Panel Discussion (1) Q & A

Moderator: Dr. Noriaki Kano

Participants: Mr. Katsuya Hosotani, Dr. Chaw-Son Tsong, Mr. Takeo Yamaoka, Mr. David Hutchins, Mr. Janak K. Mehta

- **KANO** Good afternoon, everybody. Now we have six speakers on the stage. We have listened to their presentations but we didn't have a Q & A session after each presentation. I'm sure that you have some questions, so now we would like to have a Q & A session. Based on the presentations you have heard, if you have some questions, please raise your hand and the panel members will answer them. So are there some questions from the floor?
- KOGETSU My name is Kogetsu and I have two questions for Mr. Yamaoka. Mr. Yamaoka, at Juki, you received consultation from Dr. Ishikawa. What triggered you to invite Dr. Ishikawa? At that time, I don't think Juki was in difficulty for growing its business. So what was the trigger for getting Dr. Ishikawa?

Also, you made a joint declaration of management and workers, and the companywide learning of quality control stimulated the union to learn about quality. This was not an actual collaboration between management and workers. Why did you make a joint declaration? What was the background?

- **KANO** Okay, while Mr. Yamaoka is thinking of how to answer the question, we will entertain another question.
- **ITO** I have a question for Mr. Mehta and Dr. Tsong. QC Circle in Japan are not only for Genba: actual work place, but also for the sales and product development sections. What about in Taiwan and in India? That is my question.
- **KANO** So Mr. Tsong and Dr. Mehta, would you please answer those questions? But before that, Mr. Kogetsu asked two questions to Mr. Yamaoka. The first was what triggered you to invite Dr. Ishikawa as your consultant and why was TQC started? And the second was about the relationship between management and workers. Please be succinct when you answer those questions.
- **YAMAOKA** Thank you very much for your question. We already had a trade union, but this was a new trade union as I explained. The initial trade union was similar to those in other companies after the end of World War II. They were very strongly infused with a certain ideology and had a strong movement based on the world war.

However, we questioned the existence of such an aggressive trade union.

Therefore, a new trade union was formed. QC Circle was already there at that time. And the trade union demanded not only QC Circle but TQC. That is the reason why we asked Dr. Ishikawa to teach us.

- **KANO** Dr. Tsong, not only on the shop floor, what about is in the development and sales sections?
- **TSONG** In Taiwan, Genba: actual work place, foremen, and workers are the central figures for QC Circle. QMU, quality management unit, this is the method of management in Taiwan. Section managers and general managers lead the quality management unit's activities. The workers set the theme and then they solve the problem. So rather than QC Circle, QMU management is deployed.
- KANO Mr. Mehta, please.
- **MEHTA** As I mentioned in my presentation, we started TQC with the top management, the middle management, and then workers. As Dr. Ishikawa said, it has to be companywide, which means across all functions.

He said that quality assurance is at the heart of quality control. Quality assurance is in all functional areas that contribute to the design and development of quality, including the procurement of materials, production, sales, service, everything is included. And new product development is also critical, which again covers all aspects of management.

So in India, the companies that are doing TQC in the right way cover all functions both horizontally and hierarchically.

- **KANO** Well, Mr. Ito's question is about not only TQC, but also QC Circle, and not only QC Circle on the shop floor, also QC Circle in the sales department and design department. In India, do you have QC Circle?
- **MEHTA** QC Circle is more popular on the shop floor. They are also prevalent in nonmanufacturing areas. They may not be called QC Circle. Some companies call them QC Circle, but other companies call it "small-group activities," even though they do the same thing. I think it varies from country to country and culture to culture. A very large number of companies use small-group activities at the top level and at the lowest level, even in nonmanufacturing areas.
- KANO Thank you very much. Are there any other questions?
- **AUDIENCE 1** I've learned a lot from all of you, thank you very much. Listening to you, most of you talked about the situation when the Japanese economy had major growth.
- KANO Whom are you addressing your questions?
- AUDIENCE 1 Mainly the overseas representatives. In Japan, we have lost 20 years of

growth and now we have "Abenomics" to try and regain the growth of the economy. However, we have not seen any results yet.

If Prof. Ishikawa was alive now, maybe he would come up with some new ideas. Maybe we could expect some kind of breakthrough from him. I wonder what he would say if he was still alive. Maybe he would ask us to do more. What do you think about this?

Especially Mr. Mehta from India, you are very logical. Do you have any idea to reactivate the Japanese economy? Quality control contributed a lot to the growth of the economy. I'm sure that this will be true in the future too.

