

An Evening with Legendary Venture Capitalist Arthur Rock in Conversation with John Markoff

Recorded: May 1, 2007 Mountain View, California

CHM Reference number: X4795.2009

© 2007 Computer History Museum

John Markoff: Good evening everyone. This is a real treat for me, because if you grow up in Silicon Valley and you follow the lore of Silicon Valley, Arthur Rock is always part of the Valley's lore. So I'm really looking forward to talking with you tonight. Our guest, Arthur Rock, grew up in Rochester, New York, and his family owned a candy store where he worked when he was growing up. I hope we can learn more about the candy store as the evening goes on. He was one of America's first venture capitalists, and as such, he played a similar role in creating Silicon Valley. He persuaded the so-called "Traitorous Eight" to leave Shockley Semiconductor and found Fairchild Semiconductor. Later, he would help create Teledyne, Intel, Apple, Intersil, Scientific Data Systems, among others. I read that between 1961 and 1968, his firm, Davis and Rock invested \$3 million and returned \$100 million. Which is sort of, I guess, that's what we mean by venture capital returns, as we would like them to be. I wanted to start this evening by asking what brought you to Silicon Valley. You didn't start here, but you came here very early, and something attracted you. What was it?

Arthur Rock: Well, what attracted me first, I got this letter from Gene Kleiner when I was in New York, and it was actually written by his wife, suggesting that seven of the scientists at Shockley were not happy there, and could I find them a job together, so they could work together instead of spreading out. And this piqued my interest. And together with one of the managing partners of Hayden Stone, the firm that I was with on Wall Street, we came out here and got the idea that perhaps we could agree to form a company. One of the companies that had told us they were looking to expand in the scientific area to invest \$1.5 million. And we went to all of these companies, 35 in total, and all of them turned us down because they didn't see how they could culturally invest in a subsidiary and not upset their employees. So we were about to give up when someone had suggested we see Sherman Fairchild. And we did see him, and he was excited by the idea, and he got one of his companies, Fairchild Camera and Instrument Company, to invest \$1.5 million, and that's how I started coming out here.

Markoff: So at first it was a business deal.

Rock: Oh, definitely.

Markoff: There was no... the culture that would attract you later, you didn't... you were an investment banker.

Rock: I was an investment banker, but I always wanted to do new companies, new start-ups, and I had done several of them while I was at Hayden Stone.

Markoff: Were they technology-oriented already?

Rock: Most of them were.

Markoff: So even though you weren't a technologist by background...

Rock: I'm not a technologist by background, nor am I a technologist today.

<Audience Laughs>

Rock: The interesting thing about that Fairchild Semiconductor deal was that there were seven of them to begin with, but they talked Bob Noyce into joining them. So then they became the treacherous eight. And so we divided up the company. They each got...

Markoff: I think it was 10 percent.

Rock: 10 percent, which amounted to 80 percent, and Hayden Stone got 20. And that's where the famous 80-20 began with.

<Audience Laughs>

Rock: For all you venture capitalists, if there are any in the room, you can thank me for your 20 percent.

<Audience Laughs>

Markoff: When Eugene Kleiner wrote you, what was he doing, and how did he find you?

Rock: His father had a customer's man, which were brokers in those days, and he wrote to his father's broker, and he turned it over to me.

Markoff: And the letter came to your desk.

Rock: Correct.

Markoff: Yes, interesting. And at that point, were you exposed to computing? You had invested in a transistor company already?

Rock: We had invested in a company called General Transistor, which made germanium transistors, not silicon. And those devices were used primarily in hearing aids. I have a hearing aid now. It doesn't have a transistor. <laughing>

Markoff: But at that juncture, you still had no sense that there was something special or different about computing than other industries?

Rock: No, no.

Markoff: It was a good business deal, and...

Rock: Well, it became obvious to me, while we were doing the General Transistor deal that these transistors were going to be used in more than hearing aids. And they were just starting to be used in computers. I had no idea, of course, that computers would become as widely used as they are today and for such scientific purposes, but it was obvious that there was a future there.

Markoff: Yes. I'm also interested in what would ultimately cause you to cut the ties with the East Coast. You had gone to Harvard; is that right?

Rock: Harvard.

Markoff: You'd gone through Harvard Business School, so you were kind of on that cultural track to be an investment banker for your career. Why would you give that up?

