LASEWICZ: This is an oral history interview conducted on May 16th of 2003, conducted in Armonk, New York, with Uchinaga-san from IBM Japan by IBM's corporate archivist, Paul Lasewicz. Thank you for coming and participating.

UCHINAGA: It's my pleasure.

LASEWICZ: I'd like to start by asking you if you could describe your current position and title. What do you do?

UCHINAGA: My title in IBM is managing director of IBM Japan. Also, I am a board member of IBM Japan, and the vice president of the software development laboratory in Yamato.

I'm now managing all of the development activities running in Yamato and also somewhat related activities in the development lab. That's my formal title and also my current job.

LASEWICZ: Can you tell us a little bit about your schooling and education? What courses most interested you and why?

UCHINAGA: I graduated [in] theoretical physics from Tokyo University. The reason why I selected physics is that physics is so clear and it's so beautiful. All of the natural phenomena are clearly explained by physics laws and rules. That's why I'm so impressed with physics.

In the university there are so many students and they are very, very capable and dedicated -- working and studying so hard -- now expecting, targeting to be Nobel Prize winner[s]. Also, girls there would like to get the Ph.D.

These kinds of people are so excellent -- but I thought, I'm not such a super person. I liked physics so much, but I really wanted to use the knowledge. I graduated and then joined IBM. So, that is my education background.

LASEWICZ: Could you please give me a summary of your work history? What was your first job and when did you start working for IBM?

UCHINAGA: As I said, I graduated the university and my background is physics. I then joined IBM in 1971 as a systems engineer.

Initially, I really wanted to do product development in IBM. I was so eager to develop the product, ship the product to the worldwide customers -- and they make it exciting. But, I just joined as a systems engineer. Several years later, I did successfully join the development laboratory. At first my job was developing the architecture for Japanese characters and also

defining the design for handling Japanese characters in the systems, including input method, the printing and everything.

At that time most of the computers, especially IBM computers, did not support the Japanese character yet -- just English. So, we started creating this kind of an architecture.

After that, I got a job for the microcode design of the 3270 IBM terminal. That was a very famous and a very well accepted terminal. I did microcode design and also microcode development. That was an exciting job.

Then, I was assigned as a member of the architecture group in the development organization. My boss said, Uchinaga-san, your way of thinking and your approach to design the product is good. That's why I moved to architecture group. That was so great because my background was physics.

The way of thinking in physics is very close to the way of thinking for developing architecture. You create a concept and then build up some functions, structures, and then try to find out the best solutions of a product -- from the technology point of view. That kind of activity was very, very good for me, as I had the physics background.

[After working with the architecture group in the development organization] I took a job for the product line management for the System 36 and 38. Those were the small and medium systems in IBM. But that job was not in development, it was in marketing.

In the marketing organization, I requested the Japanese language capability into the largest laboratory. We did a very hard negotiation with Rochester and other development laboratories -- it took a very long time to convince them. Finally, IBM Japan executives decided to build up the development organization, and I was assigned as the development manager to implement the Japanese characters capabilities into 36 and 38, [as well as] Japanese characters terminals. That was the first time for me to be a manager, and I had about 30 or 50 developers under me.

I spent four years [in the marketing organization.] In 1988, I was assigned quite a new job, which was the executive assistant to the sales executive. So you can imagine. I did the development, and then creating the Japanese characters into the system…

My executive [said], you have to go to the sales organization, you have to be a system assistant in sales. Well, I went to the organization and I find out that's quite a different organization, even in Japanese, it's very hard to understand

because the terminology and also way of thinking and priorities and everything are quite different.

But that was a very excellent experience for me. I spent almost eight months as an executive assistant, then back to headquarters as a strategy director and also director of networking product and also some network product line management.

After I became executive assistant for sales, only about one and a half years, my career was changing so quickly. That was very tough because almost after just three months or four months, I had to change my job and always I had to go into a quite different organization – and as the head of this organization.

That was very tough. But, those are the kind of experiences that gave me confidence. Once we got a job and I tried to understand and achieve some of the objectives, [I realized] I can do this. So those were very good experiences.

After these job rotations, in 1991, I was assigned to the software development organization, as director. That organization was not under the Software Group -- that's the local or the AP **[Asia Pacific?]** or the Japan unique software. We put some Japan customers' unique requirements or AP unique

requirements into our worldwide product. That kind of activity we did from 1991.