KANO So to the overseas representatives, Dr. Mehta, Dr. Hutchins, and Dr. Tsong, if Prof. Ishikawa were still alive today, what do you think he would say? And, are there any good ideas to regain our economic growth?

Let's have one more question.

- **AUDIENCE 2** My name is Imabayashi. I work for Bridgestone. Prof. Ishikawa really had such an impact, not only on Japan but also on other countries all over the world. Today I've been so impressed by hearing about that. Here we have distinguished guests and speakers from Taiwan, the UK, and India. All the countries really wanted to learn from Prof. Ishikawa, so you all invited Dr. Ishikawa to your own country to learn. That was really impressive. We have branch offices in Taiwan, the UK, and India.
- KANO Whom are you addressing your question?
- **AUDIENCE 2** The international speakers. In our company, we have this self-discipline approach, but it is very difficult. Even though we have branch offices overseas, and workers don't do anything if they are not told. It is difficult to arise autonomy in them. What do you think about this?
- **KANO** I think there were two questions and both were addressed to our international guests. Are there any questions for Mr. Yamaoka or Mr. Hosotani? They are free to answer your questions.
- **SUEOKA** My name is Sueoka from the Japan Quality Academic Society. I have a question for the Japanese speakers.

Today we are talking about the remarkable contribution of Prof. Ishikawa and we are commemorating the centenary of his birth. What I am feeling is that most of the stories are based on manufacturing. As everyone has said, Japan really grew fast right after the war. But for 15 to 20 years we have had these lost years and the economy has been stagnant. Right now, we have to revitalize our economy.

For TQC, and I'm talking not only about the manufacturing industry but also

the service industry, and medical, food, and agricultural industries. Quality should have a wider scope of application. That is what I am feeling. But in Japan's domestic industries, going forward, how do you think all the industries in Japan are going to take this approach to TQM?

KANO So your question was about the service and other industries. Mr. Hosotani, you haven't answered any questions. So later could you please add your answer about the last 20 years?

So, is there any advice from the international speakers? Do you have any good advice for the sluggish Japanese economy in the last 20 years?

HUTCHINS I can comment. I think, if you try to advise another country on what you want to do, that's probably about the most arrogant thing you can possibly manage. So please, for anything I say, take into account that I am only looking at it from my perspective and I'm not saying that you should do this, this, and this. We are the last people who should be saying that because you have been more successful than we have.

But looking at it from where I am, if you think back to the 50s and the 60s, from the period from 1945 to 1952 when there was American control, you weren't allowed to build ships and you weren't allowed to make steel. But you knew during that period that eventually you would be able to. And I believe that you still put people through universities in those areas, so as soon as you were enabled after the war. You had this explosive growth period, which was very much Prof. Ishikawa. but there were other factors as well. As I understand it, one of which was MIT (Ministry of International Trade and Industry) that gave export licenses. You can tell me if I was wrong. I believe they were quite strict. If your quality was poor, you could have some trouble with that.

But just to give you a couple of things about that growth, you weren't allowed to make steel until 1952. But by 1963, over 17 of the world's 23 largest blast furnaces were in Japan. You weren't allowed to build ships until 1952. And yet between 1952 and 1962, you managed to completely destroy our shipbuilding industry, because, I think, there was so much tension. If you like, built up in your society that as soon as you had that opportunity. It exploded and everybody was excited and it was probably the most exciting time in your history.

But I think another factor is that. And again tell me if I'm wrong. But it seemed to me that it wasn't right across your whole society that followed these disciplines. It seemed to me that the large exporting companies, such as Komatsu and Toyota, played an important role in leading Japan.

Those companies, once they started to go into the large-scale, they then started to replicate themselves around the world. And then they weren't dependent on the Japanese economy anymore. They were dependent on the economies in the various countries where they were operating.

The companies that were left in Japan, that weren't going for globalization, and that weren't setting up abroad, possibly didn't follow those same trends. My feeling is that somehow you've got to try and get that across into the rest of your domestic industry what you find in your exporting one, because I think your exporting companies, I'd like to hear someone else's opinion, have this TQC discipline. I don't know if it is in your domestic companies. You have to transfer it across to make it a national drive. Would you agree with me or not?

- **KANO** Thank you very much. Are there any other comments on this point? Foreign workers in overseas operation don't do anything if they are not told. They don't work like Japanese. Japan must be more autonomous. Dr. Tsong, if you know about initiatives coming from Japan, please tell us how he should do for this issue.
- **MEHTA** I think we are too busy trying to implement what we learned from Prof. Ishikawa. We have a long way to go before we can come anywhere near the kind of prosperity Japan has enjoyed. So as we are busy doing that, it's not really feasible for us to give you any advice on a situation that we have not yet experienced.

