

Entering the New Normal

The world changed overnight. Find out what industry experts and professionals think about COVID-19, what it means for the supply chain industry, and how to move forward amidst so much uncertainty.



INTRODUCTION

A supply chain disruption is an event that impacts the production or distribution of goods within a supply chain. They happen all the time, and the degrees of extreme vary.

Supply chain disruptions include forecasting and allocation errors—too much or not enough inventory, unpredictable surges in demand that create bottlenecks and stock-outs, geo-political events like the trade wars, customs delays, labor shortages and strikes, mechanical issues in manufacturing plants, major weather events—the list goes on.

Here are a few recognizable supply chain disruptions from recent years:

- Hurricanes Katrina, Harvey, Sandy, Irma, and Michael: In the last 15 years, major hurricanes have significantly impacted regions across the U.S. and Puerto Rico where damages ranged between \$50B to \$160B
- 2018-2019 trade wars: U.S. and China went head-to-head on trade, which resulted in sky-high tariffs being placed on common imports and exports
- The Volkswagen diesel-emissions scandal: VW had 70% of the U.S. passenger-car diesel market and had to recall more than 500k cars in the U.S. and more than 10.5 million worldwide

- Ongoing labor shortages in long-haul trucking and transportation create bottlenecks, having downstream effects as capacity constraints limit the movement of goods
- The Tickle Me Elmo craze in 1996. After Rosie O'Donnell randomly promoted the new toy on her talk show, there was a surprise surge in demand, however, not enough units were available nor could they be produced quickly enough to meet demand—leading to one very coveted Tickle Me Elmo going for the price of \$1500

No matter the scale, disruptions are disruptive. However, most supply chain disruptions are relatively singular in nature—there is a scope to each event. That is not the case for COVID-19.

COVID-19 is atypical & complicated.

The common denominator of normal supply chain disruptions is that each disruption is “contained” by time and space—this component was impacted at this time. There is a cause and an effect. Tariffs, for example, are disruptive, but there’s a timeline that can be managed. Even larger, more extreme events like hurricanes are contained because they are relative to a specific region and time period. Once a storm ends, damages are assessed and recovery efforts begin.

COVID-19 is different. It isn’t contained and it’s complicated. Every region is impacted, but not in the same way; different businesses are facing different sets of challenges; there is no end date.

The effects of COVID-19 are far-reaching and they are happening in waves. According to a recent survey, 80% of businesses believe they will be impacted by COVID-19. What began in China has now spread to every country where

no two regions are affected in the same way or at the same time.

With no vaccine, the most effective defense is to practice social distancing—which has fundamentally shut down travel, tourism, and consumerism. Restaurants, bars, retail stores, and even parks are closed, and it’s unclear how long this will be the case.

5 ways the world has changed



01

25% OF RETAIL WILL BE ECOMM IN ~~2025~~ 2020.

The growth in eCommerce we expected to take 5 years has happened, seemingly, overnight. Target's digital sales are up 275%¹ and Shopify sales are approaching 2019 BFCM levels ... in April.²

02

BABY BOOM.

eCommerce is up, but especially in baby products (611%), medical essentials (434%) and cleaning supplies (210%)³.

03

INVENTORY IS HERE WITH NOWHERE TO GO.

Industrial vacancy rates were at 4.4% in Q1 2020⁴. Inventory isn't moving and capacity is running out. Industry experts are saying global container shipments may fall by 30%⁵ in the next few months if space isn't made.

04

WAREHOUSE SEARCHES ARE UP YOY.

Warehouse search volume is up 2X YoY. Searches in the Southeast increased 74%; Atlanta, GA increased 3.5X and North Carolina increased 2X. In the Northeast, searches for New Jersey are up 28%⁶.

05

MAKING DECISIONS ISN'T EASY. HERE'S WHY.

80% of supply chain professionals say decision-making could be better, especially in times of disruption. Meanwhile, 76% say disruptions are increasing and 72% say they are becoming more impactful⁷.



SUPPLY CHAIN DISRUPTION Q&A

COVID-19, the Supply Chain, & Modern Logistics

The Co-Founders and CEOs of Convoy, FLEXE, and Flexport talk about COVID-19 and its impact on the retail and supply chain industries.

In the webcast, “The Future of Freight and Logistics”, Dan Lewis, Co-Founder and CEO of Convoy, Ryan Petersen, Co-Founder and CEO of Flexport, and Karl Siebrecht, Co-Founder and CEO of FLEXE discuss how the COVID-19 (Coronavirus) pandemic is impacting the supply chain and how retailers and brands are responding.

