



## **Oral History of Ken Katashiba**

Interviewed by:  
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**Uday Kapoor:** It's a real privilege to be able to talk to you about your history-- oral history. So we can start from where you were born. I hear that you were born in Tokyo, so maybe you can tell me a little bit about that.

**Ken Katashiba:** Well, I was born in Tokyo in 1940-- I think one year before the war started, because I don't remember those days. But I was in Tokyo until I was 23.

**Kapoor:** So that must be a very tumultuous time, and I wonder what you remember about the war, and especially in 1945 when the bomb was dropped on Hiroshima and Nagasaki.

**Katashiba:** I really don't have much vivid memory about the war because I think the year, and then also the years after the war, I was shifted to my relative's countryside home. And by the time I came back to Tokyo for elementary school, the only memory was a lot of American soldiers, Jeeps, and MacArthur's occupation. And that's all I remember.

And then, pretty soon, as I went to the elementary school, all the larger mansions in my neighborhood were occupied by the military officer's family that used to work for Douglas MacArthur-- General. So I kind of grew up within the military kids' neighborhood, myself. And that's probably-- early exposure to the English, you know. So that helped me getting a lot of interest in the English as well as desire to come to this country here.

**Kapoor:** I see, that's very good. So in fact, that was one of the questions I was going to ask, when you were exposed to English and when did you study English?

**Katashiba:** Well, early days in the elementary school days, as I said, I was surrounded by military kids, so I was invited to their home for their birthday parties, Christmas, whatever. So as I went to the middle school, I got more interested in the English. And luckily, I went to the private school, and during the spring or summer vacation, I started going to the tutoring school. So that further advanced my interest and progress in English.

**Kapoor:** So what was the size of the family? How many brothers and sisters, and what did your father do?

**Katashiba:** My father was with the-- well, in my father's day, the biggest thing was the electric motor. He came out of the engineering school, he got a job at the-- then called the Fuji Denki, which was Fuji Electric, like General Electric, sort of. And that company was big in the electric motor-- power generation,

dam, you know-- and he was assigned to Korea for a while. And then he was recruited to the army, and eventually came back.

So early days, I think I don't have much memory of my father, because he was either in Korea, for the business assignment, and plus he went to, I think, Burma for battlefield. And after the war ended, he came back, resumed his job at the Fuji Electric. And he was busy. So during the elementary school days, or maybe middle school days, he was so busy, he was on the trip all the time. So I don't have much memory of spending much time with him. And I have one sister, that's all.

**Kapoor:** So besides your memories of the early childhood, what are your recollections of your school days? What were your highlights?

**Katashiba:** Well, I think it was very-- all I remember was very fierce competition. You got to go through the entrance examination to middle school, high school, and college. And because of so much competition before you get into the college, you kind of slack off once you get to the college. And then I was in the football team, so during the college, most of my time was spent in the ground.

**Kapoor:** Was baseball--

**Katashiba:** No, no, this is American style football. I was left halfback.

**Kapoor:** So then you graduated from school in Tokyo?

**Katashiba:** Yeah. And after graduation-- because everything starts in April in Japan-- and I spent April, May, June-- three months in the new employee orientation. And at the end of June, all of sudden, unexpectedly, I received a scholarship from the college in Texas.

So I submitted the request to resign. Of course, at that time, the company never expected an employee joined in April try to resign at the end of June. So it creates a big hassle within the company.

But at the end, I think the whole subject went to the president. And he gave me a leave of absence, so I was able to resign-- temporary leave of absence from Fujitsu. And then I crossed the Pacific Ocean, spent the 14 days-- come in Vancouver, and spent the week in Vancouver and Seattle, and I flew in to Texas to start the new life-- first time in the US.

**Kapoor:** So when was that, roughly?

**Katashiba:** 1963.

**Kapoor:** 1963. OK. So in 1963, you joined when you went to Texas, you said?

**Katashiba:** Yeah, I was in the graduate school, first year.

**Kapoor:** And that was at Texas University?

**Katashiba:** No, it's called TCU-- Texas Christian University. But unfortunately, I believe it's in November of that year, President Kennedy was in our town. Next day, he went to Dallas and he got shot. And then I already start thinking about getting out of Texas.

But fortunately, 1964, Fujitsu was trying to recruit me back into New York. They needed somebody to take care of the computer exhibit within the Japanese pavilion at the New York World's Fair. So I took a sort of a leave from the school, and then I went to New York and start preparing for the computer exhibit. And I was taking care of all the exhibit-- the people, construction, whatnot.

**Kapoor:** So stepping back, I noticed that you went to Keio University in Tokyo. You graduated in business administration?

