

TRANSFORM YOUR

Plants are embracing digital solutions to overcome real-life transportation obstacles and growing lead times for parts

by Sheila Kennedy, **CMRP, Contributing Editor**

When the prolonged period of

upheaval in the global supply chain landscape began in early 2020, it brought tried-and-true, and even decently functional, industrial practices into question. One that is under a great deal of scrutiny now is the idea of being "just in time" (JIT) in inventory management and manufacturing.

The methodology aims to squeeze the waste out of workflows and the bottom line, creating greater efficiency, agility, sustainability, and profitability. But if we

learned anything from the pandemic, it's that being too lean can prove risky in unprecedented times.

That's not to say we should not strive for a highly efficient industrial supply chain ecosystem. Rather, now is the best time to revisit and fortify existing industry best practices. The fundamentals of JIT, Lean, predictive maintenance, strategic sourcing, and the like, remain solid. Nimble businesses are applying them using more modern, resilient, and digitalized approaches. Creative thinkers are searching for new opportunities to innovate brand new best practices.

To help industry achieve its supply chain goals and adapt better to an unpredictable future, solution providers are studying the root causes and developing more-robust methods to prevent or mitigate major supply chain disruptions such as these:

- Unavailable inventory
- Equipment failure
- Excessive costs
- Performance gaps
- Inadequate agility

DISRUPTIVE EVENT: UNAVAILABLE INVENTORY

Liquid nitrogen is a key resource in the production processes of a leading food processor/grower cooperative, but a bullwhip effect of the COVID pandemic left the organization without a reliable supply. "Former suppliers had no availability, leaving the company with no alternative sources, no functional equivalents, and no way to meet the demand of their customers for their products," says Glenn Pierce, VP of Operations at SDI (www.sdi.com).

SDI, a Supply Chain as-a-Service (SCaaS) provider, helped augment and enhance the cooperative's indirect materials and MRO supply chain, and together the two companies collaborated on a "pivot-to-adapt" response to ensure availability of the critical resource.

Lessons for industry. The COVID-19 pandemic highlighted the world's lack of readiness to manage through a global supply chain crisis and the need for digital supply chain management strategies that reduce our reliance on off-shore suppliers for crucial parts, components, and materials, notes Pierce. And when shortages because of lockdowns and continued uncertainty were followed by a surge in product demand as the economy started to bounce back, the supply chain was not able to meet the demand.

"Disruptions in production, transportation, and logistics highlighted the importance of redundant supply sources, manufacturing agility, and data accessibility. Digitization and automation of both the direct and indirect supply chain is now a must," observes Pierce.

To help ease the pain, SDI recently announced that its Supply Chain Risk Report with actionable insights and recommendations is now available to maintenance and facilities management (FM) professionals, whether they work with SDI or not, to help identify solutions that can alleviate challenges and improve overall supply chain performance.

A catastrophic failure on a gearbox on a concrete product production line occurred late one evening at the height of the pandemic, when the global supply chain for building materials was constrained and material prices were very

Supply chain disruption Forecasting production/ scheduling Time-to-market Unplanned production downtime Compliance & regulatory hurdles Quality control/waste Adopting new technology Capacity constraints Geographical constraints Workforce skills gap/upskilling Workforce shortages Maintaining a safe work environment Meeting corporate sustainability goals Remote work environments High raw material costs Market competition

The December 2021 Machine Maintenance & Reliability Industry Survey from Plant Services and Augury found that both corporate and plant respondents identify supply chain disruptions as the top challenge in their operation today.

Additionally, the company is opening up access to its 24/7 Remote Buy Desk. Normally provided as part of a broader as-a-service offering, the Buy Desk can now be used on demand by facilities managers and plant maintenance teams that need firefighting assistance now to get their plants or assets back up and running.

DISRUPTIVE EVENT: EQUIPMENT FAILURE

