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Interview with Aizo Watanabe

Dr. Joseph M. Juran Collection
Q: Mr. Watanabe, would you begin by spelling your name in English?


Q: That is the hardest question you will have to answer. How did you become involved in the quality movement?

WATANABE: 1948, from JUSE. Well, post-war Japanese industries were just ruined, totally, and I was told by JUSE's Mr. Ichido Ishaka (?), the chairman or president in those days, to help. And as I had gone into various survey and study, the economic planning agency had decided to finance, to conduct a research to JUSE as to what kind of technology development was taking place in the U.S.A. and four western countries.

And we got this information. Four of us formed a team, and had decided to take up the subject of GHQ in those days, introducing the subject of quality to Toshiba and various other Japanese corporations, and we decided to study that subject.

Q: Where did you go to learn about this? Where did you find out about it quality control.

WATANABE: We started studying on our own. And information was from Z-l, or various American books. Well,
four members of the team read all these books from the States and studied.

Q: Who were some of the authors? Whose works did you read?

WATANABE: Dr. Schuhart. Dr. Pierson of Great Britain. Hallwell. Zechtwan. And various other case studies of applications.

Q: At what point did you learn about Dr. Juran?

WATANABE: In 1950, Dr. Deming came to Japan, and had given us various advice and instructions, SQC. And in 1952, Dr. Deming had sent JUSE the Quality Control Handbook. And that was the first time we got introduced to Dr. Juran.

Q: How did Dr. Juran's teachings fit with what you learned from Dr. Schuhart and Dr. Pierson and others that you had read?

WATANABE: Before Dr. Juran, it was only SQC that we knew. And Dr. Juran had taught us how to apply that to a corporation. And, until then, SQC was basically concerned process control.

But when we had first read the handbook, quality control, customer requirement, and satisfaction -- all these new terms were mentioned in the handbook, and I really realized that, you know, when we are thinking of quality control, we should look at it from very wide perspective.
Q: It sounds almost as if you turned on the light in a dark room, when you read Dr. Juran, the way you describe it.

WATANABE: That is very true.

Q: Could you tell me a little bit about it? Here you've been studying and studying, and now all new, all different. What did it feel like, what did it seem like?

WATANABE: I think we really had to just renew our mind. I mean, SQC was something, it's only one portion of the subject, and I really realized that we should look at it from also a management perspective. And I really felt that quality control required a general activity in the general sense of a corporation.

Q: How did Dr. Juran's work affect the attitudes of top management in companies and their interest in quality for their companies? Dr. Juran's work was much broader than SQC. How did this work of Dr. Juran's help open top management's eyes to quality and say this is something we can do?

WATANABE: Dr. Juran also had given lectures to the top management. But another point I would like to make at this time is that the JUSE's president, Mr. Ichido Ishaka, the father of Mr. Kaoda Ishaka, he was very serious about this. And, as I've mentioned before, KADONREN, Federation of Japanese Economic Organizations' president was also ... by the same gentleman.

And going back to what I was talking before, the economic planning agency had financed this research, but we
used up the money right away. And Mr. Ishaka was very much interested in this subject, and so he very promptly approached major corporations -- 16 of them, of the KADONREN, to have them finance the research. And we were able to continue the study.

And it was since then, in those days, that Ishido Ishaka had been explaining about the importance of quality control to Japanese corporations. And, in the case of Dr. Juran, too, he had asked Dr. Juran to give a seminar for top management. Had many top management to attend it.

You know, top management of major corporations were able to be awakened to the importance and were able to understand the importance of QC. And this really contributed greatly to the development of quality control in Japan.

**Q: Forty years, almost, have gone by. What have been the most important lessons of those early teachings and those early seminars?**

**WATANABE:** There are so many, I really can't say it in a few words. But not only specialists of quality control, but other than that, within a corporation, everybody in charge of different sections of the company has to do quality control. This is a very big, I think, point.

And also, I would like to add that after the first lecture by Dr. Juran, people realized that it really required a broad area to be covered. And people really realized that we shouldn't just listen to Dr. Juran's lecture and just leave it like that.