**Katashiba:** That's right.

**Kapoor:** And so your career-- you meant to go into business management, marketing?

**Katashiba:** Well, of course you know I was majoring in the business area. So I guess my father introduced me to get a job at Fujitsu at the beginning of the computer age. And at the time, during the interview, I didn't know anything about a computer. But it looks interesting, so I took a job.

**Kapoor:** So in Fujitsu, were you in marketing?

**Katashiba:** Well, after the spending a couple years in New York-- Texas and New York-- I came back to Japan to resume to work at Fujitsu, and I was in the marketing headquarters.

**Kapoor:** So how long were you at Fujitsu?

**Katashiba:** I joined Fujitsu initially in 1963, and as I said, I took a leave of absence, so I was away about two years. I came back in 1965, and I was in domestic marketing for the computer sales.

And then one year after that, I was transferred to the then-called export department. So I was handling many computer-related product exports until 1969.

**Kapoor:** And then did you stay with Fujitsu too?

**Katashiba:** No, no, no, I was involved in the first everything for the computer exports from Japan-- or Fujitsu. And in 1969, I was more interested in working for the computer company outside Japan. And I had a job offer from Control Data so I took it. I moved the whole family to Minneapolis in 1969.

And of course Minnesota is very cold country. First year, I was very excited living near nature. But second year, I was finally adjusting to the life in the cold weather. But third year, I decided not to take it anymore. So I was looking for a job somewhere outside of Minnesota. And luckily, Fujitsu offer me to come back over here as they started investing into Amdahl and they needed somebody to coordinate the relationship between Amdahl and Fujitsu. So I came back here in 1972.

**Kapoor:** So at Control Data, what were you doing within the company?

**Katashiba:** I was managing data center operations worldwide. I think it was probably more not data center operation, but I was with the data center division. And I was handling all the equipment logistics for awhile.

**Kapoor:** I see. Very good. So then, when you moved back to Fujitsu and were managing the Amdahl relationship, what was your role there?

**Katashiba:** I was initially a project manager for-- well, I would say initially, when I moved back, I didn't have any specific job. But Fujitsu was sending a lot of logic designers, circuit engineers, so luckily, I had about a year trying to learn how the mainframe computers were designed and developed.

Then it was about five years cycle-- each time, they spend maybe \$500 million for investment. So I had a lot of on the job educational process with the logic designer, circuit engineer, CAD engineer, whatnot, for the first time.

**Kapoor:** I see. Since, as you mentioned, you did not have a background in computer--

**Katashiba:** No engineering background.

**Kapoor:** --but that is amazing that you were able to work in that.

**Katashiba:** Well, of course you know when I was in New York in 1965, I spent three months going through United States, trying to decide which would be the next generation circuit to be used for digital computer at Fujitsu. And I was lucky enough to accompany with the circuit engineering manager, memory engineer, and other engineers-- three of them. I was youngest-- I was the ear, mouth, and leg for them. So during that three months, before I went back to Japan, I was able to converse with them, trying to visit Texas Instruments, Fairchild. And it's the beginning of the integrated circuitry, and I was able to learn many engineering knowledge then.

**Kapoor:** That is very good. And I think your communication skills, your language skills, probably helped you in that.

**Katashiba:** I was probably lucky-- lucky, in the right spot.

**Kapoor:** So you came across Gene Amdahl while you were--

**Katashiba:** Well, of course the reason Fujitsu started a relationship with Amdahl was there was a like person in Fujitsu who was the creator of the computer group in Fujitsu, Dr. Ikeda, Dr. Yukata and Dr. Amdahl got together at the right time, and Fujitsu decided to make a huge investment to start up Amdahl. So that was probably 1971, and Dr. Ikeda himself sent a few messengers while I was at the Control Data. And he, himself, came over to convince me to move from Control Data to Fujitsu here. He wanted me to be involved in the coordination of the project.

**Kapoor:** So that is a very important role that you played.

**Katashiba:** I was more interested in getting out of Minnesota then.

**Kapoor:** So how long was that project for you with Amdahl?

**Katashiba:** Well, after spending three years at the Control Data-- and I moved here '72-- so 1972 to 1985, I was handling all the manufacturing project. I get involved in the early phase of next generation computer, and then into pre-production, and then manufacturing. And at one point, in 1975, I believe, Fujitsu and Amdahl agreed that Fujitsu would take over the manufacturing in Japan. So I was doing all

the manufacturing, engineering, information transfer at the beginning, and also coordination of the production plan, and actual manufacturing-- so I was coordinating all that.

