From the book shelf

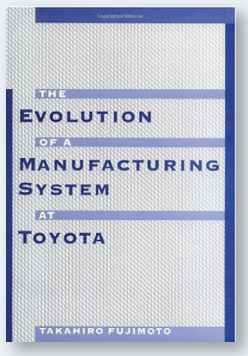
The evolution of a manufacturing system at Toyota by Takahiro Fujimoto

The "Toyota Bookshelf" certainly contains a number of worthwhile titles, but given my article about faults at Toyota, this book seemed to be particularly worthwhile.

Evolution of Manufacturing Systems at Toyota gets my vote for being the most insightful, even if it is somewhat dry. The take home message here comes when Fujimoto describes how Toyota has responded to change. This book tries to highlight the role of system processes that aren't deliberately planned.

It builds on the author's past works on functional analysis of planned manufacturing systems in the automobile industry and Toyota in particular.

Fujimoto points out that there is also an evolutionary approach – one that evolves as it encounters unplanned change or circumstances. He points out that manufacturing systems aren't merely a product of deliberately planning. This is particularly important since we are often left with the impression that the Toyota Way is somehow completely planned out ahead of time.



It's important to note that some of Toyota's successful routines have originated unintentionally; that they were the result of dealing with unanticipated events.

This book gives us general idea of how a company's organizational capabilities were born and helps us understand particularly how Toyota has created its style of manufacturing system and capabilities.

To quote Ohno, father of TPS, Toyota remains focused on reducing waste and increasing flow. New and recent challenges will spur Toyota on to a new standard of work, even if the change was unexpected. This reliance on standard work and kaizen to reduce waste and increase flow is at the heart of Toyota.

— Dr. Timothy Hill

Question from the floor

QUESTION: We're a custom fabrication shop. We've brought some Lean tools in to the manufacturing floor and we've seen some good progress. We're still shipping product late. Where else should we apply Lean?

ANSWER: Congratulations on getting Lean started and on seeing good results. Be sure to maintain those successes. To answer your question, think about the office.

I tell people that half of the time they're late is because of the office side of their business. It's relatively easy to see waste, impediments to flow or to do a 5S on the manufacturing floor. It's not that it's really harder to see waste in the office, but people aren't used to looking there.

What's worse is that waste in the office can be more costly than waste on the floor. When a large invoice is not collected, a sales proposal is delivered late, or a quote contains errors, these wastes translate into lost business and chip away at the bottom line. Millions of dollars can be at stake.

You're often looking at the flow of information when you do a value stream map for the office. An information flow can cut across more fiefdoms than a materials flow. Get a wide range of people involved in doing the information VSM, including people from the floor.

Bear in mind that front office people are often unaccustomed to being held to the same process standards as shop floor employees. There are almost always re-dos. Information travels back and forth instead of flowing smoothly.

Do the VSM for the office and administrative functions. You'll be pleasantly surprised when you start to deliver on your A3 problem solving!

— Dr. Timothy Hill

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