Rock: When I started coming out with Fairchild Semiconductor, I realized that there were a lot of small companies around this area that were looking for capital, and the capital was all in the East. And that I thought that maybe I could bring some of the Eastern capital out to the Wild West.

Markoff: The electronics industry was on the East Coast. IBM was there, the old main line electronics firms. Did you see something?

Rock: I saw that the people were much more entrepreneurial here and were willing to take on chances that people on the East Coast were not.

Markoff: And does any of that go back to your family roots? Do you think you saw something because of your family life growing up that you might have missed if you hadn't been raised the way you were?

Rock: Well, the entrepreneurial spirit in me was raised by my family, but I don't think being interested in technology companies were.

Markoff: But I mean, you worked in your dad's store.

Rock: I worked in his store.

Markoff: What kind of a candy store was it?

Rock: Oh, we sold ice cream and candy.

Markoff: Did it have a fountain? Was it the classic kind of...

Rock: It had a fountain. I was a soda jerk.

Markoff: It was Main Street, USA, basically.

Rock: Main Street, USA.

Markoff: And your folks had come from Europe?

Rock: My father had come from Russia, and my mother was second generation... first-born in this country.

Markoff: And then you went into the Army, and did you go directly to Harvard after getting out of...

Rock: No. I went to Syracuse and got an undergraduate.

Markoff: Did you actually come out and meet the eight...

Rock: Correct.

Markoff: ... or seven and then eight?

Rock: The seven and then the eight.

Markoff: And was something special about Noyce right from the beginning?

Rock: No. There was something special about all of the eight. They were all very, very attractive young people.

Markoff: And deeply unhappy dealing with Bill Shockley?

Rock: Extremely unhappy, they were going to leave regardless. And if they had left without forming Fairchild Semiconductor, I don't think Silicon Valley would have been what it is, because the only place that they really could have gone was either to Texas Instruments or to Philco or companies not located here.

Markoff: So there's this serendipity element to the whole thing. One of the things I've always wondered about in the chemistry that created Silicon Valley was that Shockley came here because his mother lived in Palo Alto.

Rock: Well, he wanted to get away from everything on the East Coast. He divorced his wife, and he didn't like his fellow Nobel winners, and he just wanted out.

Markoff: Did you ever get to meet him?

Rock: Never met the man.

Markoff: And did he hold you at ill will for taking his...

Rock: No, he did not. As far as I know, he didn't hold me in ill will, but he held all eight of those.

<Audience Laughter>

Markoff: And so also I'm very interested in the fact that there were 35 companies who were all interested in the technology but were unwilling to invest. What was it about the culture of that time that nobody would take a risk until you ran into Sherman Fairchild?

Rock: Well, these companies all had order and form, and none of them could see how they could set up a separate division and give the people operating that division a larger profit, if you will, than their own employees were getting. They didn't see how that could work. It just wasn't in their mindset. Options were practically unknown in those days.

Markoff: Did you distribute options right from the start at Fairchild? Or does that come later?

Rock: They came later, and that was the bone of contention that really caused the eight of them to leave at various times. Because again, Sherman Fairchild had passed away, and the company was based in Syosset, Long Island, and they were a real East Coast company, and they just didn't want to give options to employees. And [Robert] Noyce and [Gordon] Moore and the others all felt that they had to have options to start competing for employees.

Markoff: And so at that point that they left Fairchild, had you already come West, or were you still at Hayden?

Rock: I had come West. Fairchild Semiconductors formed in 1957, and I came West in 1961.

Markoff: To set up Davis and Rock?

Rock: Correct.

Markoff: Who was Tommy Davis and how did you meet him?

Rock: Tommy Davis was a vice president of Kern County Land Company in charge of their diversification program. Kern County Land had royalties from land they owned in Bakersfield: oil properties. The first company he had formed was Watkins-Johnson.

Markoff: That was a Silicon Valley company right from the start, wasn't it?

Rock: Right from the start.

Markoff: Or before Silicon Valley, but it was an electronics company, right?

Rock: Right. And they made lasers and traveling wave tubes. That sort of thing. It was going along fairly well, and the way I had met him is that they wanted to take the company public. Hayden Stone, as I recall, Hayden Stone did that. I'm not sure. But in any event, Tommy then wanted to go on and do other type deals like that. And they said, "No, no, no, wait a minute. We want to wait and see how successful this company is". Tommy got unhappy with that decision, and he and I decided to form a venture capital firm.