And also, at the end of the manufacturing, they have to ship the product, so I was doing all the export-import type thing, too.

**Kapoor:** So you were obviously traveling a lot. How was the family coping in terms of living here and in Japan?

**Katashiba:** Well I didn't think about-- I didn't have much time to take care of the family then. And I was almost traveling seven to eight times a year, and traveling with the Amdahl engineers or Amdahl production people, back and forth. In 1978, I believe, my kids started losing language-- Japanese-- so I thought it would be better for them to be in Japan-- spend some time with their grandparents. So I sent them back for four years.

And I went back to Japan myself in 1978. And I spent about two years, and I came back again because I was assigned back into Japan, but I was making a monthly trip over here. And then, after two years-- it was very tiring, so either fire me out of this project or send me back. The company decided to send me back again. So I came back in 1980. So since 1980, I've been here.

So I continued to coordinate that until '85. I was handling the computer group products and then semiconductor because we had Gate-Array products transfer from Motorola to Fujitsu, also at that time. So I was handling both computer side and the semiconductor side.

In 1985, I was transferred to the semiconductor group. And then I was handling only the semiconductor part.

**Kapoor:** So there was a transition to semiconductor part. What was your role in terms of managing large-

**Katashiba:** Well, I was a special project guy. So the semiconductor side-- the byproduct, Gate-Array product-- was also special project between Fujitsu and Amdahl. And before project was transferred from Motorola to Fujitsu, I was handling purchasing those Gate-Array products manufactured by Motorola for Amdahl. And then after it was transferred to Fujitsu, I was handling all the design files, transfer, manufacturing, and all the coordination through my department.

So that continued until, oh, I would say late 1980s.

**Kapoor:** So when was the transition made to Fujitsu Semiconductor or Fujitsu Microelectronics?

**Katashiba:** Well, I was handling both computer group products and then semiconductor group product, so I carried a dual function-- one in the Fujitsu Microelectronics, the other one at Fujitsu America. And 1985, I was transferred 100% to Fujitsu Microelectronics. And I was continued to handle special project for Amdahl. In 1989-- or in that time frame-- Amdahl project was declining, so I created an advanced product division. And I was not a memory guy, I was already thinking about creating products here. So initial group I created was 150 designers-- advanced product division. It's more system LSI-type approach.

And during that time, I ran into many interesting projects. Initially, '85 time frame, I was also involved in the semiconductor trade disputes. So I was commuting to Washington, DC all the time. That was the memory problem-- the trade issue. And at the same time-- right before '85-- I created the joint development product with the company called Ungermann-Bass for the ethernet controller. And then after that, I run into Sun Microsystems. So we created the Clipper project, and that helped to recruit more CPU-type engineers. I think you're part of it.

**Kapoor:** Yes. So going back to the trade dispute-- so you were representing Fujitsu in Washington?

**Katashiba:** I was one of the--

**Kapoor:** One of people?

**Katashiba:** Of course you know, the semiconductor trade issue was a government-to-government issue, and the industry was behind it. But we hired Washington lobbyist-- you know, lawyers-- so I was coordinating that quite a bit.

**Kapoor:** So APD-- you mentioned Sun Microsystems. I know they were looking for a foundry and a partner to manufacture or to design their leading-edge microprocessor. And you mentioned gate array technology. And I think at that time, Fujitsu had a fairly leading edge on gate array technology.

**Katashiba:** Especially bipolar area, and then moving to CMOS.

**Kapoor:** So I understand that there was an alliance formed with Sun Microsystems with Fujitsu. And I think you played a fairly significant role.



**Katashiba:** Well, there was always five to six years' market timing gap. And then one of my function was to find out the emerging technology and trying to come up some kind of joint development project which benefit the US partner and Fujitsu, as the Japanese partner. So I was more or less the lookout for the new technology. And by the time a new technology is announced on the newspaper, it's already too late. So I was more or less like finding the seed under the ground. and that was part of it.

The only thing I missed is Cisco.

**Kapoor:** So you mentioned that APD had hired a lot of people and were designing chips, but that came after the relationship with Sun.

**Katashiba:** That's right.

**Kapoor:** And so the Sun relationship also prospered because of the--

**Katashiba:** Sun Micro project is probably my second project. The first one was the ethernet with Ungermann and Bass. And I hired some logic designers and the circuit engineer for that project. That was more or less like a start of the whole division.

**Kapoor:** And the relationship with Sun started with a gate array to manufacture the S16, I understand-- the first microprocessor.

