THE TOYOTA ENGAGEMENT EQUATION

HOW TO UNDERSTAND AND IMPLEMENT CONTINUOUS IMPROVEMENT THINKING IN ANY ORGANIZATION

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Management That Puts People First

One morning, I (Ernie) got a call from our maintenance department alerting me of an equipment problem. At the time, I had recently been promoted to production manager in TMMK’s Powertrain area, which is located about a mile away from the regular plant.

It was not uncommon for us to have downtime, and we would follow the principle of *jidoka* and fix problems on the spot. Since I had a 20-minute transportation buffer before I affected the assembly plant, being down for a minute or two wasn’t an issue.

This time, 10 or 15 minutes went by. Then the maintenance guy came up to me and said, “Hey, Ernie. This is pretty bad.”

Now, you might say that as a new manager, I was a bit overconfident. I had started my career in Powertrain, and had developed the standards for most of the processes, so I figured the job would be relatively easy. There were some serious flaws in that thinking, of course, which we’ll discuss later.
My response to the maintenance guy was therefore pretty typical.

“I know you’re going to do your best to fix the problem,” I said. “I’ll call over and tell people we’ll be a few minutes late. We’ll be good.”

At around the 20-minute mark, he came back and said, “This is a problem. Come. Let me show you.”

I went over with him and had a look. The trouble area was where our conveyor line met the pallet conveyor. What had happened was a pallet had collided with the conveyor line, which then pulled it under the bottom, mangling up the conveyor in the process. There was actually a pallet trapped in the concrete pit underneath the conveyor. I asked him what it was going to take to fix it.

“Fix it? We haven’t even gotten to where the problem is yet,” he said.

That’s the first time I got a funny feeling in my stomach that I wasn’t going to get by with a simple machine breakdown—this was going to be much greater.

I said, “You know what? We’re doing everything we can at this point.” With our buffer now gone, we shut Trim One down in assembly, so now we had 50 or 60 people waiting for us. So we started getting a little entourage of people who had come into our area to take a look.

Six or seven minutes later, when Trim One’s buffer had passed, we shut down Trim Two, affecting another 50 or 60 people, and then Trim Three. The little entourage had grown into a crowd, and I was getting all kinds of input from people in different functional areas. It was hard to toggle all those ideas at once and ensure maintenance had all the resources they needed.

Needless to say, I was extremely concerned and began pleading with the maintenance team member, “Come on now, I really don’t want to shut the whole plant down.”

After we were 45 minutes into this, our axle team had shut down the chassis lines. The incident had now left approximately
500 team members unable to run their production processes. Then came final assembly and other feeding departments, and in a little over an hour, we had shut down the entire plant.

From this point, cars were no longer coming off the line, so the outage was costing the company a lot of money per minute. Then, one by one, the vice presidents started showing up. My Japanese trainer was patiently coaching me, and my general manager and vice president were as well, but given my state of mind, I can’t say I was very receptive with all that was happening around me.

Then I heard a voice from the background saying, “Mr. Cho is coming.”

Now at this point, I felt that the last thing in the world I wanted was a visit from our president. This situation was far beyond anything I had ever experienced, and despite my years of training and conditioning in Toyota’s culture, I began to fear the worst. I even found myself considering what I’d like to take home from my desk—I was actually thinking I should find a box and grab some stuff so I’d have it ready.

Mr. Cho’s office was about a mile away from Powertrain. Instead of driving, he walked the whole way, and it seemed to take forever. “When will he get here? Let’s get this over with,” I thought. I was dreading facing him as I waited.

After about 20 minutes, Mr. Cho arrived in the building. The area coordinators went to the door to formally greet him and escort him to the area, as was the tradition.

When he arrived at our area, Mr. Cho looked carefully at our activity logs, kept by maintenance and production. Then he walked up to me, shook my hand, and said, “Ernie-san, do you have everything you need?”

I managed to answer, “Yes, we have everything we need. We’ve got the best maintenance team. We’ve got support from other shops coming over to help us as well. We have the best of the best here.”

Then he said, “Thank you for shutting the plant down. We’ll fix this problem.”
Then he turned, chatted briefly with several other Powertrain managers, and then went back to the main plant.

