



# Get LEAN or Get Left Behind



BY GARRETT J. SULLIVAN

**Lean Construction:** the relentless pursuit of a perfect process through waste elimination. This concept was first introduced many years ago by Toyota (and became known as the “Toyota Way”), and quickly spread throughout manufacturing and a number of other industries. It is now a global business phenomenon. Not surprisingly, contractors quickly saw the benefits of Lean Construction on their jobsites—and their profit margins.

There is one distinct difference between Lean Construction and the Toyota Way. While the Toyota Way focused solely on manufacturing, Lean Construction involves everyone in the process, from the owner and A/E designer to the facility manager and the end user. Simply stated, Lean Construction helps you achieve the following objectives:

- keep work flowing so that crews are always productively installing work;
- reduce inventory of material and tools; and
- reduce costs

## The Concept

As the construction industry’s competition continues to heat up, you are responsible for deploying a Lean Construction throughout your company. Are you vigorously practicing this in your company

today? If so, you’re on the leading edge of industry. Revisit your structure to ensure it’s as strong as it can be. If you’re not employing Lean Construction, you are at a distinct disadvantage. Learn about the Lean Construction philosophy and allow it to bring your organization to maximum effectiveness.

Where should you start? Weed out waste. Follow these five steps to identify and curtail inefficiencies in your organization:

**Value:** Identify areas that increase value to a client’s objectives, ensuring full customer satisfaction and beyond. For example, suggesting to the owner the use of a software program from the start of design through construction that can continue to be used in the lifecycle management of the building equipment management.

**Value Stream:** Identify the vital steps that facilitate an effective production or service line workflow, and also unnecessary steps that result in waste.

**Flow:** Eliminate steps in the workflow that potentially cause interruption, backflow, delay or destruction.

**Pull:** Supply only upon demand. Produce only when the customer pulls, so that no resources are wasted.

**Perfection:** Strive for perfection by continually seeking to remove successive layers of waste.

Lean Construction utilizes many standard methods, such as Critical Path Method (CPM) and Work Breakdown Structure (WBS), but it features three unique tools:

**Lean Project Delivery System:** A method that enables faster job completion, lower costs, less change orders and higher quality.

**Target Value Design:** A fundamental shift in thinking at the Design/Estimate/Redesign level from expected cost to target costs and no one person has all the knowledge.

**Last Planner System:** A method of promoting conversation, before issues become critical, between trade foremen and site-management at appropriate levels of detail.

I am certain that completing construction projects faster—at lower costs and with less change orders—will continue to be the norm for our industry. Isn’t this the time to sharpen your management saw by educating yourself on Lean Construction in order to stay ahead of the competition?

Lean Construction, coupled with Building Information Modeling (BIM), will be essential to survive in the not-too-distant future. Technology is revolutionizing the construction industry at a blistering pace. The use of BIM, which is primarily used by the larger contractors in Hawaii, is on fire on the Mainland. This is quickly becoming the norm in the building industry. It is my opinion that this is another area that merits attention by every construction leader. Contractors who fail to take the time to understand and employ Lean Construction, as well as tools such as BIM, will be doing so at their own peril. **BI**

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