Markoff: How did you find your investors?

Rock: Most of them were from the East Coast, people I had known.

Markoff: And it was a personal thing. It wasn't institutional at that point?

Rock: Yes. Institutions could not invest in venture capital firms in those days. It wasn't until the ERISA [Employee Retirement Income Security Act] laws were changed in 1972.

Markoff: So that regulatory change, which brought in these huge pools of capital, came actually a decade after you had started?

Rock: Absolutely.

Markoff: Venture capital then was well-established as an enterprise by the time that sort of accelerated.

Rock: Well, there weren't too many other firms until that was done, so 1972. We started with \$5 million. I mean, that's hardly an investment in one company today.

Markoff: That would come from a pool of about how many investors?

Rock: Oh, I think we had about 15 or 20 investors.

Markoff: Did you guys go back East? What did you take with you in order to persuade them? It was a totally new idea at that time, wasn't it?

Rock: Well, they knew me. These investors had known what I had done at Hayden Stone.

Markoff: And was Fairchild a success by that time, so you had that on your...

Rock: Yes, yes, right.

Markoff: And so in your equation, where did Stanford fit? There's this model now. Did you know of [Fred] Terman that early, and were there graduate students around? And were they entrepreneurial? Did you see any of that at that juncture?

Rock: Yes, I saw all of that. This is controversial, but in my opinion, there would really not be much of Silicon Valley if it hadn't been for Fred Terman and Stanford, because Stanford did two things. They allowed their professors to work part-time, and this was unknown in the East. MIT and Princeton and other schools would not let their professors work part-time, start companies. And also, they had all this land, and they allowed these companies to rent or lease space from them.

Markoff: The way I understand it, Terman actually set out to do that intentionally, because he didn't want his students to have to go back East to work.

Rock: That's right. That's right.

Markoff: And so, I mean, could you walk the halls and look for students with ideas, or did they come to you and say...?

Rock: Well, we were the only game in town, so they all came to us. We didn't have to go looking.

Markoff: And at that point, was Terman dean or was he still ...?

Rock: Well, when I got to know him, he was dean. I'm not sure what he was in the beginning.

Markoff: And I think his protégé was a man by the name of John Linville. Do you remember Linville?

Rock: No, I don't remember him.

Markoff: It was Terman though who was the ...?

Rock: He was the lead.

Markoff: I saw in one of your interviews, it mentioned the fact that one of the things you did early on was selling magazines door to door. Was that your first job, or was that a job along the...?

Rock: Well, I was pretty young when I did that, so it must have been my first job.

Markoff: Was it hard work?

Rock: Not especially. I enjoyed the commercial life.

Markoff: Yes. And were you successful?

Rock: Yes, well I sold a few magazines anyway: *Saturday Evening Post*, and *Liberty*.

Markoff: That was the big seller? That's great. So one of the things that I saw you mentioned that I was intrigued with just because I always thought that integrated circuit came into being, in part, because of the need to squeeze more circuitry into the nose cone of a ballistic missile. And I saw you talked about the heat issue in one of your interviews that germanium was problematic, and one of the attractions of silicon was that it had a wider temperature range.

Rock: Correct.

Markoff: So it wasn't so much the scaling of the circuitry initially but other properties?

Rock: No, I don't think so, although my memory is a little fuzzy there. But as I recall, the first big business deal that Fairchild Semiconductor did was with the Space Bureau. They won a contract to... and that was a tough business, because they had to qualify so many of these circuits, and a lot of them didn't work. Didn't hold up under heat tests.

Markoff: And it was a new technology, right?

Rock: New technology.

Markoff: They were displacing transistors?

Rock: Exactly.

Markoff: And at that juncture with Fairchild right at the start, you were director, I take it?

Rock: Not at Fairchild.

Markoff: Not at Fairchild, okay. So you were not hands-on in that way?

Rock: I was not hands-on at Fairchild.

Markoff: Different at Intel?

Rock: At Intel, I was hands-on. Attended the staff meetings and was a director for 30 some odd years.

Markoff: Do you remember in 1965 when Gordon Moore sort of observed this doubling of density, was it a big deal at the time?

Rock: No, no.

Markoff: You didn't think anything about it?

