

## Enduring lessons from the COVID-19 pandemic

By Yossi Sheffi



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### Common lessons

Flex helps enterprises to design and build products, and as such, operates in a business-to-business environment. New Balance is a manufacturer of athletic footwear and fitness apparel, and hence, is a consumer-facing enterprise. These differences give rise to different perspectives on the pandemic, yet the lessons learned by Torrel and Wheeler should resonate with most companies.

**Speeding up digitalization.** The digitalization of supply chains was underway before the coronavirus erupted in late 2019, but the pandemic accelerated this trend and illuminated how companies can harness the digital transformation of supply chains.

Torrel notes that as the disruptions reverberated through supply chains, practitioners were required to make decisions on the basis of imperfect information. This challenge “validated the investments that Flex has made over the past years in our digitalization tools,” she says. In particular, the tools helped the company make quick decisions when handling the daily challenges of managing the pandemic.

A prime example is Flex’s Pulse system that provides real-time visibility into the company’s global supply chain. Team members are able to access the system via their PCs or through one of nine Pulse Centers around the world featuring wall-length screens. While the Pulse system has been evolving since it was introduced in 2015, the pandemic added a new dimension to

As companies recover from the COVID-19 pandemic, more attention is being paid to the lessons learned from the global crisis. The MIT Center for Transportation & Logistics asked two leaders, Lynn Torrel, the chief procurement officer and supply chain officer at Flex, and Dave Wheeler, the chief operating officer at New Balance, to relate their pandemic experiences. The executives learned much about managing supply chains in extreme adversity, and how such a crisis requires companies to be innovative.

this evolutionary track. An example, says Torrel, is the need to enhance the information on the status and financial health of sub-tier suppliers. Achieving this “will require third-party partners to support us with that information” she says.

At New Balance, the crisis highlighted the importance of adopting or enhancing technologies that improve responsiveness and performance.

“It all starts with the forecast,” says Wheeler. New Balance is investing in ERP and supply chain planning technology “to bring in demand sensing, incorporate point of sale information and the use of AI.” The application of 3D computer modeling to bypass the need for early-stage prototypes and 3D printing to speed up physical prototyping is another area of focus. New Balance is working with suppliers to link 3D-printed models of prototypes to bills of material to the shop floor.

**Data: The lifeblood of response.** Even the most sophisticated digitization tools are only as good as the data they rely on, and both companies developed new approaches to data gathering.

New Balance routinely ran projects according to traditional, long-term time frames and key milestones, explains Wheeler. During the early phase of the pandemic the organization introduced “a series of what we call agile pods (teams), that are cross-functional and have a 90-day time limit.” Driven by key deliverables in two-week sprints, this new approach makes the manufacturer more responsive.

Torrel instituted a daily call at 5:30 am with

Flex's business leadership around the world. "That was incredibly important in how we addressed the challenges we were facing," she says. Organized around a highly structured agenda, the meetings enabled regional leaders to provide feedback from customers, suppliers and media channels on the pandemic's impact. Critical information such as changes in customer demand forecasts or changes in suppliers' delivery commitments helped the leaders to evaluate risk. "Then we would employ tiger teams to address the significant challenges we had," she says.

**New paths to competitiveness.** While disruptions cause instability, they also bring fresh perspectives on the commercial environment in which companies operate.

For example, in light of the COVID-19 experience, Flex believes there may be opportunities to partner with new customers "who have done their own manufacturing and want to look at maybe de-risking by using a partner like Flex to take on a portion of their production," says Torrel. Such an approach could bolster the customers' resiliency and risk mitigation efforts, she adds.

New Balance was working to build shortened lead time considerations into the design of products before the coronavirus struck. The pandemic brought this effort into sharper focus and the work intensified during 2020. An important element is how to redesign manufacturing networks to minimize lead time. In that case, "using an outsourced specialized capability on a regionalized basis makes a lot of sense to us," Wheeler explains. This approach makes the manufacturer more responsive by, for example, bringing more precision to inventory management.

**Pandemic-related role changes.** The pandemic has had a significant impact on the way business leaders fulfill their roles within organizations.

Torrel says that collaboration has always been one of her leadership tenants, but the pandemic reinforced its importance. For example, during the crisis manufacturing plants around the globe opened and closed due to the pandemic, requiring Flex to shift production to support customers and maintain revenue flows. Managing this constantly changing supply picture required her to take collaboration to higher levels.

For Wheeler, one notable change in leadership style attributed to the pandemic is a more urgent need to support person-to-person interactions. In normal times, people often get together after meetings to have informal chats. A lot of work gets done during these hallway conversations he says. But these in-person asides came to an end when communications shifted to online channels such as Zoom and Teams. To compensate, Wheeler makes an extra effort to "intentionally carve out a little bit of extra time to connect with individuals."

**Retaining the passion.** During the pandemic both companies helped to address shortfalls in personal protective equipment (PPE) supplies.

Flex was particularly concerned with tackling the severe shortage of ventilators during the initial months of the crisis. The company worked with many ventilator producers and other critical equipment manufacturers. Importantly, Flex used its manufacturing and supply chain expertise to help ramp up the production of these units. Its engineers are adept at scaling up to mass production. The company's supply chain know-how played a key role in reducing lead times for critical parts and launching ventilator products quickly.

New Balance created a unique protective mask—a totally new direction for the company that required its supply chain team to take on unfamiliar product design responsibilities.

Again, the company's manufacturing and supply chain expertise were crucially important in enabling the team to meet the challenge. For example, a no-sew fabric used in the design of New Balance athletic shoes became a component of the mask. The design process was completed—with the help of suppliers—and production started in about one week.

Clearly, the urgent need to fight the coronavirus pandemic was the burning platform for these efforts. But will the passion and ingenuity both companies brought to bear endure after the pandemic?

"We learned a lot along the way," says Wheeler, lessons that will make the company more competitive in the future. For example, having to create a new product that is subject to tight regulation in an accelerated time frame is an experience that will benefit the company in the long-term.

### Looking to the future

This theme of capturing the wisdom gained during the pandemic will surely increase in importance in 2021.

"Seeing a team come together for a common cause was the story of 2020 for us. Our solid culture was a key enabler. We surprised ourselves in our ability to come together virtually and use the tools available to us to work together in a seamless way," says Wheeler.

For Torrel, one of the biggest "aha" lessons from the pandemic is the increased prominence of supply chain. Before the crisis "nobody was really talking about supply chains, people just expected them to work and deliver products," she says. ☺☺

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*Yossi Sheffi's latest book is "The New (Ab) Normal: Reshaping Business and Supply Chain Strategy Beyond COVID-19," (MIT CTL Media, 2020).*