A COMPLETELY DIFFERENT VIEW

Russ Scaffede, former Vice President and General Manager, Powertrain, Toyota Motor Manufacturing Kentucky

I’ll never forget a speech Mr. Cho gave at a big automotive conference in the late 1980s. There were 400 or 500 people in the audience, and the big three all had vice presidents and executives there to talk. Everybody was talking about external factors such as emissions standards, the global economy, and what the government needed to do to help them be more competitive.

Then Mr. Cho got up, and he spoke for one hour about what Toyota does to support the production team members so that they can be more successful on the plant floor. Then we broke for lunch, and I’ll never forget the buzz in the lunchroom. Everybody was saying, “Did you guys understand what just happened?” Here were all the automotive industries in America talking about what everybody’s got to do to save them, and here’s a Japanese guy in America explaining what they’re doing to help the production team members be more successful. Everybody picked that up during that conversation. It was a completely different view of things.

A NEW TAKE ON LEADERSHIP

Some people might wonder why Mr. Cho would walk all the way to Powertrain to look at some logs and talk with me for 15
seconds. Somebody might think, “Why didn’t he just call the executive coordinator for Powertrain and get the information he needed, and then call the production manager?”

The answer is that Mr. Cho didn’t just see this incident as something that had to be fixed. He also saw an opportunity to have a positive influence on the company culture, and he wasn’t going to pass it up. Here he had a very young production manager, a large audience, and a perfect situation for reinforcing a culture that says we stop and fix things. He could do one simple thing and make a big difference. He could walk to Powertrain, take his time, and show that our values must never be compromised, even in a very stressful time when we were shut down. And he could do it in a way that would really cause people to take note and remember the lesson.

Now a lot of people may have been thinking that Mr. Cho was coming to either reprimand or fire me. His actions showed how wrong that assumption was, and the visit had enormous impact on our culture, just as he had intended. People at TMMK still talk about that story many years later, and it profoundly changed the way I would manage people for the rest of my career.

So what some people might have thought was an unnecessary visit by Mr. Cho was actually a very efficient use of his time. When you consider all the efforts that go into “culture change” in many organizations—training courses, management retreats, consulting reports, etc.—the hour Mr. Cho invested here was a bargain for the company, and far more effective than any outside intervention.

Mr. Cho was an unusually successful leader even by Toyota standards, and his depth of vision influenced thousands of people. Where other managers might have merely seen a costly production delay, Mr. Cho saw a group of people who needed to be developed, and a perfect opportunity to do that. In our sessions today, we refer to acts of leadership like this as “Mr. Cho moments.”
Toyota had a very different way of managing, and it was strongly focused on employee engagement. To understand the context, you have to go back and understand the years of built-up animosity and strained relationships between employees, union, and management in the Big Three. Essentially, there was an environment and a set of rules that made it impossible to engage employees.

There were many people at GM who understood this, including some of the best managers I’ve ever worked for, but around half the people, both on the labor and management side, were entrenched in the old ways and very unreceptive to change.

Toyota, on the other hand, was able to set up a system where it could engage its employees to foster identity with their jobs and continuous improvement. And because TMMK was a greenfield situation and NUMMI was a shuttered plant that Toyota had revitalized, the company was able to make sure that everybody was willing to go out and help the company improve.

So our job as leaders at TMMK wasn’t about command and control—it was more about engaging than managing. This is not to say that the financials, the metrics, and the necessary reporting weren’t considered critical. They were, but this was a small part of what we did.
initially. Two weeks after my start date, I was on a plane to Chicago en route to Nagoya, Japan, with no idea of what I was going to learn, and definitely outside of my comfort zone. I even remember thinking when we landed in Chicago, “I could just get out here and come back home.” I learned later that many of my colleagues were feeling that way.

When the company built its leadership team, it was not looking for car builders so much as people builders. I had worked for the past eight years at the nearby IBM plant, where I had started in entry-level assembly. I was fortunate to be promoted six levels, and had one level to go to reach the technician level, where I would progress from hourly to salaried employee. During that time, I had been given the opportunity to develop some leadership skills that I believe were of interest to my interviewers at Toyota.

