Learning Lean via Simulated Work Environment

It is proven that one of the best methods of learning is doing. And that’s exactly what a group of 18 Navistar employees did recently. Navistar partner Caterpillar allowed Navistar employees to experience a simulated work environment (SWE) in its production facility in Aurora, Ill. “This SWE is a three-quarter scale manufacturing process that comprises a closed loop conveyor,” explained Mike Brewer of FTE Performance, a company that is helping Navistar accelerate its lean transformation. “There are 16 workstations where operators construct a product – in this case, a wooden cab – using actual power tools.”

Three Navistar teams were asked to assemble a cab while learning how to identify waste, flow issues, and waiting time among other various issues. The teams worked together to improve processes, eliminate waste, reduce wait time, and go faster.

Through the experience, participants apply a range of lean principles including:

- Performing safety checks
- Following Standardized Work lists
- Rotating between jobs
- Brainstorming and implementing continuous improvement ideas
- Measuring and tracking performance using Metric Display Boards

“The experience drove home how we can take manufacturing processes and utilize the thinking, not only in manufacturing, but in our daily work and home environment,” said Michele Calbi, vice president, Strategic Initiatives. Following the SWE experience, participants provided this feedback:

- "My first goal will be to break down all of our processes and try to understand where we can make improvements in eliminating time-consuming wasteful actions. By understanding how we work and engaging my team I think we can establish a more lean approach to our area of the business."
- "I will also look at some in-house training and interaction with other groups to help my team better understand their roles within the company, and how what we do affects the business."
- "Listening to my team and encouraging them to voice their suggestions/opinions as to how we can better manage our business should increase their participation as valuable team members."

In addition, participants are kicking off new lean-related processes and tools:

- Operational Process reviews
- Lean training for the Global Parts Product, Pricing and Operation including 5S, 8 types of waste, and Kaizen/Continuous Improvement (coming in this spring)

SWE Participants included:

- Jan Allman
- Tom Clevinger
- Michael Goetter
- Rosa M Hicks
- Matthew Hubbard
- Lisa Humphrey
- Heather Jarvis
- David L Juengel
- Gail L Krolik
- Greg Leverette
- Mohammad S Mahmood
- Edina Mahmutovich
- Ramon Mella
- Laura Mummert
- Fabiola Reich
- Ruben D Varela
Loice Wilhoite

Navistar is scheduling additional SWE events to continue the Lean learning experience.

For additional photos, click here.