

‘Smart Operations’ New Key to Manufacturing Excellence

written by Lauri Moon | August 30, 2016

Smart operations use pervasive data collection, advanced analytics, technology investments and deeper collaboration with partners to prepare their value streams for the next industrial revolution.

(MH&L - Staff: 8-15-16) Over the next three years, a growing number of successful manufacturers will enhance their manufacturing processes with smart operations, a broader supply chain strategy that extends beyond the factory walls, according a UPS report, *The Rise of Smart Operations: Reaching New Levels of Operational Excellence*.

Smart operations use pervasive data collection, advanced analytics, technology investments and deeper collaboration with partners.

Lean and Six Sigma methods remain the standard for manufacturers, but continuous improvement has a downside, according to the report. Overly optimized processes can become inflexible, leaving the business unable to adjust rapidly to disruptions in the supply chain and changing customer demand.

However smart operations are better positioned than others to compete and in today's fluctuating markets because increased visibility of inventory location and transportation allow companies to better analyze and quickly manage changes to their supply chain both upstream and downstream of the factory, the report says.

"Smart operations are crucial to the long-term success of manufacturing companies," said Derrick Johnson, vice president of marketing at UPS. "The strategy enables manufacturers with limited resources to serve their increasingly demanding customers more flexibly."

The report, which was done with IDC research firm, assessed how far along companies are in implementing smart operations. The report showed that 53% of companies were at a relatively low level of overall maturity. Still, 47% of the survey

respondents said their company's progress toward smart operations exceeded that of their peers.

There are five areas essential to smart operations:

- Connected products: Increasingly, industrial manufacturers sell products that are connected in the cloud. This connectivity allows companies to offer better maintenance service, which sometimes even generates new revenue streams.
- Connected assets: Manufacturers with connected assets are better able to monitor their operations to anticipate and even correct problems before they occur.
- Supply chain decision making: The data and analytic tools used in smart operations help manufacturers resolve issues in the supply chain faster.
- Buy-side value chain: Smart operations allow manufacturers to automate purchasing with their vendors and manage the inbound transportation of those supplies.
- Sell-side value chain: Smart operations allow manufacturers to change transportation modes and speeds as well as destinations based on shifting customer demand.