

September Sponsor



CONSULTING & EDUCATION

Learn how our comprehensive, integrated BPM methodology can work for your organization.

BPTrends Associates

EXPAND YOUR KNOWLEDGE

LEARN MORE ▶

BPM COURSES & CERTIFICATE PROGRAMS

- At one of our locations, or
- Onsite at your location – with your team

Corporate Education Group

+1.978.649.8200

BPTrends Associates

BPM TRAINING delivered in **AUSTRALIA and NEW ZEALAND** by **leonardo consulting**

Once More: Lean, the Toyota Production System, Six Sigma, and BPM

I am frequently asked how Lean or Six Sigma fit with the Business Process Management methodology that I frequently write about. I usually respond that, in my opinion, Lean and Six Sigma are focused on specific sets of tools and techniques designed to accomplish specific types of tasks. BPM, at its best, is a comprehensive approach to improving how organizations create value for customers. In this sense, BPM is focused on coordinating a wide variety of process improvement tools and techniques, determining when, where and how to best apply each tool or technique and where multiple tools and techniques should be used in combination. Thus, for example, a BPM manager must not only be concerned with Lean or Six Sigma tools and techniques, but must also be concerned with process maturity, business rules, process automation, human performance improvement and change management.

Let's consider a specific example - the relationship of Lean and the Toyota Production System. In the late 1980s, Womack, Jones and Roos visited Japan to find out why the Japanese auto industry was performing so much better than the US auto industry. They started with the assumption that it was a result of Japan's quality control systems that the Japanese had learned from Edwards Deming in the immediate aftermath of World War II. What they discovered, and what they reported in their book, *The Machine that Changed World: The Story of Lean Production* (Macmillan, 1990) however, was that there was a big disparity in performance between most auto companies in Japan, all of whom were using quality control, and Toyota, which was at least an order of magnitude ahead of the rest. What Toyota was practicing is now widely known as the Toyota Production System (TPS). To simplify things, however, Womack, Jones and Roos, coined the term "Lean" and put most of the emphasis in their first book on how Toyota focused on eliminating waste throughout its process flows. Almost all early books about Lean, written in the US, emphasized the elimination of waste, and US business executives can be forgiven if they initially thought of Lean as a set of techniques for eliminating waste.

In fact, Toyota was as good as it was because it used a wide variety of practices which are summed up in the TPS. For example, every Toyota employee knows exactly how to perform his/her job. If an employee completes a task in a minute or two less than the others doing the same task, the team gathers around the worker to see what he or she did. Either the employee has skipped something – in which case training is defective and the team wants to correct that – or the employee has made a break through and discovered a better way to do the task, in which case the team wants to understand and modify the task requirements. This involvement and commitment by line employees throughout Toyota, is very different from simply focusing on waste.

Let's look at how this relates to CMMI's Capability Maturity Model represented below in Figure 1.



REGISTER TODAY!
[CLICK HERE](#)

bbc BUILDING BUSINESS CAPABILITY
OCT 28 - NOV 2, 2012
FORT LAUDERDALE, FL

NEW Business Process Manifesto!

Discover how *effective business analysis* can *benefit your business*.

iiea International Institute of Business Analysis™

Business Process Change
A Guide for Business Managers and BPM and Six Sigma Professionals
Second Edition
Paul Harmon
Foreword by Neil Armstrong