But I have a hypothesis, which may be false, but I sense, as Dr. Ishikawa said, that it happens only where there is a felt need. Japan felt the need after the war. It had the question of survival. There was no food to eat, and you had to import so you had to pay in dollars. All of that created a need. And again, as David said, those industries that had to export and compete obviously took it on first. Those who stayed home may not have necessarily felt the same need.

And as society has become affluent and come into a comfort zone, it is much difficult to create a need. But that is true all over the world. Mature societies find it difficult to make change happen. It's true for successful companies as well. So how do we create that need and the change so the rest will follow?

With companies' economic policies and other countries' policies, there are so many macroeconomic factors that can come into play. So it wouldn't be appropriate to say that only quality played a role. Quality when provided the opportunity is the right way. But when the opportunity is not sensed or not taken, we may not be able to use that. That's my thinking. Thank you.

KANO Thank you very much. Well, those answers were only about manufacturing. What should we think about nonmanufacturing? I'm sorry, there was a QC Circle question. Please, Mr. Tsong.

TSONG In Taiwan, Dr. Ishikawa stressed the importance of education. There were three or four people from the QC Circle and they addressed problems. About 10 circles received a lecture once every week for three hours. And education and training was given to QC Circle members so that they could solve a problem in three months. There were also QC Circle presentation meetings.

At the beginning of the course, they did not know the methodology that should be applied to problems. Gradually they became capable of solving problems, built confidence and trust, and became more autonomous. They then registered their QC Circle and began autonomously carrying out activities.

- **KANO** So, Dr. Tsong, you think that education and training are important in order to develop spontaneity. Spontaneity helps people work actively. Did you say like that?
- **TSONG** Yes, without education we cannot ensure active implementation of QC Circle.
- **KANO** There was another question from Mr. Sueoka about nonmanufacturing industries.
- **HOSOTANI** Prof. Ishikawa's belief was, whether it is TQC or QC Circle, both of these activities must be continued forever. The reason is why each worker can grow and create an ideal workplace through these activities, which will promote prosperity for company. So these activities are significant and they have to be continued.

QC Circle activities were started and became effective in manufacturing. And then in 1977, as you know, case studies in the sales and administrative areas, examples of those activities were started to be published once every five years in JHS : Jimu Hanbai Service, which means "administrative and sales activities."

Now, though, the manufacturing industry has a selection of QC Circle conventions in June. Administration and sales have their convention in November. They are separate, but I believe that QC activities are proceeding in both sectors.

Also in the medical field, there may be some malpractice, and of course efficiency is also sought in this field. Every year a TQM convention is held in the medical world. In November, in Ise, Shima, convention is planned for three days. Generally, between 800 and 1,000 people participate in the convention. All of those people are medical staff, such as doctors, nurses, some from the administrative departments of hospitals and medical institutions, and some are from long-term nursing care facilities. They make QC Circle presentations at the medical field QC convention.

Also in the food industry, TQM activities are being promoted because there have been some scandals and problems that have occurred lately.

So these activities are spreading to other sectors. I believe that these will continue to spread to other sectors. Based on Dr. Ishikawa's belief, we need to promote these activities in other sectors as well.

- **KANO** There was one more question for Mr. Yamaoka. He has to answer at least one question.
- **YAMAOKA** Mr. Hosotani already responded, but talking about nonmanufacturing industries. The Japan Society for Quality Control celebrated its 30th anniversary. When Dr. Kano was the president, there was a discussion about implementing TQC in other sectors, including the medical field. I am involved in these promotion activities in the medical field.

Talking about the medical field, we hesitate to use the word "quality". Different drugs may have very similar names, so the nomenclature may not be ideal and that can lead to malpractice or the mixing up of drugs. This malpractice can lead to criminal indictment. If there are very detailed descriptions about what happened, they can be used as evidence in court. The police take those records.

But the civil code has been revised significantly. If there is anything that is strange, amateur people may not understand exactly what is wrong, but professional people must understand what has happened. So people are being encouraged to bring lawsuits. The medical field has to make sure to do things right and keep good records. This situation is quite difficult, but the medical field is going in that direction.

Also, when it comes to agriculture, there are genes and recombinant technologies. Agricultural companies here in Japan are not allowed to use them. But if you look at the Dutch case, if agriculture is liberalized, I think that there will be more interest in the giving and recording of data.

Thank you very much.

KANO I know that there are more questions, but we have run out of time. This is the end of the panel discussion for Part A. Thank you very much for your close attention.