**Katashiba:** Integer unit.

**Kapoor:** Integer unit, yes-- which was a 20,000 gate Gate-Array.

**Katashiba:** I don't remember.

**Kapoor:** And it had 4,000 units of register file. And the objective was to design a 10 MIPS processor. And that was a choice, because LSI Logic had a 50k gate array, but that was going to come out in 1986, which was later.

**Katashiba:** Well, I think Sun was having a difficulty finding some semiconductor company commit the resources for developing RISC chip. And maybe I came in the right place and convinced Fujitsu to come in to invest the resources.

**Kapoor:** Yes, because RISCs was so-called risky venture at that time, because CISC was the favorite of most--

**Katashiba:** Yeah, that's right. Well, predominant--

**Kapoor:** I understand that when Sun came to Fujitsu for the request, yes, Yasufuku-san in Japan was reluctant because I think you mentioned that there was a mainframe mentality.

**Katashiba:** No, I think Dr. Yasufuku was more forthcoming than Computer Group because at that time, Computer Group had a peak sales period for the mainframe and they were still under the mainframe mentality. So I failed to convince Computer Group to come in to do the joint Unix development. So we decided to pre-start with the semiconductor project only. But of course you know, later, they had to get in.

**Kapoor:** Yes. Right. So by now, you were president of Fujitsu Microelectronics?

**Katashiba:** No, at that time, I think I was initially Vice President. And then, late '80, I became Executive Vice President. And later on, coming to 1990, I became a President.

**Kapoor:** There was during this time, I think in 1988, Sun, FMI, and Wind River signed an agreement to accelerate the use of SPARC in real-time computing markets. Did you play a role in that?

**Katashiba:** That was a difficult project because semiconductor group was eager to manufacture, but was not really tuned into marketing itself. And somehow, that had to be transferred to Fujitsu Computer Group. Computer Group finally realized the importance of the workstation. And I think after 1990, they came in to work with Sun-- you know, in the UNIX workstation cooperation.

**Kapoor:** Fujitsu just also signed a five-year OEM agreement to market Sun workstations in Japan, which of course, helped Sun in their growth in the workstation market.

**Katashiba:** In Japan, right.

**Kapoor:** In Japan. Was that an exclusive agreement, or was this--

**Katashiba:** By that time, I was not quite involved because it was a deal between the Computer Group and Sun Micro, so I was not directly involved. But initially, I spent a lot of time convincing Fujitsu management to get involved with Sun Micro, especially in the workstation.

**Kapoor:** So in terms of SPARC International, were you also part of that discussion?

**Katashiba:** I think initially, yes. But I believe a Computer Group representative probably participated more in that area, especially the architectural design area.

**Kapoor:** So for the computer group, were there different communication media? You were not involved with that or you were facilitating?

**Katashiba:** Well, of course you know I was 100% FMI side now, so I have less dealing with the Computer Group.

**Kapoor:** So in terms of the FMI-Sun alliance, that extended beyond just the Silicon Valley. There were many other factors.

**Katashiba:** Well, initially we had the exclusive marketing right for the chip, but I think we failed to implement perfectly there. And later on, when the workstation project came over, I think the Computer Group took over that relationship.

**Kapoor:** So in terms of development at APD, there was the embedded processors, and the SPARClite--

**Katashiba:** Well, I think a byproduct from ethernet project and then Clipper SPARC project-- we created a byproduct around it.

**Kapoor:** Yes. So some of those products were meant for applications such as cameras and other little embedded designs. So that was pretty much planned by your group.

**Katashiba:** Yes. Well, I was interested in transforming semiconductor group from just a simple memory product of more complexity product. And especially after we failed acquiring Fairchild, I was more eager to transform them to more system-level LSI.

**Kapoor:** I'm glad you mentioned that. I remember reading a lot about the acquisition attempt by Fujitsu for Fairchild. Were you involved in that as well?

**Katashiba:** Well, I initiated the initial kick start with the president of Fairchild then. and we had many behind the scene negotiation, but we were probably naive politically, because it was at the time of the semiconductor dispute going on. And we were a little bit politically naive. And we were ready to almost

scratch off the Fujitsu, and then joined company would be under Fairchild name. But unfortunately, it didn't materialize.

**Kapoor:** There was also investment in VIA Technologies.

**Katashiba:** Which technologies?

**Kapoor:** VIA-- V-I-A-- VIA Technologies.

**Katashiba:** VIA Technologies?

**Kapoor:** There was Fujitsu invested like 25% into VIA Technologies.

**Katashiba:** I don't remember that.

**Kapoor:** I remember helping them when I was at Fujitsu. And then, of course, ICL-- this is again the computer group--

**Katashiba:** Yeah, ICL is strictly computer group, yes.

**Kapoor:** What about HAL Computer?

**Katashiba:** Well, I-- that one I also did the kick start. I met with Andy Heller and convinced the president of Fujitsu, as well as Dr. Yasufuku, to invest some startup money. HAL is Andy Heller's company, and we sent a lot of logic engineers-- and sort of re-creation or Amdahl-type project.