IBM stressed many of the skills and values that are characteristic of Toyota. We were very conscious of process and continuous improvement, and there was a disciplined approach to identifying and solving problems. I had some excellent leaders and mentors as well, and the company had a vision for my long-term development and challenged me to meet that vision.

Toyota, however, practiced people development on a whole different level. From day one, it was made very clear that the company did not hire me to be a team leader for the rest of my life. My group leader wanted to know where I wanted to be in five years, where I wanted to be when I retired, and what it would take to get there. The understanding was that I would be willing to stretch myself to achieve my goals.

This thinking was very prevalent when I arrived in Japan and first met my trainer Mr. Shoichi Ikoma (Sho-san). He had a precise set of learning objectives for me during the trip, and he knew exactly how he wanted me to get there. He was very knowledgeable, and a hard worker who took his role as trainer very seriously. He spent a great deal of time with me, including
many lunches and dinners. Also, as I later learned, he was being evaluated based on how successful he had made me.

The rest of the team leaders who had come over were in assembly, while I, being in Powertrain, was in the machine shop across the street. We went to work at the rear axle line, which was the line I would have at TMMK. The work was being done in an open area, and it was extremely hot, yet the people were all working without breaking a sweat. It all looked so easy. But when I got on the line for the first time, I thought, “Wow, this is more difficult than they make it look!”

The rear axle team had four processes. In that area, you could see all the way from the beginning, where they built the shaft up, connected it with knuckles or carriers, married the shock absorber to it, and then installed the spring and the upper support stud to mount into the vehicle.

What I found stunning is that they were completing these processes in 28 seconds. “How am I ever going to meet this expectation?” I wondered.

My trainer, however, knew exactly what I was thinking, what I had to learn, and how I could learn it most efficiently. He knew all the processes intimately. Initially we spent time on the mechanical parts, how they went together, and the sequence of the processes.

But mechanics and layouts were just the introduction—the real core of my training was around culture and people. My trainer understood the culture so well that he was able to break it to me gradually instead of throwing it at me all at once. After my orientation and a couple of days of getting to know the layout of the area, we began on my primary objective. I was to “master one process” thoroughly, which they referred to as my MOP.

The process he used was very similar to training within industry (TWI) or job instruction training (JIT). He would give me a very small piece of the process to start with, and then gradually start adding to it. Of course, I was there trying to make a
big impression and often tried to do too much. He said, “Slow down. Slow down. Understand what you’re doing before you do it.” He was a very good teacher. And he was standing by me literally almost the whole time I was there. Needless to say, the company was very serious about me getting this right.

I am pleased to say that I got through the MOP in my second week, which allowed time for me to be developed further. My trainer then challenged me to come up with three improvement ideas for that process. As I found waste and developed ideas for improvements, he helped me do experiments to prove my ideas. This was my first exposure to changing a process.

Initially, I began to look for major gaps that would allow me to “hit a home run” by introducing a big process change. At that point, my trainer took me aside and said to me, “Home runs are OK, but we are looking for small improvements that add up to big change.” He instructed me to take it slow and prove each idea before I moved on to the next.

Out of that emerged my best idea—a way to provide a little bit of flexibility between two processes that would make it easier to recover and maintain flow if a small abnormality occurred. It was a small idea, but after my trainer and I had worked on it and done the experiments, it was pretty solid.

Then he did something that stuck with me throughout my entire career. He brought the team together—the people doing the actual work—and had me present my idea to them. So here I was talking to people with as much as 15 years of experience. I was nervous, to say the least.

I presented my idea through a Japanese interpreter and then asked for feedback. The reaction surprised me. The team not only listened and took my idea seriously, but began to give suggestions about how that idea could be made even better. They were very supportive—it was like, “What if we do this? What if we do that?”

We then tested the improvements together. I believe that my original idea would have saved two seconds, but by the time
the team had given feedback, we had doubled that to four seconds. I was then amazed by the teamwork they displayed as we implemented my improved idea.

After the improvement was in place, the plant manager came to the area, and once again I presented the idea. While I spoke, the whole team stood around me as a show of support. The plant manager then congratulated me on my idea, and told me that this was the start of my journey, and that I must never forget the power of people. What an impact this had on a one-month-old Kentucky team leader!