But Professor Misano of Tokyo University, and Professor Muramatsu of Yusida University, and Professor Kamio of Yokohama University, and also Professor Matsomoto who was working under Mr. Kayano. Four of these people really studied the lecture of Dr. Juran, and had arranged it to apply
it to Japan to come up with a seminar for the middle management.

And many people really participated in that seminar, too. And the participants of that seminar requested a seminar for the top management, too. And so we came up with top management course. And these seminars are even held to this day with a big number of participation.

And this all started out from the lecture by Dr. Juran. And everything is based on his lecture. And this is how much we appreciate.

Q: In America, the same need as you have here. We have a small number of people who are very interested in quality. The difficult part is expanding to bring in all of the workers. How did you, in Japan, how did the companies in Japan integrate bringing all the workers into the quality structure?

WATANABE: Well, in '87, ISO 9000 Series was issued, and rather than that -- well, the content of that was what a corporation should take up as an issue. And I think it covered all these issues that need to be taken up by a corporation. But -- well, this is my personal opinion -- but that 9000 Series had really taken up, very appropriately, the issues that need to be taken up by Japanese quality control.

But how to operate it in an organization was a problem. And another important thing is that this way of handling it is scientific or logical. But important thing is this also what Dr. Juran taught us was this human factor aspect. It really has a big influence on it. And in the case of Dr. Juran, the human factor consisted of the workers' culture, and he really taught us.
And even to this day, I think today it should start out from the business policy of the top management. And, in those days, what Dr. Juran taught us about customer satisfaction and the environmental issue, and all of these things come up as an Issue.

But the top management should consider all these things; should apply it to the organization of the company, and to come up with a policy. And if the management top person does not have a set policy, then an effective QC activity cannot be promoted.

In the case of Japan, the workers are gradually becoming lazier. Before, they worked very hard for the company and for the country. But nowadays, it seems like they are more individualistic. And so, from now on in the future, I am a little concerned about the future quality control of Japan.

Q: Is it possible that Japan and the United States are now -- because Japan was in crisis, America was very successful. Japan quality, American quality. Now America's in crisis and Japan's is ... (STATIC). Is that, in fact, an accurate description? Crisis, more quality. No crisis, it's okay.

WATANABE: I may not be answering your question, but, in Japan, another reason for success is QC technology and facilities were all inter-related. And for the development of a new product, the basic technology had to be applied to industrial technology. And this is where QC came along, and QC was really effectively used for that transference of the technology.

And if you put aside technology and just come up with a good product only by quality control, this is impossible. And this is many years ago, but in one of the South American
countries, I had instructed a factory for two months. First of all, in the beginning, I was asked to give an instruction on quality control, but it all ended up to be an instruction on technology.

Without technology, no matter how much quality control you do, it wouldn't be effective. And I really experienced it.

Q: *What is the big challenge now here in Japan, for the next four years, in quality?*

WATANABE: There are various things. But my concern is in order to produce a good product, the precision of the parts is an important factor, in Japan. You see, the final finishing touch -- you know, the technician and engineer, we still have engineers to give the final finishing touch.

And we currently have the problem with the United States about the parts suppliers. But, in Japan, a group like QC is taken up. The parts supplier is also working a lot on quality control.

And recently, we still have many engineers who are able to come up with a very detailed intricate final finish of the product. But I am concerned about the decreasing number of these people with the skill to give the finishing touch, precise finishing touch.

Q: *That seems to be quite different from my understanding of the Japanese process, because in Japan, I always thought the focus is on the process and not on the person.*

WATANABE: Many university professors say so. But I am not a university professor, and I've been working for a
corporation. And I've experienced it myself, being involved in corporate business.

I was working for a company, and I'm not a university professor, and so I have a different opinion. Because I can say this through my own experience.

Q: Do you have a different philosophy? What is the university philosophy versus the corporation philosophy?

WATANABE: It's very difficult to give you an easy explanation for this, but when you're actually on the field in a corporation, you know, you would encounter extremely difficult problems. And these problems, even if you know a statistical methodology, you cannot overcome these problems, solve these problems.

And so if you really dig into these issues, technical knowledge and skill is required to solve these problems. And I think corporate people have this kind of attitude.

