

I think the opportunity is to be wrong!



Interview by Robin Hamilton

Mike Rother is an engineer, researcher, teacher and speaker on the subjects of management, leadership, improvement, adaptiveness and change in human organizations. He is co-author of two ground breaking LEI workbooks, *Learning to See* and *Creating Continuous Flow*. His latest book is *Toyota Kata*.



Mike Rother

“ We learn from experiments that fail. Every scientist knows this... We think – that’s negative – that’s a mistake. But that’s actually how we learn.”

Current Condition



Obstacles

Target Condition

Challenge

Vision

THE IMPROVEMENT KATA

If we can learn to enjoy uncertainty and even thrive in it, then great things happen.

This is essentially how we work with the Improvement Kata. And it’s a delight...

When you see people’s eyes light up and they say “Oh my gosh, I’m doing things I never thought possible before and I’m less scared about things that are uncertain,” you see the potential in the world for whatever it is we want to achieve. But we have to manage ourselves a little differently. We’re learning some pretty interesting stuff, about how we humans think and manage.

Q One of the exciting areas is the potential to embed a way of thinking into an organization using some of the recent thinking from neuroscience and sociology. Was that fascinating work?

A Yeah, we’re thinking differently about how we change our behavior and our thinking. I think it’s time. We’ve spent fifteen years in the lean community trying to make change happen simply by explaining a different way of doing things.

The behavior pattern that we found at Toyota and wrote about in the book, *Toyota Kata*, carries all the way through the Toyota organization. It’s used from top to bottom. It’s a kind of fractal structure, if you will. There is kind of initial reaction to it that says “Oh, this is just for small, front-line improvements,” but that is actually not the case. It’s really for any objective you’re trying to achieve.

Now the content will vary. What people are working on at different locations, areas and levels within the organization is totally different. The higher you go in the organization, the more you’re looking at strategic issues, but the way of operating, the way of thinking and acting on it stays about the same.

Q It’s certainly very exciting when you get the opportunity to be right.

A I think the opportunity is to be wrong! We learn from experiments that fail. Every scientist knows this. If we predict something is going to happen and something else happens, we think – that’s negative – that was a mistake. We think that we have made a mistake, but in fact, this is actually how we learn.

Of course, we should design our experiments so that when there is a failure and the prediction isn’t true, it doesn’t cost us.

Let me give you an example that’s kind of interesting: We’ve learned that the neurons in our brain, the dopamine neurons at least, work on predicting errors...

...that is, the neurons will actually make a prediction or make an expectation of what will happen. The neuron begins to act and when it happens differently than expected, the neuron adjusts.

Let’s take that to a concrete level. Just stand up for a minute in your office and take one step. A thousand and one things happen while you’re taking that step that need to be compensated for. The only way to figure that out is that when the neuron makes a prediction—that is wrong, it adjusts. Interestingly, I think Toyota has figured this out.

You may leave the meeting with an action plan and everybody is saying, “Yeah!” That’s what we’re going to do — and I now know

which action items are mine, let’s go and implement this.” If all this happens before you even took a step, all your neurons decided on exactly the signal they’re going to send, *at what point do you end up falling over?* It would be the same as the baseball coach saying at the beginning of the game, at the top of the second inning. “On the first pitch I want you all to go out to right field and get ready to catch the pop fly.” *That team will fall over.* That team will not work.

Q What was it you liked about the video your colleague Oscar produced? <http://vimeo.com/channels/improvementkata/71882501>

A I think he visually showed in a compact fashion how to navigate this grey zone.

Q Part of that is this iterative process of moving step-by-step through the grey zone, is that right?

A Yes, but always working toward a target condition.

Q How far off does that target condition need to be? Can it be any distance?

A Typically it’s one week to three months out. The challenge, that’s the bigger goal that’s further out. That typically is anywhere from six months to three years out. And then you would have a series of target conditions leading toward that further-out challenge you’re trying to reach.

If you and I were in an emergency situation – let’s say we are in a war and the over-arching goal is to win France – we may have a goal of making it to such-and-such a point inside the country. In this case we’d make a plan, but everybody involved doesn’t assume that that plan is going to be it.

Every day we would huddle and we’d say, “Wow, where the heck are we now?” Ok, what’s happened. What did we learn? How do we need to adjust? Now let’s make that adjustment and go forward. I think what actually happens is that in peace time, the tension is out of it. So we start to get into meeting rooms and put our feet up on the table and go, “hey, what do you think we ought to do?... Let’s make a plan and we’ll implement that plan.”

I’m not promoting creating a crisis. I’m talking about teaching a way of working that is good crisis behavior, that you can use in any situation.