Rock: I didn't think anything about it, and I think Gordon is now going to be known more for his law than for starting Intel.

Markoff: But at that point, did you... I mean, was sort of scaling something you intuitively understood, or did...I mean, was it not part of the sort of common parlance before Gordon sort of evoked that with his article.

Rock: I think Gordon just observed this and said this is the way it has been probably, and this is the way it probably will be. And I don't think it was any more than that at first.

Markoff: But now it's so much of the culture of the Valley, particularly in terms of industries where the children eat their parents and opportunities that come at regular intervals. And you didn't see any of that in the...?

Rock: No, no.

Markoff: Tell us a little bit about Scientific Data Systems and Max Palevsky.

Rock: Max Palevsky. Max had started developing computers when he was with Packard Bell Electronics. And Packard Bell was a poorly managed company and ran into troubles and refused, after awhile, to fund the computer division. And Max quit and through a so-called finder, came across me, and we decided to back him. Max was and is a very interesting man. His style of leadership, which worked very well while he was running the company; he was a very, very good manager. But his style was different than most people's style. His was an easy going, slap you on the back, put your feet up on the table. I think he was the first executive I ever came across who didn't wear a tie. And that's the kind of a guy he was. He finally decided that what he wanted to do was really not be in the computer business but make enough people so that he could be with the beautiful people, and that's what he's done. And that's what he's done.

<Laughter>

Markoff: And at that point, the target market was scientific computers, but was it also IBM?

Rock: No, we were...

Markoff: Were you trying to avoid IBM?

Rock: We were trying to avoid IBM, and we had a rule, more or less, for the marketing department that unless our computer could give four times as much value as an IBM computer, we wouldn't even go after the customer, because you couldn't make a mistake with IBM.

Markoff: But was there enough headroom that you could do that frequently?

Rock: Yeah, we did it very, very well.

Markoff: And I think I saw that you said that SDS [Scientific Data Systems] was one of the first companies that actually gave stock options to all employees?

Rock: No. That was Intel.

Markoff: Oh, that was Intel. I see, okay.

Rock: We did give options at SDS, but primarily only to the executive staff.

Markoff: And were you involved in the decision to sell SDS to Xerox?

Rock: Very much, because I said Max didn't want to do this full-time, and we got an offer that we really couldn't refuse. And it's pretty interesting. We found this out a year later, or six months later. The reason Xerox wanted to by SDS was because IBM was going into the copying business, and Xerox felt that they had to be in the computing business. So a few months after they bought us, they changed the name to XDS [Xerox Data Systems], which was fine. And a couple of months later, they came to us and said, "Hey look, you guys are making scientific computers. That isn't why we bought you. We want you to start making business computers." And then they put in a few of their own executives at XDS, and within 18 months the company folded up.

Markoff: And it didn't have to be that way?

Rock: I don't think so.

Markoff: It was a classic business blunder?

Rock: I don't think so. I think it was one of the classic cases of mismanagement I've ever heard of. There are others, but...

<Audience Laughs>

Markoff: So when Noyce and Moore came back to you to do Intel, did you guys already have a sort of deep relationship?

Rock: Oh yes, yes.

Markoff: Was it sort of slam dunk?

Rock: Oh no, especially with Noyce. Moore was and is kind of an aloof person. He's a wonderful man, but he's a... but Noyce and I had a great relationship.

Markoff: I think I read that you wrote the business plan for Intel?

Rock: Two and a half pages, double-spaced.

<Audience Laughs>

Markoff: Is there a lesson there that still holds today?

Rock: Well, the lesson is that once you get the lawyers involved in writing these plans and making sure that you can't be sued for anything, the plans get up to two and three inches thick.

Markoff: Do you remember anything? It was a plan describing solid state memories, is that...

Rock: No. It was a plan devised to say nothing.

<Audience Laughs>

Markoff: You were able to raise how much money with that, initially?

Rock: Two and a half million dollars.

Markoff: And then you took a seat on the board, and you stayed on the board for many, many years.

Rock: 33 years until there was an automatic retirement age.

Markoff: But that was not your only... you started Intersil as well.

Rock: Intersil with Jean Hoerni, he was he was one of the Fairchild treacherous eight.

Markoff: Initially, you were able to start, and it didn't compete with Intel?