Q: Let's look at the U.S. for a moment. Your prime minister a few months ago said things about the American work force and American quality. As a quality professional, what is your feeling about it? Was he right? What is the state of quality in America today?

WATANABE: Concerning Prime Minister Minaso's comments, I don't know why he said such a thing. But I don't remember the name, but in the United States, in 1958, when I first went to the States, I had visited several plants.

And I really was impressed and was surprised by the very, very intricate work that the people were doing. Precise, you know? And I was able to witness with my own eyes that it's
not only in Japan, but in the States, too, that people are coming up with these precise jobs.

And when I asked the foreman of that plant doing a good job, he said that he, based on his many years of experience, is taking advantage of maximizing the people. He's utilizing his experience.

General speaking, in the States, I think you have this certain standard of work. But if you are assigned to the same job for many years, of course there is a standard that you need to fulfill, but the foreman or the supervisor may not experience certain things that the actual people on the job, at work are doing, I mean, are faced with, the problems that they are faced with.

And these people, through their experience, are able to overcome some of these problems that the foremen or their supervisor may not understand. And I think this is very effective.

Q: Is there a difference in philosophy between Japanese senior managers and U.S. senior managers, how each of them looks at quality?

WATANABE: I don't know. But what I cannot understand is that I don't think this is true with all the corporations. But, regarding quality, I think there are many cases where corporations have QC staff assigned to quality only.

And a person in charge of manufacture, or the foreman, or the middle management, are just totally entrust the issues of quality to these people in charge of it. But I cannot say this definitely, because I haven't seen all the corporations in the States.
But, in the case of Japan, the middle management are always out on the field to see if people are working and coming up with the standard of work that they are required to fulfill, and if quality is maintained, and so forth. And Japanese companies are very, I think, attentive to these things.


WATANABE: You mean the level of work of the workers, labor?

Q: Related to quality, quality measures, applied to work and workers. Measurements of quality; measurements of the workers related to quality.

WATANABE: This depends on corporation by corporation. But the average is the output.

(END OF TAPE NUMBER NINE)
Eizo Watanabe

(Interviewed on 16 March 1992, Tokyo, Japan)

Video Roll # 10

Q: What will distinguish companies with truly excellent quality?

WATANABE: I would say customer satisfaction. It all boils down to customer satisfaction. And, in addition to that, the environmental issue also needs to be paid due consideration to. To decide on quality standard with due consideration to environmental issues.

And so this means that the top management's quality policy -- how the quality policy is drawn up would determine an excellent, superior, good corporation.

Like Japan in the past, the attitude just to sell more and more, would not be appropriate, correct an attitude in the future.

A larger degree of customer satisfaction becomes more and more important. And in order to do that, Japanese corporations ... automobiles sell in the United States. One of the reasons for that is because it does not break down. And, even if it does, the maintenance and repair can be done very fast. and this is the same in Europe, too.

And so this customer satisfaction, in the general sense, should be always pursued. Should be studied all the time.
And to come up with a policy appropriate for required customer satisfaction. And as a continuous effort along that line is the most important thing. This is my personal opinion.

Q: How important is it for a senior management to have a long view, to look way in the future?

WATANABE: I am, right now, 78 years old, you see. And so when I was out in the field -- you know, I've retired many years ago. But before my retirement, I was head of the planning department. And, at that time, I really tried to get as much information as possible from overseas. And always relate that information to the top management.

And I really feel that this is very important. And so the top management should have a competent staff to do that for them. Not only from the perspective of work, but from the political perspective, too, I think it's very important.

Q: In America, managers look three months, three months, three months. Is that too short?

WATANABE: Yes, I think it's short.

Q: What is an appropriate amount of years to look ahead?

WATANABE: Three years, I would say.

Q: Why?

WATANABE: Take, for example, the environmental issue, the CO-2 issue. You know, this kind of issue -- not in
three months, but three years ahead -- is very important. Like I'm right now with -- the company known as Mitsubishi Material.

But I used to work its predecessor. And it had constructed a plant for copper. And we've been working on it for about five years, I'd say. And, in March, in the United States, the issue of atmospheric pollution and water pollution became to be taken up as an issue. And we were aware that we needed to solve that problem. But this month, we gave up.