After that, I got a new assignment: in 1995 I was promoted to the board of IBM Japan. I was the first woman board member in IBM Japan and also in Japan industry. There were many magazines that asked me for interviews, and I was so surprised.

Also in 1995 I was promoted to sales, marketing and development, as the Asia-Pacific cross industry solutions GM, General Manager. Cross industry solutions -- that was my mission. We developed these kinds of solutions and sold and deployed these solutions to the Asia Pacific customers.

I did that about three or four years and then after that, 1999, I received my current job. That's the Yamato software development job. The executives asked me to take the lead in building up this organization as a member of the worldwide software development lab.

I've been running [the lab] more than three years, almost four years, to make this a world-class software development organization in the Software Group. So, that's the real long story.

Most of my career has been in basic development. Experiences in marketing and sales and strategy [have also] helped me a lot, for new challenges or new positions. I do appreciate the many executives who gave me these kinds of opportunities.

LASEWICZ: It sounds like they also helped develop your personal confidence as well, enabling you to feel that you can take on different responsibilities.

UCHINAGA: Yes. That's right.

LASEWICZ: Could you describe your early experiences with science and technology?

UCHINAGA: Yes. The reason why I took physics as my background is that when I was a young child, my father was an engineer. He liked mathematics, and appreciated people who were very strong in mathematics and physics and so on. He always explained to me the greatness of science and mathematics.

That's why I tried to be very good in mathematics as a young child. Usually most of the parents and also most of the relatives, they said, you are a girl. So, if you stick with the mathematics and physics, it may not be good for the wedding.

But my father said, no, no, no. You are good in mathematics. My father's expectation of and interest in me was a very strong influence to my career, because I tried to be a very good child and I tried to answer my father's expectations.

I learned and studied a lot, trying to understand physics and mathematics, and then getting excited. So, that's why I started this kind of thing.

When I was a student in high school, my teacher in physics, he was quite excellent. He explained physics very clearly, the natural phenomenon very easily, by using physics law and rules. It was an eye-opener for me.

Almost all of the phenomena in the world we can explain by using a very simple format or simple rules. I was so shocked. That's why I'm now trying to get physics as my course in the university.

In university, as I said before, most of the students study very hard to learn a lot. But I was not so good a student. I just enjoyed the beauty and the clearness, and also, the fun. That is my background in science, physics and mathematics.

LASEWICZ: I'm sure you exceeded your father's expectations.

UCHINAGA: Yes. I should say it this way. My father, he was engineer of the *shinkonsan*. *Shinkonsan* is the most famous train in Japan. We call it the bullet train.

LASEWICZ: Yes.

UCHINAGA: Yes. He was a proud member of this development team, so he always was talking about these kinds of things. After he passed away, I always remembered his face was so bright when he was talking about that project. That's why I have a very strong interest in building the product and then getting it to the worldwide customers, so the customers enjoy my product -- that's my interest and my desire.

LASEWICZ: Have you had a mentor at any time during your career?

UCHINAGA: Yes. If I did not have a mentor then I think I could not have achieved. The reason is, when I joined the development laboratory or the marketing requirements organization, I was just focusing on the very small things and tried to be very detailed, very sophisticated in the small things as a systems engineer. But after I had a mentor, my way of thinking changed.

I had two very strong mentors. The one mentor is a man from the Rochester laboratory, his name is Mr. Paul **Deera**. I respect and

appreciate him so much. He gave me advice how to make a career and how to make decisions in many different situations.

One example is when I went to his office for an interview and he said, sit down, Uchinaga-san. Then his first question to me was: what kind of job do you want to do when you retire from IBM?

At that time, I think I was 33. I thought that I had long, long years to be retired. But he asked me, when you retire, what kind of position do you want to obtain?

I was so surprised. But he asked me to think about my targets of a career, not just the current job or next job. He always forced me to think about the future or my desire, the final goal: maybe board member or president or general manager, whatever. So he asked me, what kind of things do you want to do?

I started to think about such ideas. I said, okay, I want to do this kind of position, but I do not want to open up this kind of a discussion in this interview because this is my secret.

