

Post-Pandemic Supply Chains: A Prognosis from Johnson & Johnson

How a global manufacturer has learned some vital lessons about managing uncertainty and planning for the future



[ken cottrill](#)

Follow

Apr 1 · 4 min read

As the recovery from the Covid-19 pandemic progresses, the lessons learned from the crisis and the implications for future supply chains become clearer.

Healthcare company Johnson & Johnson has been on the front lines both as a global manufacturer that has had to manage the uncertainties of the pandemic, and latterly, as a producer of a Covid-19 vaccine.

The MIT Center for Transportation & Logistics interviewed Meri Stevens, Worldwide Vice President of Supply Chain, Consumer Health and Deliver at Johnson & Johnson, about her company's pandemic experiences.

Putting the crisis to work

For most companies, one of the most important lessons to come out of the pandemic is that the global crisis accelerated many of the trends that were underway before the coronavirus erupted. This phenomenon is described in the book [*The New \(Ab\) Normal: Reshaping Business and Supply Chain Strategy Beyond Covid-19*](#) by MIT CTL Director Prof. Yossi Sheffi.

Stevens agrees that the pandemic provided a burning platform for many initiatives at Johnson & Johnson. A notable example is that it pushed some innovations from the experimental to the implementation phase, she says.

Automating the analysis of order patterns is an example. “We want to look at anomalies: things that are not supposed to be happening,” she says. By becoming more adept at spotting anomalous ordering behavior, the company can address the root causes quicker, ultimately in real time. The volatility created by the pandemic provided a wealth of data on these out-of-the-ordinary events.

Similarly, the pandemic accelerated the shift towards digital transformation in the supply chain. Johnson & Johnson’s multi-year investment in digital “has been the hallmark of our transformation over the last five or six years,” says Stevens.

The program has two distinct pieces. In the consumer-to-cash cycle, the company has focused on the consumer insights it can glean in the ordering process all the way through to invoicing and cash receivables.

The second thread concerns the sensing and tracking of physical entities in the supply chain, starting with the patient or consumer and reaching back to raw materials sourcing. The emphasis is on improving supply chain transparency and visibility. “Really being able to monitor in real time the flight path of our products,” Stevens says, and leveraging this data in key areas such as the monitoring of product temperature gradients.

Carrying the lessons forward

Having harnessed the pandemic to speed up the introduction of critical innovations in the supply chain, where will this momentum continue over the next five years or so?

Digital transformation is one area where the changes will continue to gain ground. Says Stevens, “our investments in digital and intelligent automation will be crucial. The more we can predict outcomes the more effective and agile we can be.”

An important lesson the company took from the pandemic it will use going forward is how to handle “wild” swings in demand. For example, in the second quarter of 2020, the Johnson & Johnson

medical device business faced a dramatic drop off in the number of surgeries performed around the world. The decline surpassed industry predictions. Subsequently, the number of surgeries surged back much faster than anticipated.

The experience has provided some valuable insights. For example, “how to make sure that you’re always positioned to sense when demand is going to increase and be able to react efficiently and effectively, so you don’t create waste in the system,” says Stevens.

Understanding the dynamics of these demand/supply shifts and sensing the levels of resources needed to meet customer needs back to raw materials suppliers “is the crucial element we are thinking about.” The “Holy Grail” is “knowing what the consumer is going to want where and when,” she says.

In parallel, the company is focused on finding ways to run its production lines at maximum efficiency. This effort is helped by the falling cost of sensing technology, which enables manufacturers to keep a close eye on production lines to achieve the best yields “without having to do as much offline testing,” she says.

As the competitive environment moves beyond the extreme volatility created by the pandemic, what skills will supply chain practitioners need to excel in a post-pandemic world?

Technical skills in critical areas such as data science and analytics will continue to be important, Stevens believes. As she notes, identifying and resolving problems is at the heart of supply chain management.

In addition, practitioners need to be resilient; to endure setbacks and recover quickly. In an ideal world supply chains unfailingly deliver perfect products on time and at zero cost. In the real world this is not possible, “so we don’t really have wins, we only have a lack of loss,” Stevens says. Consequently, professionals must be able to perform at the highest levels in adversity.

This article is based on the [SCALE Speaker Series event](#) Meri Stevens of Johnson & Johnson in Conversation with Yossi Sheffi, held on March 17, 2021.