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**LEARNING THROUGH EXPERIENCE**

*John Shook, Chairman and CEO, Lean Enterprise Institute*

Taking hundreds of people to Japan for three weeks or more was a huge expense and effort. Many of the team leaders and group leaders had never been overseas. Many had to scramble to obtain their first passport just in time to make the trip! Some got a little homesick, and others struggled with the food, not to mention the language, of course. But almost all found the three weeks working alongside their counterparts in Toyota City to be a life-changing experience. Seeing is believing, and there is no substitute for the actual physical experience of working on a Toyota assembly line.

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**THE JOURNEY CONTINUES**

The plant manager was right about the start of the journey part. There were many aspects of this lesson that would be apparent at various points in my career and would be critical to my role as a leader.
As I realized later on, my trainer was trying to connect me to the True North from day one. This was why he took me to the assembly line and showed me where the axles went on, all the different components of the axles and how they were assembled, and how they were connected in the assembly line. What he wanted me to understand was “they are my customer, and I’ve got to do everything I can to make my customer happy.”

When he wanted me to master a process, the real objective was helping me to understand what a process looks like to a team member. It was all about what the team members are feeling when they’re on the line. Then he would ask, “What are you thinking?” It was all about gauging where I was at with the culture piece.

Back in Kentucky, the development continued. We didn’t have our machines yet, so I spent two weeks on the wheel and tire line helping to develop standards for processes that I had absolutely nothing to do with. The whole idea was for me to start understanding how to develop standardized work, and how to look at process flow. It didn’t matter whose department the work was in!

After the equipment arrived and we began to set up our actual processes, it became clear that things weren’t exactly as they had been in Japan. Instead of just following a template, we had to use our newly developed skills to help set up and test the processes. We got a lot of things wrong, of course, but we knew where we were going, and were beginning to understand the “why.” That’s when the wisdom behind that training really started to make sense.

The presence of our Japanese trainers, however, remained very strong throughout our start-up of production in 1988, and for several years after that. As we discussed in earlier chapters, these trainers included some of Toyota’s best people, and their knowledge and mentoring skills were phenomenal. They had an intrinsic knack of grasping where we were in our journey with regard to the Toyota Production System (TPS) and other PDCA thinking processes.
As I got more confident with the basics, they began to spend more time coaching me on developing my subordinates, who were, according to the servant leadership model, the people I worked for. The idea was that management isn’t about “knowing and telling,” it is, as we discussed in previous chapters, about “leading and learning” simultaneously. Along similar lines, I often mention to organizations that we have to condition ourselves to refrain from “telling, selling, and convincing,” but instead practice “engaging, involving, and empowering” people.

As I recall those early days with the Japanese trainers, they were always present in the background, observing, assessing, calculating, and waiting for opportunities to intervene with questions that led to specific coaching points. It wasn’t uncommon in the beginning for a trainer to stop me for a couple of minutes in between production and trials and ask, “What was your thinking when you made that decision, Ernie-san?”

Then I would discuss with him the reasons behind my thinking. Sometimes he agreed with me, and sometimes we had further discussions. At first, I thought that he was “double-checking” my answers to ensure the right decisions were made that maintained our team KPIs. Later, I realized that this wasn’t about second-guessing my work, but about the long-term journey and laying the foundation for continuous learning.

Often at the end of each day we would summarize what had taken place. Where I didn’t meet expectations, we would have a “plan versus actual” type of discussion. The conversation frequently involved people, and the trainer would often ask me questions like, “Who did you develop today, and how did you do it?” or, “What did you both learn?” He ended the huddle with, “What do you see as the next step of your own development?” Then we would have very open and honest communication, and set a plan for raising my own bar of knowledge and preparing me for all the obstacles and challenges that might arise.
As time went on, these discussions became less frequent as he confirmed that my skill was improving. My trainer was involving and engaging me with what he was taught years ago and passing this knowledge on to me, which was referred to as sharing our wisdom. We both knew he couldn’t hold my hand forever, so he transferred as much knowledge as possible and let us fail occasionally on purpose so we would learn.