**Kapoor:** Yes, I was actually involved in that. If you remember, we had a meeting in Tokyo with Andy Heller, yourself, and me, talking about some library development.

**Katashiba:** I'm sorry, I'm getting too old.

**Kapoor:** No, that was very nice. In fact, many of the engineers from that company-- were hired at Sun later on.

**Katashiba:** Well, many came from IBM.

**Kapoor:** I also noticed that you went to Harvard Business School Advanced Management Program.

**Katashiba:** The company was kind enough to sponsor me for the Executive MBA-type program.

**Kapoor:** So that was during the time then you were president?

**Katashiba:** No, I retired in 1997, I believe. And I became part of the corporate planning group, but I chose to stay here. And at the same time, I was the special advisor to the president of Fujitsu promoting new technologies, new investment. So my assignment is to invest corporate money into the venture capital fund, as well as the business.

**Kapoor:** And then also Stanford Graduate Business School?

**Katashiba:** Yeah, I did some executive courses, yeah.

**Kapoor:** So how long were you involved in that activity as a special assistant?

**Katashiba:** 1997 to 2005, when I retired.

**Kapoor:** And were any exciting projects started during that time?

**Katashiba:** Well, last project I tried to kick start was the cooperation with PARC (Xerox). The days are becoming more ubiquitous-- you know, computing-- and that was my last project with Fujitsu. And after 2005, I retired, so I kind of detached myself out of business completely. I've been retired nine years.

**Kapoor:** So you've certainly been involved in many exciting and pioneering activities. Looking back, what were some key highlights that you remember as pleasant memories?

**Katashiba:** Well, I think many years of coordination between Fujitsu and Amdahl-- that was the coming up with the compatible IBM machine in terms of logic design, circuit design, manufacturing, engineering. And I was able to learn quite a bit from that process. And if I had come up with one project I was most impressed, it was dealing with all the Amdahl engineers in those days.

**Kapoor:** And if you look at Fujitsu now, since you were involved with the company for so long, where does the company stand today in terms of innovation and in terms of future?

**Katashiba:** To tell you the truth, I have no knowledge. After I retired, I'm completely detached with the industry and decided to go on my own hobby areas, so I don't know-- I don't have any share of the Fujitsu. The only thing I associate with the Fujitsu right now is a once a year, they have old boys' club. Company sponsors this sort of banquet, so I meet with the old faces. That's about it. And we talk about old days, we don't talk about the future. Sorry about that.

**Kapoor:** No, that is fine. There's no problem. What is your personal assessment of Japan? Where is Japan today in terms of--

**Katashiba:** Japan, in my view, is probably having a hard time to transform to new age. And I think they're fighting with this byproduct of globalization and declining population. And of course, you know government debts issue whatever. So I think they are right now in the many planning stage to revitalize the country.

**Kapoor:** So there's also population is aging. There are fewer younger people. Are the younger people looking at new ways to transform the society? Or what would be your assessment?

**Katashiba:** I hope so. I don't have much association with the younger generation. But judging from what I read, I think a new breed of young generation should come up.

**Kapoor:** I know that entrepreneurship and new ideas was your specialty. You were really looking at new ideas.

**Katashiba:** No, I guess my specialty would be think outside the box and be open to the new ideas, new technology, and try to connect it with Fujitsu. That was my sort of special project mentality.

**Kapoor:** So would you recommend the young people in Japan to be thinking that way?

**Katashiba:** Well, I think the young generation-- unfortunately, they are not so eager to work outside of Japan these days for some reason. They should venture out more. Although it's a small population, I'm sure there are a lot of Japanese startup businesses down in Silicon Valley, but still a very, very minor percentage. And they should-- the government should probably try to help promoting that one. It's not happening like the Chinese or Indian engineers, but I think it's a small portion of the Japanese engineers are starting companies here.

**Kapoor:** Any other closing thoughts?

**Katashiba:** Well, my closing phrase is I'm a little bit embarrassed to be interviewing here today.

**Kapoor:** I know, you should not be.

**Katashiba:** Myself, I did coordinate or kick start many projects, but I don't know how much contribution I've made to this industry.

**Kapoor:** You have made a lot of contribution, Katashiba-san, and you should be proud of that.

**Katashiba:** Thank you.

**Kapoor:** Thank you very much.

END OF INTERVIEW