Productivity methodologies, tools, and techniques

Synopsis of the APO's Toyota Production System projects

Through APO projects, I have visited several of its member countries including India, the Philippines, Malaysia, Singapore, etc. to give lectures and consultations on the Toyota Production System (TPS). I have also delivered presentations through the APO's distance-learning courses to 13 different countries during the past three years. People in other Asian countries are always eager to learn from Toyota's manufacturing competitiveness and are interested in implementing the system within their own companies.

For those who want to learn about the implementation of any system, it is important to know there are three points they should be aware of: 1) the principles; 2) the background; and 3) how to implement the system (Figure 1). I shared this idea with all the participants in the APO projects that I have been involved in.

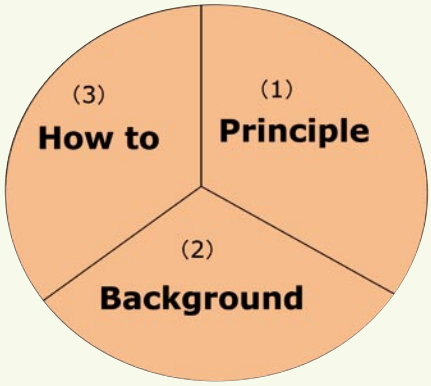

Figure 1. Essential points to grasp before implementing a system.

To explain this further: 1) The principles are what people can grasp from any type of seminar or course. In terms of the TPS, they include the concepts of just-in-time, elimination of waste, *jidoka* (automation so that machines can detect the production of defective parts and immediately stop the line), etc. People want to know what these concepts are and they normally understand them very well in a relatively short time. 2) The background explains why an enterprise (in this case, Toyota factories) operate based on those principles. If there is a principle, there must be a background to the "why and how" the principles were developed. By examining the background, people achieve a better understanding of the principles.

However, it is not enough for people simply to grasp points 1) and 2). They also need to know point 3), i.e., how to put the system into practice when they actually try to adopt the concept within their companies or factories. There always are some difficulties and obstacles in any organization when trying to implement new systems. For example, some people may not be willing to cooperate, there may be some who oppose the concept of the new system, and others may feel they that do not have sufficient time to practice improvement activities. Participants learn points 1) and 2) easily, but quite often they are not able to put into practice what they have learned within their own workplaces for many different reasons.

Hisazumi Matsuzaki in action at APO program in Tokyo Photo courtesy of H. Matsuzaki

In the APO's TPS-related projects, I have always emphasized the importance of point 3) and spent a lot of time on this issue during my lectures. The participants actively exchange their opinions on and experiences with point 3) and understand how important it is to grasp points 1), 2), and 3) at the same time. In the meantime, they also recognize that the TPS is not a system that "you can just learn and then apply in your own company," but rather it is a system that people need to create by cooperating with each other.

Once during an APO TPS project, one of the participants mentioned that he had come to realize that, "The TPS is not like the computer system in my company, it is rather a system that we must make by ourselves. You cannot just purchase it and start using it." By engaging in active discussions, participants recognize why the TPS requires many group activities and why continuous efforts are needed. Then they start thinking what they could do to make better-quality products, shorten lead times, and reduce costs, which are the purpose of the TPS and every company's daily activities.

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