There were many lessons. I learned to understand that failure leads to successes—I just had to be patient enough to see the greater purpose behind the lesson. I learned that frequent and honest communication with your team members gives you the opportunity to develop them and yourself simultaneously. I was encouraged to learn something about each one of my team members to help build mutual trust and respect. I continue to practice this even today.

PEOPLE DEVELOPMENT IN PERSPECTIVE

Pete Gritton, former Vice President of Human Resources, Toyota Engineering and Manufacturing, North America

I was the ninth American hired at TMMK and came on board in November of 1986 as an employee relations manager. I’d been in HR for about 15 years, and figured it was my job to convince these Japanese that they were in America now, and we do things differently here.

We started out by writing the policies. The process was very simple. We had a policy review meeting every Thursday evening at 7:00. My job was to bring in a policy recommendation and present it, talk through it, and hopefully get approval. My audience, by the way, were some of the smartest people I’d ever worked with.
I wanted to have a success on my first night, so I picked overtime pay. I was going to dazzle them with my presentation and get quick approval and then take on more challenging things later. Overtime pay was the most straightforward thing I could think of. I was proposing very basic things like time and a half for over 40 hours.

I presented my policy, and Nate, my boss, asked, “Why?” Now, I’d never actually thought about that, but I was an experienced human resource professional, so I started talking anyway. I explained that basically everybody does this.

“Ah, okay,” he said, “so we’re only going to do stuff that everybody does?”

I knew I was in trouble, but I started talking again and used a whole lot of words, and explained that our employees expected it, and if we didn’t, they’d be upset.

“Oh, okay,” said Nate, “so we’re only going to do things that our employees expect us to do? We won’t challenge them, or ask them to think or do things differently?”

This process went on for six weeks. Every week he would ask me why, and I would go back and investigate the whys. I was spending so much time on the whys that I never got a chance to change the policy at all. On the sixth week, Nate suddenly put up his hand and said, “Okay, we’ll do it,” and signed off on the policy that I had recommended the first week.

So the process wasn’t about the policy—it was about helping me understand two critical points. One was that Toyota has a unique business model that has been very successful, and everything has to be aligned with that. It may not always be what people expect, but this is what we are doing to drive success for both the company and the employees.

The second thing he was trying to teach me is that you can’t make assumptions and speculations at Toyota without doing your homework. “Well, this is normal practice” is not acceptable. We have to have fact-based decision making that has logic and facts and data involved in it. When we make conclusions about things
and recommend them, we need to confirm that it’s really well thought out, deeply researched, and the right fit for us.

This was one of those “Oh my gosh, what have I gotten myself into” kinds of moments. But it was also very exciting because it was really resonating with me, and when I thought about it, it all made perfect sense. I had just not been exposed to that sophisticated a level of thinking about the role of human resources in a company.

THE DUTY TO HELP OTHERS SUCCEED

I became manager of Powertrain through a series of promotions, from team leader to group leader to assistant manager of Engine Assembly and Machining, and then back to Powertrain Axle as manager. What I found was that the basic principles I applied in my daily work hadn’t changed one iota—the difference was that I was spending more and more of my time making other people successful.

There were always people to mentor me and coach me as a manager, and they were as eager for me to succeed as I was. In our system, my success was their most important measure. In turn, they knew that my success depended on my subordinates, so they taught me how to develop them. When I became manager of Powertrain, I was teaching people to develop their subordinates. It was a little like a pyramid system for developing better people!

As the story with Mr. Cho illustrates, developing people usually took precedence over particular situations, and we had to be reminded of this sometimes. I remember a situation where my trainer told me that a worker on the line was struggling with some personal issues, and that this was impacting his work.

“You should go and talk with him,” he said.
“Sorry, I can’t do that now,” I said, “I’ve got a severe problem in assembly to deal with.”

My trainer then asked, “What’s more important than developing your people?”

Message received. But that wasn’t the last time I had to be reminded, and I was often reminding my leadership team as well.

When I actually did go to respond to a severe incident on the line, the priority of developing people didn’t change. Instead of applying my Powertrain knowledge and saying, “Do this, and then this,” I would be coaching my assistant manager to coach the specialist to develop a strategy for fixing that problem. Once again, solving the problem is important, but so is engaging people in solving the problem themselves so they can someday replace the leaders that are coaching them.