Rock: No, it did not compete. They were making field effect transistors: entirely different. And when they started to compete, they started to compete in the watch business, of all things. And both of them went out of the watch business eventually, but as soon as that competition started, I got off the Intersil board.

Markoff: For the semiconductor guys, was that the first consumer market for that industry? Do you remember if there were other adventures before that?

Rock: There may have been, but I think that was probably the first.

Markoff: And it was terrible. Was there ever a success, or did it... it was just a...

Rock: How are you going to compete with Seiko and the Japanese and the Swiss? I mean, you can't compete with them in the watch business.

Markoff: So did you invest in Teledyne after you were in the Valley, or did that come before?

Rock: I raised the initial money for Teledyne a few months before I moved to California. And then when Davis and Rock was formed, we made a follow-on investment. In fact, I knew I was going to do that when I set the thing up, and I was on their board for 34 years.

Markoff: And the idea was about conglomerating right from the start?

Rock: Right from the start, primarily in the technology field. At least we started off in the technology field.

Markoff: That idea is-- I'm trying to think. Did that idea sort of disappear from the scene at the end of the 1960s, 1970s? Did it sort of fall out of fashion, or...?

Rock: Well, that's essentially what General Electric is.

Markoff: That's true. So tell me about meeting Steve Jobs for the first time.

Rock: Well, my friend Mike Markkula here is responsible for all of this. <Laughter...Markoff gestures to Mike Markkula in the audience> Mike asked me if I'd be interested in investing in Apple Computer. Mike had backed them originally. I think it was a \$300,000 loan? \$350,000, something like that. He guaranteed a bank loan. I had known Mike at Intel. And so he sent the two Steves up to see me, and boy, I was really unimpressed.

<Audience Laughs>

Not by their knowledge or by their entrepreneurial spirit, but these guys, just, you know...they didn't have the appearance that one would expect from someone looking for cash.

<Audience Laughs>

And I kind of hem and hawed with Mike, and Mike said, "Well, what you really ought to do is go down to the computer show in San Jose." I think it was called the "Home Brew Computer Show." It may have been something else. But in any event, I went down to San Jose. In this big auditorium, all these companies were there showing off their gear. And no one was at these other companies. The people around the Apple booth... it was everybody at the show. And I could not even close to see them. And at that point, I knew, well, maybe we had something.

<Audience Laughs>

So that's when I got interested and...

Markoff: And this was the Apple I at this point.

Rock: Apple I.

Markoff: This was before plastic, I think. There was no plastic case for the Apple I, is that right? <Laughing... Looking into the audience> Expertise. And do you remember... there was a point where Steve Wozniak when to HP and asked them if they were interested in entering the personal computer market, and they turned him down. Did that happen before?

Rock: I think that happened before. It must have been.

Markoff: Now, at that point, did you ever work on Sand Hill Road, or did you always work in San Francisco?

Rock: No, always worked in San Francisco.

Markoff: How did Sand Hill Road come into being, and did you watch it?

Rock: Well, everything happened after 1972.

Markoff: I see, so much later.

Rock: These venture capital firms were set up and then they had to compete for business, to get companies to invest in. So they had to be close to the companies.

Markoff: And were you fairly standoffish, or did you right from the start do the things...?

Rock: I was very standoffish, and I did not see the potential that was there with all this new money that came in from institutional type investors. I was always interested in helping the companies, not in building my own venture capital firm. So I didn't do that.

Markoff: Before leaving Intel, there was one thing I wanted to ask you about, because Intel made this tremendous gamble at one juncture, relatively early on, when it left the memory business and it became a microprocessor company. What did it look like inside, as someone who was involved in that decision?

Rock: I had nothing to do with that decision other than as a board member to approve it. The decision was made by [Andy] Grove and [Gordon] Moore. The famous story, of course, is Grove went in to see

Moore and said, "If they fired us and brought in new management, what's the first thing they'd do?" And Moore said, "They'd get rid of the memory business." So Grove said, of course, "Let's do that." I had nothing to do with that decision, but it was probably the best decision any company has ever made and it took more guts. I mean, to lay off a third of your work force and take the big losses they took just took a lot of guts.

Markoff: You stayed with Intel. Did you ultimately leave Apple's board because there was competition between Intel and Apple and processors?

