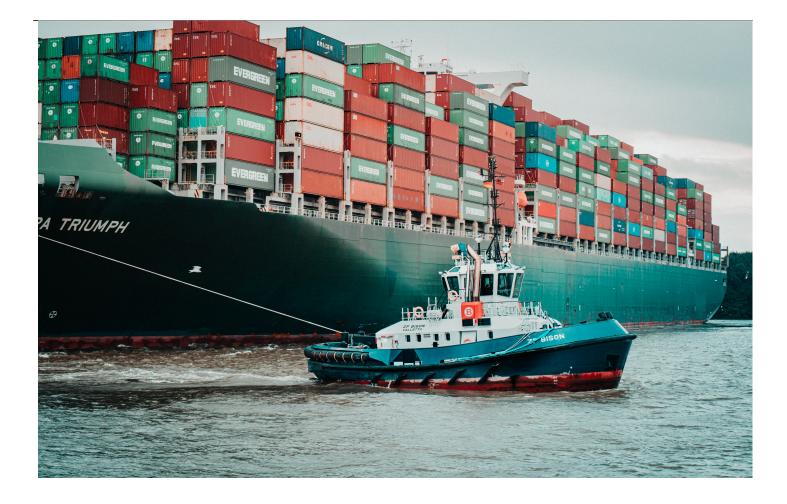## [?????????????????????](#)

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The fractured global supply chain will never return to normal. That's what Edward Hertzman, an expert in sourcing and supply chains, [says](#) in a new *Fast Company* article. The disruption of supply chains caused by a shipping logjam and the Covid-19 pandemic has been one of the biggest news stories of 2021, but hopes were rising that the problem would abate at some point in the year. But it is clear that [this is not going to happen](#). So, what should businesses do? It's high time they figure out how to use the crisis as an opportunity to achieve digital transformation.

Why the Supply Chain Problem Is Worsening

The bad news for businesses everywhere: a shipping crisis that has lingered for months continues to wreak havoc everywhere. Shipping routes that businesses need to ensure a steady movement of products from manufacturers to retailers are fraught with massive slowdowns with many badly needed products stuck in warehouses. As a result, retailers and manufacturers are warning of higher prices and fewer products available for the crucial holiday shopping season.

Part of the problem is the lingering Covid-19 pandemic. Throughout 2021, busy ports in China that account for a large share of exports have experienced shutdowns due to Covid outbreaks among workers. A recent shutdown occurred at Ningbo-Zhoushan Port south of Shanghai, which is the world's third-busiest shipping port.

But the pandemic is not the only reason. An over reliance on shipping became painfully apparent when an accident at the Suez Canal caused an expensive traffic jam whose effects are still being felt.

Businesses ranging from auto makers to retailers to technology companies such as [Cisco](#) are paying the price – literally. The cost of goods delivered has skyrocketed, and retailers such as Target are forced to either pass along costs to consumers (which spurs inflation) or eat the costs (which hurts their stock valuations).

Why the Supply Chain Problem Is an Opportunity

The ongoing crisis underscores a reality, and an opportunity: supply chain management is overdue for transformation. The disruptions have made it painfully evident that businesses are operating antiquated supply chains. For instance, many businesses lack basic visibility into the location of products in the supply chain, and they lack the ability to sense and respond to fluctuations in prices and the movement of goods.

At least one business, Clorox, is acting by transforming its supply chain with digital. In fact, Clorox views its supply chain as key to transforming the entire company. Clorox recently [told investors](#) that over the next five years it will invest $500 million on a far-ranging digital transformation that encompasses everything from enterprise resource planning (ERP) to supply chain management.

Clorox CEO Linda Rendle said, "We are accelerating our transformation through planned investments of about $500 million over the next five years to enhance our digital capabilities and drive productivity improvements, including replacing our enterprise resource planning. This will enhance our supply chain to better position Clorox to meet customer needs, yield efficiencies and support our digital commerce, innovation and brand-building efforts." Clorox also will also invest in digital technology for data analytics to better understand online customer behavior.

Notably, Linda Rendle pointed out how achieving better supply chain visibility is foundational to the company's digital transformation. She said, "We'll first make an onvestment in our ERP, which is the foundation and infrastructure of all of these changes. We'll have better supply chain visibility across all parts of the supply chain with real-time data, which will improve things like procurement and supply planning. It will further enhance the work that we've done on digital and ecommerce and further enhance our ability to do personalization and get more out of that goal, and will help us on innovation."

More businesses can unlock value from their supply chains – even amid a global shipping crisis – through a wise investment in artificial intelligence. Transforming the supply chain can deliver the biggest bang for the buck. For any company that is making and moving goods, supply chain management makes up for one of the biggest cost line items in their P&L.