When I started this way of thinking, this was a great help for me because when I was in higher positions, I was always looking for who would help me to do this kind of thing.

That way of thinking changed my attitude. Not only just at 33 years old, but also still, right now, I'm now doing the same thing.

Every New Year holiday, January first and January second, I'm so relaxed. I now open up the paper and then I put some target year, for example if I'd be 75 years old, what kind of things do I want to do.

So, I set my target for maybe when I'm 75 or 60, and then I draw a roadmap for how I can achieve -- not only the career, but also my personal interests, with friends or money or whatever.

I'm always creating some target, understanding the current positions, and creating some roadmap or chart. This is so fun because there are no restrictions -- just to think what I want to do.

This is quite interesting and exciting, especially January first and second. I drink a sake and then think about my dream and how I can achieve this. I write down everything, and I carry this paper for one year.

Then the next year, I open up the last year's plan and also I think about this year's plan. So, that's helped me a lot. Mr. Deera helped me a lot.

Another mentor is Linda Sanford, but so many woman executives also mentored me, when I've faced a very hard problem or a very serious problem for personal reasons or found a job or mission or whatever.

I would knock on the door of Linda or some other woman executive and try to get some time, maybe 15 minutes or 30 minutes, and ask them to be a sounding board for me.

They were so kind and always gave me this kind of an opportunity, even if they were busy. So, Deerasan was a very important mentor for me and also the women executives, especially Linda Sanford. She is a very important mentor.

LASEWICZ: How do you use your technical training in your degree today, and how has it helped you?

UCHINAGA: Physics has given me a very important base to think about all of the phenomenon in nature.

For example, in the IT industry, technology is changing so quickly. So, it's important for us is not just to understand one technology or two technologies. The important point is to catch up on all kinds of new technologies analyzing what the root cause is, how to create the functions, from the technology point

of view. That kind of analytical thinking is a great help to me for approaching any kind of new technology, market or business.

I do not have a good memory, but I am very proud of my good analytical mining. Whatever new things come to me, even if it's marketing or sales or services or the development of a new software or hardware product. I have some confidence once I understand the root cause or the base technology or base structure and base concept, then I can do this. So physics helped me a lot to apply many kinds of different things once I understand the base.

LASEWICZ: Could you describe your work over the years and what you find most satisfying about it?

UCHINAGA: My current job is, as I said before, I'm running the Yamato software development lab. That was started in July 1999. At that time the software development lab was established by John M. Thompson, who was GM of the Software Group.

But this organization itself was the very early phase. The people were put together from many different experiences and many different fields. The idea was, in order to be a world-class software development lab, we should do many things.

I decided we should be a world-class software development lab within five years. I said to all of my engineers, hey guys, we should be a world-class development lab within five years, that's my target. I said it the first day. And we just started. I said, if we do not achieve these kinds of things, our value will be very, very small because in Japan our cost is not low when compared with China or India.

Our value is to provide a very excellent product, product design or product concept to the Software Group by getting the customer requirements. So, if we do not do it within five years, we cannot not sustain any more.

I set a target for five years, and then created a roadmap for second year, third year, fourth year and fifth year. Well, right now is the fourth year, still we do not have the champion lab yet, but it is very excellent progress. I have the confidence that we will do these kinds of things. Maybe in six years, but almost in five years. I'm very proud of this kind of achievement. I have excellent engineers, they are focused to be a world-class development in the Software Group.

Also, WebSphere business integration. This is a very important initiative for the on demand e-business. These are the major missions that we have right now. I'm so amazed we can do these kinds of things.

I think the leaders should create the vision or should make the target clear, and then we have to understand the current status and clarify what issues and what kind of things we have to resolve.

Once these steps become clear by the leader, I have excellent engineers, they can fix it. That is my way of management. In the case of the software development lab, we are continuously improving this activity more and more. But I'm very proud of my lab and also my engineers, everything.

LASEWICZ: It sounds like for an operation to start from scratch, you've done a terrific job.

UCHINAGA: Yes. Thank you.

LASEWICZ: How has your being a woman affected your experience as a technologist?

UCHINAGA: Most people expect or assume that women are not so good in technology. I enjoyed being a technical engineer in IBM. The reason is, especially in Japan, most of the women are expected to be good at other things. Especially in Japan, they do not expect women are good in this kind of field -- technology is good for men. But because of my father or my background,

I have a very strong interest in technology, and I was very good at technology.