Our development strategy was for every single person to move up two levels in the organization. After I had moved from production to HR, for example, I knew that if I hired an entry-level administrative assistant, I had to be thinking from day one what skills this worker would need to become a specialist. This meant I might have to rebalance people’s workload to make sure they got the range of experience that they would need later on, or include them in projects that weren’t directly relevant to their daily work. This required patience, and often putting minor problems on hold, but we constantly focused and refocused on this.

So essentially, I would spend my days trying to work myself out of a job. Of course, I knew that if I made others successful, that meant I was successful as well. Trust was a big factor here—I knew that Toyota was not the kind of company that would counsel me to teach others my job and then let me go because I was no longer needed. Unfortunately, some companies today do just that, tearing down their culture in the process.

I have to admit, however, that there was some tugging at the ego when people started to use their newly acquired skills to change the processes that I had created. I got a strong reminder
of this soon after I had retired and first went to TMMK as a visitor. When I got to my former work area, I noticed that managers I had helped move up had made a lot of changes to the processes I had put in place. “Wait a moment, that’s mine,” I thought. But then I realized that it was not mine, it was theirs. They were being super successful, and it was a great feeling to see that. And today, I have to admit that those processes, as I had initially developed them, wouldn’t survive today.

**MINE VERSUS OURS**

A key aspect to helping people move up is encouraging them to share what they know in the form of improved standards. This in a sense makes them dispensable in their current role, but at the same time, more valuable to the company because of the deeper knowledge and understanding they’ve acquired.

Few organizations think this way. I believe the base assumption in many situations is that when people are in a position, they will be there forever, and there’s no need for anybody else to know the details of how they get their job done. If they leave the company, well, we’ll deal with it then.

Of course, “then” is too late. I was at a plant not long ago for a client, and we were discussing a woman who had worked in payroll and HR for 36 years. She was very good at what she did, and had accumulated a great deal of what I call tribal knowledge—tricks of the trade that she used to do her job successfully. However, since she was in her seventies, there was a good chance she might want to retire soon, and that tribal knowledge would go out the door forever. I asked them what their plans were for that.

“Oh my gosh, we’d pay her more to stay,” was the answer.

I reminded them that money might not be the deciding factor for her, and challenged them to come up with ideas for capturing the tribal knowledge that this woman had accumulated.
Furthermore, if we can get this worker to a place where she’s learning new concepts and skills as opposed to applying the same old knowledge, we have a better chance of retaining her. As my trainer told me early on in my career, the minute you quit learning is the minute your value starts going down.

Now, the accumulation of tribal knowledge is a big problem in most organizations, and often, people have no desire to share it. If I view my coworkers as competitors, why would I want to show them something that would help them become as good as or better than me? This happens on an individual level, or on a larger scale, where sales won’t share their data with marketing, or manufacturing with R&D. This is how we get siloed bureaucracies where “the left hand doesn’t know what the right hand is doing.”

I believe that tribal knowledge actually harms the company for several reasons. First of all, it’s not sustainable, as the example with the woman in payroll shows. Secondly, because it’s not out there to be challenged and improved, it tends to create an inflexible “this is the way we do things around here” mindset.

Worst of all, tribal knowledge perpetuates a culture where people don’t work as a team toward common goals. Where openly shared knowledge brings people together, tribal knowledge creates barriers.

Therefore, we must harvest our tribal knowledge by encouraging people to share their ideas, and when these are proven valid, incorporate them into our standards. That way, the full power of these “knacks, experiences, and feels” gets fully realized throughout the organization and passed on to the next generation.

I internalized this fairly early on, mainly because of the way I was treated by the company. When I saw how generous my trainers were in sharing their knowledge and ideas, it was natural to follow suit. So as a leader, I never hesitated to share my knowledge, whether helping a subordinate get to my level of
knowledge, giving another department a hand with a problem, or sharing successful practices with suppliers.

Of course, in an environment that encourages the sharing of ideas, we also need clear guidelines for evaluating and improving them. In addition to developing people, we need to make sure that they understand how to develop their ideas according to the needs of the company and the company’s stakeholders. We’ll look at that in the next chapter.