And so to think ahead in units of three months is very, very short. Like, for example, years rom now, the problem of atmospheric pollution would be this way, and so forth. We need to make these suppositions.

And I would' see, too, still our technology machines are always changing from large machine to a smaller machine, and, you know, all these changes are taking place.

And I think we should be able to perceive three years ahead. And that company is, I think, thinking of three years ahead in its plans to re-organize the company, and so forth. And Japanese are careful about these things, as to what would happen years from now, in order to make preparations at this time.

Q: May we now look at Dr. Juran. The video is like a painting made by many artists with different brushes. How would you use your brush to create a picture of Dr. Juran?

WATANABE: For me, Dr. Juran is the most -- how should I say -- reliable father. And even if you talk with him about different things, he's always willing to share with me his views; never reluctant to talk to people. And so, in that
sense, he's a good listener, and always willing to share his own views.

I think that's the part that I respect him.

Q: Years from now, the people of Japan will look back on those seminars and teachings of Dr. Juran. What will history say about Dr. Juran's contribution to the country of Japan, the economy of Japan?

WATANABE: In my view, I'd say everything. I think there's nothing in particular. I mean, it's just everything. Like I've mentioned about the quality atom (?). The Feiganbaum's (?) TQC later was taken up. But it was since then that he was talking about quality and customer satisfaction and tradition of no problems of the workers.

All of these were talked to us by Dr. Juran. And everything we see today -- I mean, everything is related to Dr. Juran. And we were able to apply what he taught us -- the American style, the European style -- to the Japanese way. And so it may be slightly different from what Juran had taught us, but everything routes down to what Dr. Juran taught us.

And, you know, during the war, we were an enemy of the United States. But to this former enemy, he has been so warm and he was willing to teach us, is something that I really, truly, sincerely appreciate, very profoundly appreciate.

Japan was able to stand up because of Dr. Deming and Dr. Juran. And I personally feel it was because of Dr. Juran that Japan was able to stand up on its two feet.
Q: If you had a chance to speak to Dr. Juran's great grandchildren, what would you tell them about their great grandfather? What kind of a man was their great grandfather?

WATANABE: That there is no greater happiness for them to have such a great grandfather. And also I would like to add that, in 1958, when I went to the States, I think in Rochester, Dr. Juran had treated me to steak for lunch. And it was at that time that we talked about different things.

At that time, Dr. Juran didn't use the word, quality management. But the mid-management course, I was in the group considering the mid-management seminar. And I mentioned to Dr. Juran that, rather than quality control, maybe quality management is better. And he said that, well, come to think of it, that's true.

And then, in 1964 -- there are two worlds in QC of the management of the technology. I think the thesis of the industrial quality control -- this is the thesis that he had written. And Dr. Juran had used the word, quality management, at that time. And implying the fact that he accepted my suggestion, and I was very happy about that.

Of course, this is a supplementary comment that I wanted to make.

Not only this world of expertise of QC, but to care so much about Japan, which used to be an enemy nation, is something that we owe a great debt of gratitude to him. And I really don't know how to express my appreciation to him. Unfortunately, many Japanese leaders are not aware of this.

The only people who are aware of Dr. Juran's contribution to Japan are the people who have been acquainted with him.
from the old days. But today, I think, Japanese leaders tend
to be arrogant. And I really, truly regret this.

    Q: In many years, when you are 150 years old, you'll
think back about your time with Dr. Juran. What memory of
Dr. Juran will you always carry with you?

    WATANABE: His customer satisfaction, I'd say. Which
is the basis, basic point of QC. And, regarding his character,
there's nothing that I can point out, but in many ways, I'd
say, he is a great man.

    Q: Is there a personal time that you spent with him, that
made you feel good? Or an incident that you think people
should know about?

    WATANABE: You see, I'm not really good in speaking
English, and so I would see his face and just pay my
greetings, often times. But I wasn't able to really go into an
in-depth talk on a personal level. Not much of that. But I
can say is that I was very happy to hear every word from
him.

    I think it was two years ago? When Dr. Juran was in
Japan for that last time. At that time, he said, Mr. Watanabe,
let us meet in Pravda, next year. And, you know, he is very
casual in that sense. And the way he dealt with me in that
way was something that gave me joy. And the following
year, I went to that country.

