



Thanks to Greg Howell for his insightful and entertaining update. Greg and I know about the same number of people but (with all due respect to my friends), he knows lots of really interesting people.

Two things we need to mention for sure. The Construction Users Roundtable Summit in St. Louis next Wednesday is an absolute must meeting. Thanks to Greg Sizemore and Donna Janssens of CURT and Al Schwarzkopf of Merck and CURT for keeping their collective shoulder to the wheel of lean construction and design. If you attend no meeting other than our Congress, this is the one that should get your attention. This is the third in our Owner initiative—each building on the previous one. If you're interested in have Owner's interested in you, then you should be interested in this (interesting).

Second, we're following the Summit with the 9th Annual Lean Design Forum, co-sponsored by our friends and partners AIA and P2SL. For more information and a full agenda, see <http://network.aia.org/CenterforIntegratedPractice/Events/EventDescription/?CalendarEventKey=7e7d00c7-f37d-4e49-a02b-7bdcd70786fb>. It promises to be an important move forward in understanding the interplay of lean with design. Thanks to Markku Allison and his whole committee for making it happen.

Part of the week in St. Louis is the first meeting of our new Board of Directors. Many of you may not realize that we have added Jeff Liker, author of the *Toyota Way* and several other lean books as our "outside" lean expert. I asked Jeff to share his connections with lean in construction and design and his aspirations for his board position. I think you'll be as moved to hear the following as I was to receive it:

I followed the Lean Construction Institute a little as it first developed at University of California, Berkley out of Civil Engineering. My impression was that it was heavily focused on project management software and missing the philosophy of the Toyota Way. Over time I have peeked in and learned it has come a long way as a movement and is more holistically focused on people, process improvement, and results. I am speaking to the San Diego group July 17. I agreed to do this because I was impressed by the energy level and maturation in philosophy. So it was an honor to be asked to be on the board of directors of the overall institute.

My experience with lean in construction has mostly come from work we did with ship building over the years. A submarine, aircraft carrier, and container carrier is a residence for the people spending months or over one year at sea. The large container vessels have bedrooms, hospitals, cafeterias, recreation rooms, engine rooms, pilot houses, multiple levels and are like large buildings on the sea.



We found that the basic principles of lean we had learned in automotive were the same for ship building. Part of my work brought me to some of the best shipyards in Japan. They were far more systematic and systemic in the overall process than the American companies. They started by designing the ship as a series of modules. The steel modules that were called "blocks" and then outfitted with electrical wires, plumbing, and HVAC were designed to have similar work content so that they could flow down a moving line for welding and then assembly. Some of the larger parts like the pilot's room were built by suppliers and then brought by sea just-in-time to be assembled onto the ship. Construction takes place in dry docks and that construction process created the Takt that then pulled all materials to dry dock as they were needed. For example if they had two dry docks the ships there was be in a certain phase of construction and then come out onto the water for testing and some final construction. When one ship left dry dock another was started which created the pull for all of the modules. Final work on the ship was done by zone and all the trades worked as a team to complete each section to a schedule and then move to the next section.

We worked with both design and manufacture in the American companies to bring them in the direction of lean shipbuilding. It was baby steps but progress. We also worked on overhaul and repair and that story is told in The Toyota Way to Continuous Improvement.

I look forward to working with the board of directors, learning more about lean construction as it is being practiced, and what I might contribute from my study of the Toyota Way. The Toyota Way is a values-driven approach to an enterprise which starts with a philosophy of contributing to customers and society, develops lean value streams that deliver high value to the customer with minimal waste, gives the people who are responsible for the work responsibility for improvement of how they do the work to achieve challenging targets, and uses as the driver of improvement and organizational learning a disciplined problem solving process based on Plan-Do-Check-Act. I am curious to learn how much of lean construction has shifted to developing people and a culture of continuous improvement which is the real power of lean.

I hope to introduce you to other new Board members in the same way in this space over the next few months. I can confidently say that we've filled the Board with folks like Jeff Liker—erudite, articulate and great champions of the work we've undertaken to transform the industry. With advocates like Jeff, what can't we achieve?

Hope to see you all in St. Louis the week of the 13th. Thanks for all you do.