Rock: Well, the way that arose is Apple had a design team to design circuits, and I didn't see where there was any conflict in that. And either they hid it from me or I wasn't astute enough to catch on, but what they did is... they had this design team with Motorola and IBM. And then there's this announcement in the *Wall Street Journal, New York Times, Mercury News, The Chronicle,* all these papers, double-page, announcing that they were going to build a power chip. And they would, quote, this is what it said, "We will kill Intel." And you know I just had to get off the Apple board.

<Audience Laughs>

Markoff: During that period, I wanted to ask your philosophy. How did you pick the entrepreneurs that you decided to back? Did you have rules of thumb, or was it about the people? Was it about the ideas?

Rock: Well, it's all about the people. I'm not enough of a technologist to be able to understand what most of these entrepreneurs are about technically. And the way I went about it was to spend a lot of time with these would be entrepreneurs. When you meet with them at first, everything is fine. They're going to tell you what you want to hear, and so I used to meet with these... I had the luxury of not having any competition. So I could meet with these people over a long period of time and try and figure out whether they said the same story twice and three times or whether they changed the story each time and whether they had the so-called fire in their belly and intelligence. And the main thing, of course, is are they honest? And by honest, I don't mean taking money out of your pocket but intellectually honest and do they see things the way they are and not the way they want them to be?

Markoff: I saw that in one interview you sort of made this distinction between this period, the dot-com period where there arose this class of promoters as entrepreneurs as opposed to company builders. And is company building still around? Do you think you can find that as opposed to...

Rock: I think it's starting again. But in the period around 2000, there were an awful lot of promoters. I remember one investment banker, who I know quite well, told me that he'd get venture capitalists calling him and asking, "What's trading hot in the market? I want to start a company around that." And that's not the way to build a business.

Markoff: Did you leave the field? Were you still actively investing in that period, sort of 1995 to 2000, or did you sort of leave the field?

Rock: I kind of got out. I kept on with my investments, and I made small investments. But the idea of starting a company and competition and going out and knocking on doors just didn't appeal to me.

Markoff: We're going to open it up soon. I know you said you wanted to hear from the audience. But I did want to ask about your philanthropic activities now. You've got a sort of spread of interests from corporate governance to children's education. What motivated those interests, and what are you doing?

Rock: Well, what I'm mostly interested in is children's education, K through 8. My theory is that if this country is going to compete with what's going on in the rest of the world, we need to have educated people. And in the inner cities, less than half of the kids... in the big inner cities, less than half of the kids graduate from high school. And that was okay many, many years ago when these people could go into steel mills and automobile factories and use their brawn. But today, this is all done by computers, and unless you have at least a high school education, you're not going to find a job. And I think it's just going to be a terrible thing for this country, and our education system stinks.

Markoff: Do you do that by finding programs that are promising, and how do you make a difference?

Rock: Well, I've got a few programs. The BASIC Fund, Bay Area Scholarships for Inner City Kids. At the moment, we're giving scholarships to 4,500 kids in the Bay Area to attend private schools. 420 schools, I think. And then I'm interested in Teach for America, and I guess everybody here must know about that program. And also I'm getting interested in KIPP [Knowledge is Power Program]. And I'm trying to spend most of my time and give moneys to those kind of endeavors.

Markoff: You've also focused on corporate governance, and you've helped create centers both at Harvard and Stanford that I know of, is that correct?

Rock: Well, no. Harvard is not corporate governance; it's entrepreneurial activities to encourage them to teach entrepreneurial. And they're doing a great job there. They have a building and are developing courses, and as far as I can tell, they're doing well. The Stanford, I know Joe Grundfest quite well, and he's interested in corporate governance. And it seemed to me as though all of the corporate governance activities were on the East Coast again. And nothing here on the West Coast devoted strictly to corporate governance. And there were a lot of problems here, as we found out. And so I helped set up a center for corporate governance, or Toni [Rock] and I did.

Markoff: You're referring to your wife; is that correct?

Rock: Correct.

Markoff: Did you come away with strong feelings one way or another on the impact of Sarbanes-Oxley and its efforts to sort of right some of the wrongs of the...?

Rock: Yes. I think that the Sarbanes-Oxley law ought to be repealed. I think it's a detriment to our corporate activities. The only good part of Sarbanes-Oxley, in my opinion, and I get some feedback from other people on this, is that the CEO has to sign off on the financial statements. Other than that, I think it's a real waste of time and effort, especially for small companies.

END OF LECTURE