    (OFF CAMERA DISCUSSION)
Q: You may not want to answer this. In the United States today, because of the enormous amount of publicity, most people believe that Dr. Deming deserves full credit for the quality revolution in Japan. Almost no one knows about Dr. Juran. Is there something you would like to say to those people who believe that Dr. Deming, himself, created the quality revolution in Japan?

BLACKISTON: Make sure you give him the option ...

WATANABE: I am also very concerned about that, too. Because it's the same thing in Japan. You know, those people who had listened to Dr. Juran's lecture -- of course, many of them have listened to his lecture, but this was many years ago. And we have this Deming Award.

Because of the existence of this award, when people talk of QC, people come up with Dr. Deming's name. And this is the current sort of trend of the Japanese management. And I think, unexpectedly, there are very few people who truly understand the great contribution Dr. Juran made.

Even the university professor, too. Professor Kulai and Professor Kondo -- all these people. It's very doubtful as to how much they understand as to the contribution of Dr. Juran. And I'm really concerned about this. And also, in the United States, too, the 14 points by Dr. Deming, these are very much promoted.

But it's not that Dr. Juran is not appreciated, but why his name is not so much mentioned as frequently as Dr. Deming is questionable. And I really would like you to work hard to promote his name. If possible. I cannot speak sufficiently in English, but along that line, it would be more than my pleasure if there is anything that I can do to help promote Dr. Juran's name.
Q: In Japanese, tell us if you would what did Dr. Deming do; what did Dr. Juran do?

WATANABE: What is very clear is that Dr. Deming had promoted SQC. Statistical quality control. I think in the States recently it's called process control.

And Dr. Juran had -- as I mentioned -- a quality atom. The development, design of a product, manufacturing, sales, and service -- all these activities -- management control -- had been taught to us by Dr. Juran.

And so it was more of a very realistic activity that we were taught from him. And Dr. Deming, he had taught statistical quality control. And it was more of a limited area. The major difference is very clear, in that sense.

Q: What did each of those contribute to the Japanese economy, and the Japanese role in the world, as a manufacturer of quality goods?

WATANABE: I think both -- the statistical method, to utilize that, was taught to us by Dr. Deming. But to introduce quality control from the development initial stage to sales and service, to control quality in the general sense, the management were awakened to this.

And the Quality Control Handbook also comes up with there is a mentioning of the president of Toyota automobile. You know, these top class management were able to understand Dr. Juran's talks, and were able to apply it to the Toyota style, for example.

And also had instructed QC to the parts suppliers. And they have introduced the Toyota A ward to these parts suppliers for them.
And so it was from the initial stage of designing that quality control concept had been introduced. And for these suppliers which should live up to the standard and come up with a good quality of parts for the automobiles, Toyota gives them an award. And this is all based on Dr. Juran's philosophy, which has been applied to the Toyota style.

And so this is a technology that Dr. Juran taught us. And so it's a matter of whether we are able to maximize and fully utilize that technology or not.

(OFF CAMERA DISCUSSION)

Q: In Japan's own quality revolution, knowing all of the things that you know, all of the things that you've learned, all the things that you've experienced from your own quality revolution, if you could have changed anything -- looking back -- what would you have done differently?

WATANABE: To really, thoroughly go ahead with the top-down method. In Japan, I've written a book. But I was the first one who started to come up with the concept of top-down. The top used to be very responsible and strong. If not, no matter how much the bottom people really work hard, customer satisfaction cannot be attained.

And so the top really have to have this will to do it. And Japan has been doing this. But 50% of the Japanese industries have not yet achieved that level.

Q: Whatever you would like to say, the door is open, anything you would like to say about Dr. Juran.
WATANABE: I seem to be repeating myself, but the revitalization or the reconstruction of Japanese industries, he is the father of the reconstruction of Japanese industries.

Q: *Would he say that using Dr. Juran?*

WATANABE: Dr. Juran is the father of the reconstruction of the Japanese industries.

Q: *One more time, please.*

WATANABE: Dr. Juran is the father of the revitalization of Japanese industries.

Q: *Thank you.*

(END OF TAPE NUMBER TEN)