother, my grandmother and my sister, the three principal women in my life. And I saw how wonderful the opportunity that was given to me because when I went to Columbia it wasn't that I learned things about statistics or finance or otherwise. What I learned about is that there were other horizons and I never could see them. And when I go back and I talk to school kids about it, I surprise them. The other day I did a reading for children, fourth graders, Dr. Seuss. It was America Reads. So I went there and I always kind of get talking not to them, but with them so I could see from the faces that it was a different population than I knew when I was a child. I said how many of you have parents who were born outside of America. Twenty-five out of the twenty-seven children in that room held their hands up, and I held my hand up. So you see, I want you to understand something here. That just because your parents weren't born here and couldn't give you a lot of help sometimes, that you can still do something in America and I stand for it. And I'm an old man compared to people you know.

Ceruzzi: Now what was the connection to the company?

Lautenberg: The campaign was ADP. One guy wrote a letter saying I was a union-buster. It was the most outrageous claim because if one looks at my 18 year record you see how much of my interest I devote to working people, giving them healthcare, giving them a chance to get decent jobs and earn decent salaries. My rating with Cote(?), which is a labor organization, is almost 100, one of the highest that there was. But yet ADP never had a union and it was because we treated them well enough in the first place that nobody could wrest the control away.

ADAPSO

Ceruzzi: Was your service in ADAPSO kind of a training ground for politics?

Lautenberg: It was.

Ceruzzi: So you enjoyed doing that.

Lautenberg: ADAPSO. That was a passing moment when you look back on those years, but it got me to testify in front of I think it was Senator McClellan's committee or subcommittee.

Ceruzzi: About banking, right?

Lautenberg: About banking.

Ceruzzi: They were taking away the business. They were doing payroll.

Lautenberg: They wanted to open up, right, so I went down and I was appealing for the industry. And when I went to the Senate, a staff member there pulled up my testimony. It was rotten. I was awful. If someone had appeared in front of me as poorly prepared as I was I'd throw him or her out, but it was an experience for me. And I didn't want to go to the Senate to do good for the computing industry. I wanted to go to the Senate to do something for my country and I felt very strongly about that. The fact that I had the experience that I had, that my father lay in his deathbed thirteen months not only did he die leaving an enormous family void. My mother was 36 years old when she was widowed. But it told me that insurance would have been a great thing. It taught me that there had to be some way for a family to recover. It taught me about education; my father took me into the mill and took me by the hand and said, "I want you to remember," I was twelve years old, he said, "I want you to look around here, you see how dark it is?" he hated working in the shop and the factory. He said, "You see how dark it is in here? Do you hear the noise? Do you see how filthy it is?" And he took my hand and he rubbed it along the silk fibers because he worked on a machine called a warp and there were weavers and other trades. And he took my hand and he rubbed along the fibers and it left a film. And he said, "You must get an education. You must never work like this." And it meant nothing to me.

Ceruzzi: Well you were twelve years old.

Lautenberg: My father died at 43, his brother died age 52, my grandfather died at age 56. All three of them worked in the silk mill. I just celebrated with my uncle, another one, his 100th birthday, so here was the occupational side of the experience. The city of Paterson is where they discovered the dangers of asbestos and there was a famous physician there named Selicon(?) who learned about asbestosis and that's why I didn't cave in when the asbestos manufacturers came around knocking on the door trying to get me to write legislation to protect their liabilities. But anyway, it was the ADP experience, the opportunity to start with nothing, to finish putting sixteen and a half thousand people to work doing things that made the country, forgive the modesty here, made the country more efficient in some ways.

Ceruzzi: You're almost unique among people who have gone into politics to come from a data processing background, and in fact there seems to be this notion that people in the computer business today are apolitical or they're something, they don't care. I don't know whether that is true or not.

Lautenberg: Well that's not true. I mean when you see some of the people who have made lots and lots of money and gotten in touch with Bill Clinton or gotten to support George W. Bush

Ceruzzi: I'm just curious how you, you were working these long hours, you had plenty to do, but in addition to that you first get involved with ADAPSO, probably because it was an issue that was important to your company.

Lautenberg: It was. I wanted to know what was happening in the industry and I thought that one of the good ways to do it was to associate with others. I didn't feel threatened by their competition or anything like that. I felt that if I could help make the industry better then we'd have a better opportunity and we could sustain our position in this larger pie. Also there was an ulterior motive. It gave me, it gave ADP, a chance to talk to people to be acquired with whom we could have an alliance. In those days acquisition wasn't quite so clear, in 1965 or whenever it was. But it served a very useful purpose later. As a matter of fact, one of our top managers, a finance vice president, created a business through ADAPSO by going to the meetings and arranging mergers and I think Bernie Goldstein who is here had the same experience. Was it also altruistic? Yes it was. I had been a commissioner for the New York, New Jersey Port Authority, appointed by the governor of New Jersey. I like public service. I was chairman of the largest charity in the country, public service. I had thirty years at ADP and I felt that there were things that I could do that were bigger than ADP that might be of help.

PUBLIC SERVICE

Ceruzzi: And I guess the other side is that while you were chairman of ADAPSO you enjoyed the work even if it was frustrating or what?

Lautenberg: Well, yes. I started out my life by becoming president of a ski club; I became president of ADAPSO. I was president of ADP. I was never president of the United States. There's not enough time left. But it gave me some idea of what public life might be. But I really am rather sentimental about the country. I look at what's happened, my kids and my grandchildren who are all so lucky that my grandparents made a decision to come to America. Carried my mother in her arms.

Ceruzzi: And where did they come from?

Lautenberg: My mother from Russia, my father from Poland and they were brought as little kids, my mother as a baby, my father maybe six or seven years old with his parents, early in the 20th century. And hear this, when I walked into the Senate, I had been elected in 1982. When you go to the Senate, on a seniority basis, you get stuck in the least visible places and as time goes by you can work your way more toward the center so that the president of the Senate should you want to be called on in debate can see you easier. When you leave your desk there is a tradition and I did the same thing. I wrote in the desk Lautenberg, New Jersey. When I arrived at that desk in 1983 and lifted the desktop the name in there that struck me the most was Truman, Missouri, and whenever my seniority improved, they just unbolted it from here and they took the desk. Wherever I went I wanted that desk. So I

thought well this was one hell of a trip through life and so that's why I wanted to be of service.

Ceruzzi: Well you have.

Lautenberg: I think so. I went from being adept at the touch system on a ten key adding machine which was pretty good, I learned some typing in the army, so those were the office skills I brought. But then went I went to the Senate and I wrote the law to stop smoking in airplanes and revolutionized the culture about tobacco and it wasn't just in the United States, it wasn't just in the airplane. People began to understand across the world what tobacco was doing to them, and it made a hell of a difference in people's lives. And there are other things that I did legislatively, all of which stem from this experience and this knowledge that I got and the success that we had that enabled me. I put my own money into my first race – that's not a new phenomenon. I won't say that I started it but I think I was one of the early do-ers. And the fellow who took my seat spent sixty-two million dollars of his own money. I spent three and a half million dollars.

Ceruzzi: There's been some inflation.

Lautenberg: Twenty times in eighteen years?

Ceruzzi: Well okay, I think I got it. So thank you very much. It's been very, very enjoyable for me.

Lautenberg: My pleasure.