Moderated by Harshad Kanvinde, Practice Leader - Strategy & Supply Chain at Slalom Consulting, learn more about current trends in freight, transportation, and warehousing & fulfillment, and how technology and modern logistics solutions are helping businesses better manage supply chain disruptions.

What is your view on the economic and supply chain disruptions caused by COVID-19?

Ryan Petersen: Now, on the supply side of the economy where goods are coming out of China, that’s where the initial problem started, and now it’s become a global issue. But even as you focus on China, the one thing that most people don’t know is that 50% of the world’s cargo for air freight actually travels in the belly of passenger planes. And so the problem is compounded as all these flights have been canceled, and most major airlines have canceled flights from China, at the same time as the demand comes back online to move products from there. So, there’s very little capacity. So you’ve seen a doubling in the price of air freight. So it’s highly disruptive on the supply side.

Dan Lewis: I’d say the biggest and most important thing is that everything is very unpredictable. Typically, when it comes to the supply chain, you know, you can sort of see patterns play out over time, you have seasonality. This year, it’s completely unpredictable.

What that means is that in an industry like trucking, where most major companies have kind of an annual procurement process and they try to predict volumes on given lanes and set pricing and partnerships up on those lanes to make sure their needs are met, right now all of those agreements are shifting and you’re seeing freight fall outside of that.

Karl Siebrecht: We’ve seen three different waves. The first wave was centered around international manufacturing, mostly imports from China where we had customers whose manufacturers ceased production on some of their products. And so there’s a scramble to try and forward-buy other products given a risk where more supply might get shut off. The second wave we started, it was more domestic. It was domestic manufacturing and retail.

So manufacturers of consumables, in particular, needed to ramp volume as best they could and increase supply and manufacturing. And then on the other side, retailers—particularly online retailers whose demand was spiking—needing to add capacity to their fulfillment networks to try and ship all those products that are increasingly being bought online.

The second part of the domestic retail disruption that we've seen is...and most people have probably seen there's a lot of store closures—typically brick and mortar store closures. So if you think about that, the demand and that sales channel is cut off. A lot of these companies don't necessarily want to cut off their supply and need to find a place to sort of bandage back in some cases.

And then in the third wave, we've started to see the need to help with the distribution of medical supplies. So as Dan said, there's just a lot of uncertainty and disruption in general, but those are the three of the waves that we've seen specifically.

*Supply chain planning is at odds.
Seasonality is predictable, but
eCommerce growth isn't.*

Karl Siebrecht, Co-Founder & CEO at FLEXE

Are these disruptions exposing underlying supply chain weaknesses?

Ryan: We've got a whole generation of MBAs that have been trained to think inventory is evil, and rooted out—at all costs—to get to this just-in-time world (in supply chain). And it does create systemic risk when we're so interconnected.

So any kind of disruption at any border can have all these downstream effects that are really hard to model and predict, and it leads to disruptions. I do think you're going to see folks start to think more about resiliency in their supply chain [such as diversifying different sections of the supply chain].

But in a global pandemic situation, I don't know that diversifying helps you that much because this virus is spreading all over the world and it hit China first, and then other regions. I don't know that diversification necessarily becomes the right strategy. But certainly, people are starting

to think about that interconnectedness and how to make a more resilient supply chain ... It's really hard calculus if you're a supply chain manager.

Karl: COVID-19 is just the most recent and in some ways, the most extreme example of what we see as a trend that is increasing with more and more business elements becoming dynamic—much of which is fundamentally driven by eCommerce. So, absolutely we've seen this as yet another example [of supply chain disruption]. Historically, the supply chain, particularly domestic distribution, has been an asset-intensive business and the value driver has been how well does a company manage these assets?

In our world, it's your physical buildings, the equipment that runs those buildings, and then labor, those have been the value drivers of determining whether or not you have a good distribution network. And now increasingly, value drivers are in technology, allowing you in many more ways to be flexible and react more quickly and with more sophistication.

Supply chain planning is at odds. Seasonality is predictable, but eCommerce growth isn't. You may not be able to know if your online channel is going to grow 10% or 80% this year. And then also, amidst all types of supply chain disruptions, is the desire to ship products faster, which means you need more distribution nodes closer to consumers. The calculus around Ryan's point about how much inventory

From Redundancy Comes Resilience

A professor of supply chain management at ASU, Dr. Kevin Dooley, PhD., tackles supply chain sustainability and resilience, and why the future of supply chain requires a new way of thinking.