I have met some engineers or some customers who when I met them at first, their reaction was the same, wow, why is this young lady talking about technology.

Their expectations were so low. Then when I started talking about technology, more in detail, more precise and more clear, they were so surprised and their evaluation of me was flipped: wow, she is so great, she's so super for the technology side.

The reality is that my technical capability is not so different from other men. But their expectation of my technical capability was so low.

One good example is, we had this business discussion with some very important customers. The customer wanted to invite our competitors to be a part of the product providers with IBM.

The customer asked us to open up some interface for the 5250, that was the System/400 and terminals. We have the System 38, 36, AS/400 -- we call it a 5250. The interface between the 5250 and these kind of systems we call **[arctic].**

The customer asked me, why don't you open up this kind of interface to this company, to use two companies and create very strong competitive situations with IBM and with others. So we were forced to open up that technology for the [arctic] interfaces.

The company's name was Hitachi, and Hitachi's senior engineer, he was very proud of his technology. I went to his office with customers, to talk about [arctic] and so on. His first reaction to me was, why is this young lady explaining about [arctic], maybe IBM is treating me lower. So, his reaction was very bad.

But I started and I explained and he was so impressed that after that, he treated me very good. After 20 years from that situation, after 20 years, still the customer, you know, Hitachi's engineer, is talking about me -- she's a great technologist. It’s so surprising, because this is not so unique in case of the man, only in the case of the young woman.

I think that sometimes once we exceed the expectations of people, their attitude about women is flipped. When I meet some customers or some outside people, their initial impressions of me are very low.

But when we achieve some high level, which is higher than their expectations, their treatment to us, to me, greatly changes. So,

I think that technology is good for women once we have a very good technology background. This is a great strong power for women. That's my impression.

LASEWICZ: What have been some of your greatest challenges and how have you overcome them?

UCHINAGA: My greatest challenge in my career is when I got the assignment to be the executive assistant of the sales organization. That was quite a different organization in the way of thinking, and the technology was different. No one knew me, and that was a hard time for me.

But after I overcame the situation, that was my asset, because now I understand sales organizations and sales people's way of thinking. This has helped me to broaden my way of thinking and also understand the people's network and everything.

Another one is Asia Pacific, cross industry solution. That is the service organization and marketing organization. I did not have enough knowledge about sales, because when I was executive assistant I did not do anything about the sales because I just helped the executive, that's it.

But in 1995, I was assigned as a general manager of the Asia Pacific cross industry solutions, and my role was to give the

quota and also to sell the product, to sell the solution to the customers. So, that was quite a different experience for me.

But again, at that time, I got very strong help from many executives. One of them was [Mike Rowley], and he's now senior vice president. He gave me advice, much guidance and many suggestions. So that's helped me a lot.

Whenever I'm facing very hard situations, I always get very good advice and very good directions. Once I understand the structure and all the priorities, then that becomes my confidence.

LASEWICZ: What has made you successful?

UCHINAGA: I think that answer is passion -- passion and energy are very important to me. Once I realized I desired certain things, I had strong energy to make them happen.

I faced many issues and many problems that I couldn’t fix by myself. I tried to fix the end issues, the end problems, and tried to find out the root causes and how can I fix these issues.

It’s very important to me to first make my vision, analyze all of the factors and parameters, understand the current status and how I can achieve the next step to make it happen.

Dedicated analysis of the current situation and the current issues and problems, for both sides, is another one of my strengths.

Once I did it, my staff understood what I was doing. Even if I said, this is a crazy target, most of my people said, hey, Uchinaga-san is now starting, now we have to follow. Most of my people now understand my approach. So I'm very happy because I've got such excellent people there now supporting me.

So, I think passion and analytical thinking and setting a target have made me successful. And also, very super and excellent people who are now helping me. I think that's the reason why I can succeed.

LASEWICZ: Well, thank you. I appreciate your time.

UCHINAGA: Thank you very much.

LASEWICZ: This has been very informative for me. You've done a terrific job.

UCHINAGA: Thank you very much. If these kinds of things will help the young engineers, it’s my pleasure.

[END OF INTERVIEW]