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Shifting focus

Instead of focusing on lean tools, HP Tronic achieved skill development and mindset change through structured practice

BY LINUS BRODÉN

P Tronic has been working with lean in its manufacturing areas since 2007, and we made a few attempts to introduce lean in our administrative processes, but have not yet been successful.

We tried to find situations where we can apply the lean toolbox, but this has been harder in the administrative areas, and the results always slipped back after a couple of weeks. We haven't been able to create any real commitment, which may be because there hasn't been a clear connection between the toolbox and what we as a company are trying to achieve. Our efforts have been focused at eliminating waste, almost randomly, but with no clear target.

In February 2014, we were introduced to the Improvement Kata and Coaching Kata practice routines, as a part of a project with Produktionslyftet, a national business development program in Sweden to help manufacturing companies improve their competitiveness based on lean principles. These routines combine a pattern of scientific thinking with principles of deliberate practice, to make scientific thinking something anyone can learn.

F Instead of focusing on lean tools, Kata focused on defining a challenge and target condition, and provided a clear procedure of iterative experiments to strive for it. The approach can be applied in any situation and practiced again and again. This was our key to successfully introducing lean principles in our administrative processes; we didn't focus on the toolbox. We focused on a challenge and by what it means to get there.

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Our management team, with the assistance of a coach from Produktionslyftet, defined a three-year challenge: Production volume 50 percent higher with the same personnel and floor space. We started our KATA work in four areas: sales, purchasing, engineering and a joint group that we call the quotation process (which includes sales, purchasing and engineering).

Structured process

Since the start, we've conducted approximately 150 experiments and have achieved several target conditions on the way to the overall challenge. We are following the experiments daily using coaching cycles with the five coaching Kata questions. (See "A Kata for PDCA" by Mike Rother and Jeff Liker in the Summer 2014 issue of *Target*.)

Our coach Lars Danielsson has pointed out that coaching cycles are where the scientific routine gets established in our minds as a habit. Coaching cycles help to teach the Improvement Kata pattern, in the mind of both the learner and the coach. "When you hear the idea of improvement activities every day, it's easy to be reluctant. I was. But when you start to experiment and see the results, you get it. Before we started Kata, I believed a two-hour meeting was better than a couple of 10-minute meetings. Today, after three months with experiments, I've clearly changed my mind," said Emil, our sales manager.

In the beginning, it felt odd to repeatedly ask the same questions as a Kata coach, but the more experience you gain, the more the importance of a structured coaching routine gets clearer. You have a standardized way of reminding yourself and the team of the target condition. It keeps you on track so you don't lose focus and start with experiments that aren't relevant for the current target condition.

The Five Coaching Kata Questions help you to be more efficient and focus on what we learned from the last experiment and our next step, instead of entering a never-ending discussion of possible solutions. Perhaps the most important point is that while we are working on real goals, we are "practicing."

Improvement activity

In the quotation process, we defined a target condition that described a workflow process with increased integration between the involved departments, and an outcome metric of 85 percent RFQs complete within standard time. To increase the integration between the departments, we started to experiment with ways to visualize the process. The work with this target condition resulted in a daily seven-minute meeting, a whiteboard that visualizes the flow and a set meeting agenda. Everyone involved agrees that they now have a much clearer picture of what's going on and that positive crosstalk between the groups has increased. The rate of achieving the standard lead time has increased from an average of 60 percent to 85 percent (May 2014) and 90 percent (June 2014).

"Before we started experimenting toward this target condition, there were countless complaints of lacking resources and the involved departments didn't hesitate to blame each other. After the target condition was met, I haven't heard any complaints, and we are finally working as one group instead of three different departments," said Veronica, the plant manager.

Together with the work done toward target conditions in sales, purchasing and engineering, we are now able to measure the throughput time, quality and resource allocation through the entire quotation process; defined as "when we receive the RFQ until we deliver the quotation to the customer."

The interesting thing is that this was developed out of a specific need and through following the pattern of the Improvement Kata, not something we benchmarked from someone else and then tried to copy.

Kata lessons

We've also had our share of difficulty with Kata. First, there are a lot of areas where you have to change your mindset.

For example, we have previously worked with improvement projects with a clear start and end. We talked about continuous improvements, but haven't really understood what that meant in practice.

The fact that improvement isn't something you can take a break from was a big mindset change. This is still something that we work with every day, since it's easy to fall back to old habits.

Second, before we started to work with Kata, we always focused our improvement activities by picking the lowest hanging fruit with no clear direction. The Kata approach is different. You define a target condition and focus on the improvements needed to achieve it. Here it's also quite easy to fall back to old habits, especially when you try to experiment against obstacles that are hard to overcome and solve.

"Today, I have much better understanding of the sales process, my colleagues' work and why we make certain priorities," said Lars in sales.

Finally, it's hard to learn how to formulate good target conditions. You have to formulate a target condition that's outside your current knowledge threshold, without using verbs (as if you were already there) and make it concrete enough so you know when you have reached it. You're defining where you are going without knowing how you will get there.

Next step

We are still in the early steps of deploying Kata, but in the future, we want this to be a part of HP Tronic's DNA. Therefore, our main focus is more of the same; create the habit of daily experiments. It's easy to fall back into old habits. By experimenting with ways to follow-up on our improvement activities in the management team, expanding Kata to other departments and developing more Kata coaches, we aim to create a pattern that will become normal throughout the organization. If we are successful, then the organization can meet all sorts of challenges, with the help of structured experiments into the unknown.

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