For too long, businesses have managed their supply chains with platforms and solutions strung together haphazardly. As a result, enterprises have planned blindly, with too many data blind sides due to lack of visibility and data capture mechanism across the value chain. They've also being and be too reactionary because of planning inefficiencies, which leads to the infamous "[bull whip effect](#)" --

or the demand distortion that reverberates throughout a supply chain from the retailer through to the wholesaler and manufacturer due to the variance of orders which may be larger than that of sales.

The global disruption we're witnessing today has been building for some time. Before the infamous Suez Canal traffic jam sounded the alarm on how inefficient global supply chains were, businesses were already worried about how well they could manage around potential disruptions. In 2020, as the pandemic took hold, 48 percent of supply chain decision makers told McKinsey that they have experienced delays in planning decision because of remote working, and 85 percent said they were struggling with insufficient technologies. The problem accelerated in 2021 – it did not begin in 2021.

Even a small improvement to demand forecasting and supply planning than the current reactionary mechanism can yield significant revenue upside. And when businesses improve the way they simulate and optimize for future scenarios, they can transform their approach from being managing business processes to improve business processes (the former is reactionary and the other is proactive).

How AI Can Help Businesses Transform Their Supply Chains

AI is crucial to achieving long-lasting outcomes. Two examples stand out:

- **Visibility in real time**: with real-time data, a business can identify the status of inventory everywhere across the entire supply chain. Too many businesses right now are suffering because they lack data about what is on a ship transporting their materials. They need to know where their goods are at all times if they are going to successfully sense and respond to changes in demand and supply. This is especially true of complex supply chains that rely on many players operating globally. But a lack of transparency makes it nearly impossible for them to take steps such as identifying how to predict when inventories might return to normal.
- **Forecasting**: AI can help a business simulate and forecast the impact of supply-side issues on the demand side. AI can help businesses conduct scenario planning exercises and inform critical business decisions. we suggest that businesses use the current disruption as an opportunity to put in place a disaster management program driven by artificial intelligence/machine learning. AI-based scenario planning helps help manufacturers do a better job responding with resiliency by anticipating shortages and supply issues ahead of time and then responding with resiliency strategies. This would require having the data and be able to simulate resiliency responses. AI could also help businesses along the supply chain predict if a particular disruption (such as a natural disaster) is transitional or longer term and simulate response scenarios based on that data.

For more insight, read my new post in *Forbes*, "[How Retailers And Manufacturers Can Improve Through The Supply Chain Crisis](#)."

How Centific Can Help

Centific help businesses transform their supply chains by supporting decision makers with AI-based intelligence. As a result, businesses improve their speed to market and create loyal customer relationships by delivering experiences that are both convenient and lovable. Our approach encompasses:

- **Multi-sided marketplaces**. Establish direct-to-consumer relationships through new business models that that drive engagement and growth through co-creation and collaborative ways of

working.

- **Visibility platforms**. Provide transparency into the entire supply chain through digital experiences that your customers and employees trust to drive efficient decision making and better outcomes.
- **Last mile delivery**. Create differentiation and customer loyalty by transforming last-mile delivery from a moment of convenience to a lovable experience in areas such as curbside pickup, contactless delivery, and order fulfillment.
- **Supply chain intelligence platforms**. Curate, ingest, and label data generated across the supply chain to infuse intelligence throughout the supply chain to drive transparency, efficiency, and predictability.

Where Centific Has Helped

Our client work spans multiple industries that employ delivery models, such as:

- **B2B manufacturer**. We helped develop an "Airbnb model" of assets sharing to improve logistics. We discovered, designed, and developed the first blockchain-powered, global, multi-sided marketplace for the sharing of industrial assets.
- **Freight carrier**. We collaborated with a freight carrier to scale drone delivery with quickly. We created an experience to enable the rapid transport of life-saving medical supplies through a digital drone visibility platform.
- **Leasing company**. We helped achieve holistic digital transformation. We partnered with the client to implement a product design, data architecture, and process changes that accelerated velocity of delivery.

How We Do It

We help businesses rapidly develop better ways of working through our proprietary [FUEL](#) methodology. Through FUEL, we conceive of new models and improvements by using test-and-learn tools that make it possible for businesses to adapt rapidly and cost-effectively:

- **Design thinking**: base all product and experience decisions in what matters most – gaining empathy by understanding the emotions that drive how people make decisions.
- **Fit**: validate the concepts, products, and experiences that are solving a real customer problem, address a meaningful market, and can scale to achieve business outcomes.
- **Agile at scale**: with evidence that the team is addressing the right opportunity, embed velocity into the product delivery process by adopting agile ways of working.

The outcome of using our FUEL methodology is the creation of a minimum lovable product – or a new supply chain process that delivers the most value possible quickly and effectively.

To get started, [contact Centific](#).

Photo by [Mika Baumeister](#) on [Unsplash](#)

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