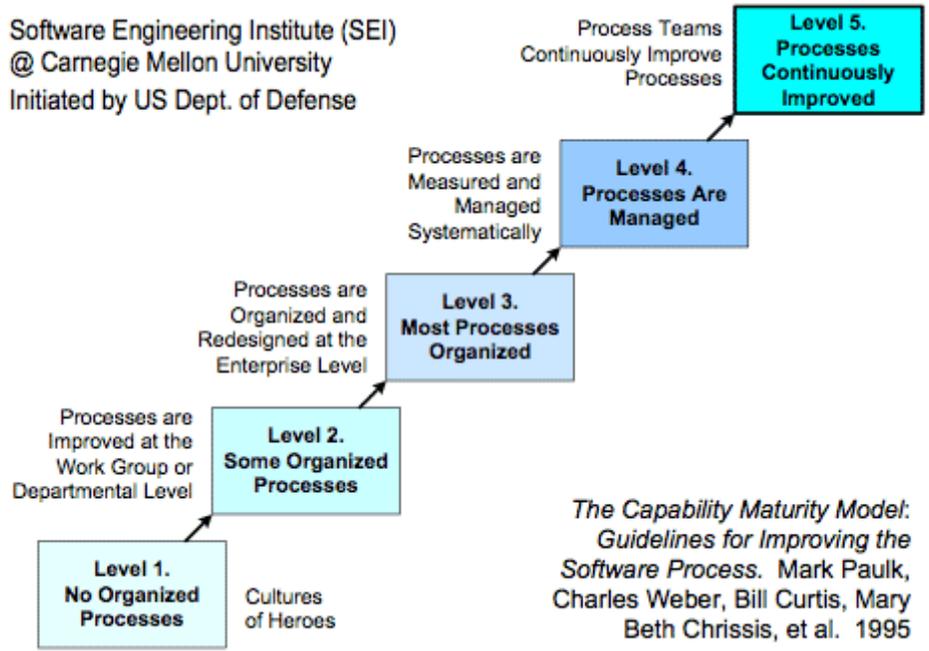


Figure 1. The SEI Capability Maturity Model

The essence of the Maturity Model is an assumption that organizations need to acquire knowledge and skills to become good at using process techniques. Process maturity takes years to develop and organizations go through phases, starting by defining and improving a few processes and gradually adding other capabilities – including the ability to create enterprise process models, to measure process results, to manage business processes, and to use teams to continuously improve their processes.

Toyota is a CMMI Level 5 organization. The organization started well before World War II and spent years mastering the various capabilities that they employ. Today, a process focus permeates the organization and everyone from the CEO to the line workers are quick to talk about the role of process in the Toyota system.

Unfortunately, Womack, Jones and Roos didn't stress this fact, and many US organizations launched Lean programs, as if by eliminating waste from some process flows they could make their organizations as efficient and effective as Toyota. In fact, most organizations can use Lean techniques for eliminating waste. Most organizations are at Level 2 on the CMMI maturity scale, and techniques for making selected processes more efficient are appropriate at that level of maturity. On the other hand, few organizations can quickly adopt A3 – a Toyota approach to communicating process problems among process managers – or deploy employee teams that focus on perfection the way Toyota's employee teams do.

Long after Womack, Jones and Roos wrote their first book, we now have books by the people who originated Lean – Shingo and Ohno – and, much more useful, we have books that describe the Toyota Production System in considerable detail. (One of the best is Jeffrey Liker and Michael Hoseus's book, *Toyota Culture: The Heart and Soul of the Toyota Way* (McGraw Hill 2008), which describes the problems of installing the TPS in factories in the US.) What the various Toyota books describe is just how complicated and integrated a Level 5 BPM Maturity is, and how difficult it is to achieve Level 5 status.

Way back in the 1980s, Michael Porter recommended that organizations structure integrated value chains for competitive advantage. Any organization could make one innovation, Porter argued, but their competitors would soon copy the innovation. Real competitive advantage, Porter argued, comes from having a highly integrated set of activities that perform very well together – a highly integrated, large scale value chain is very hard to duplicate. Think of how many years US car companies have struggled to match Toyota's results, with only limited success!

This is not to play down the work of Womack, Jones and Roos. They were pioneers who brought basic Lean ideas to the US, and they have worked hard ever since to promote Lean practices. It is important, however, to understand that they introduced techniques without the context required to fully understand what would be required to create an organization like Toyota. When Toyota sets up a new factory in the US, they bring experienced supervisors from Japan and expect to keep them in the US for 3-4 years, just to get the TPS underway in a US factory. And, they start by knowing exactly what they want to achieve.

The difference between a specific approach, like Lean or like Six Sigma, and a broad perspective that focuses on what it takes to systematically evolve and support a business process system in an organization, is the difference between Lean or Six Sigma and BPM. BPM consciously tries to take a broad overview and to think hard about what it takes to actually turn an organization into a mature process-centric organization. BPM is not simply about changing how specific activities function; its about changing how the whole organization works.

Some organizations will start by eliminating waste from process flows. Others may start by modeling customer processes and determining how they interact with an organization's internal process. Others may begin by defining business rules, or by automating specific activities. Still others will begin by developing data on activities to determine how many errors are made per thousand outputs. In fact, most organizations will have several process initiatives going on at the same time, whether they are all recognized as process activities or not. To gain real momentum, an organization needs to pull all its process efforts together and to coordinate them. Lean isn't enough. Six Sigma isn't enough. Balanced Scorecard or Business Rules or software automation aren't enough. Any can serve as a good starting point, but an organization needs an approach that coordinates multiple process initiatives with a good sense of where one is and where one wants to go to achieve true performance improvement . BPM seeks to use all of the tools and techniques that have been developed in the past two decades, and to coordinate them to provide the best results.

Till next time,

Paul Harmon

NOTE: History always depends somewhat on one's perspective. It is important to understand that my own background is in process redesign, as defined by Rummler and Hammer. Thus, I tend to begin with a broad view of process and drill down to specific problems. Others, in the quality control, Lean or Six Sigma traditions are more inclined to start with specific problems and work to incrementally improve process.

[:: email us](#)
[:: Visit BPTrends](#)

BPTrends LinkedIn Discussion Group

We created a BPTrends Discussion Group on LinkedIn to allow our members, readers and friends to freely exchange ideas on a wide variety of BPM related topics. We encourage you to initiate a new discussion on this publication, or on other BPM related topics of interest to you, or to contribute to existing discussions. Go to LinkedIn and join the [BPTrends Discussion Group](#).