What is an example of how the supply chain can be more resilient?

Think about inventory and the concept of “leaning out” [or leaning away from lean manufacturing]. You need to create some kind of buffer. I’m not saying lean manufacturing is bad, but in some ways it’s gone too far. We’re seeing the implications of that now.

Redundancy is counterintuitive for most supply chain professionals where their entire careers are built on optimization and efficiency.

Redundancy is counterintuitive for most supply chain professionals where their entire careers are built on optimization and efficiency. But, in terms of true supply chain resilience—redundancy is the efficient solution.

Even though holding more inventory doesn’t sound economically feasible, it becomes so once it’s industry-accepted. That is going to require a new mental model for supply chain leaders.

needs to be held, and what the trade-offs are for holding more inventory becomes more manageable if you can ship products faster and win more sales.

Unfortunately, this particular issue is painful on both the human-level and on the supply chain. But I think it will be something that companies go back on and figure out how to better build resilience into supply chains to try and mitigate the impact of this type of thing happening when it happens next. And technology will invariably play a role in that.

Dan: We aren’t going to rebuild the supply chain to handle this sort of an event on a regular basis. I think inventory is probably going to be something that a lot of people start talking about, which is you know, what does it look like when there is a disruption? And when should we revisit some of the assumptions.

There’s the dependency on global supply chain versus a dependency on domestically produced goods. That’s where the inventory really comes in. There was a general push to try to minimize all inventory, faster inventory turns, less cash tied up in inventory; it will probably become more surgical. Businesses will focus on the inventory part but also on replenishment, risk premiums will be placed on different types of inputs to determine if more or less inventory is needed.

[You can read the full article or watch the video here >>](#)

What will it take to invest in supply chain resilience?

Supply chain professionals are accountable for a series of metrics that are centered around optimization by way of reduction: Inventory reduction, reduction of holding costs, inventory turns, and in some cases, supply base rationalization and reducing the number of suppliers. If those are the metrics for which you're accountable, it's difficult to rationalize a series of increases to make the supply chain more resilient.

The unfortunate reality is managers rarely get rewarded for risk management. If risk isn't uncovered, there's no recognition—no opportunity to save a project and be a hero.

The supply chain needs some kind of resilience or flexibility metric that is well-accepted and acknowledged. It's similar to packaging and a problem that exists in the engineering domain. The function of packaging isn't to be thicker, thinner, lighter, or heavier; the function is protecting the product. But there has been consistent movement to optimize the economics and make packages thinner—cheaper.

[You can read the full article here >>](#)

At some point, you reach that optimal where you can't thin it anymore without endangering the product itself, which is the reason you have packaging in the first place. Holding inventory serves that same purpose. It provides insurance, but if our metrics don't take into account the benefits of inventory, then they're creating an industry that is lean, mean, and unprepared.

We need to think about how we build in more options so we aren't faced with the same level of disruption the next time this happens.

Will we ever be able to proactively plan for major supply chain disruptions?

No. I think that the disruptions will increase in number because of climate change and frequency and severity and concurrency. And so, it's a matter of planning for that different

future, and planning for more adaptation—planning for redundancy. Part of redundancy is having multiple sites, multiple suppliers, etc., and having options for supply.

We need to think about how we build in more options so we aren't faced with the same level of disruption the next time this happens.

2020 was supposed to be the year for supply chain sustainability. Has that changed?

From my perspective, consumers' growing interest in sustainability has not changed, nor have investors' and companies' long-term investments in becoming more sustainable.

I'm an optimist here. You have to be an optimist when you work in sustainability, but I think this pandemic is giving people a high degree of confidence that sustainability is the right thing to focus on. Anecdotally, people around the world have noticed the benefits of cleaner air, cleaner water, less noise, and less traffic. So, again, it's an opportunity to see not what a "less active" society looks like, but what a "conscientiously active" society could be.

Supply Chain Resilience Comes at a Price

In this interview, Harshad Kanvinde, Practice Lead for Supply Chain and Strategy at Slalom Consulting, talks with us about supply chain resilience and the real implications of diversifying supplier networks.

Lots of discussion around diversifying supplier networks—is that even an option right now?

Supplier diversification is a sound strategy, but if you aren't already on that path it's not something you can do overnight. Even under normal circumstances, it's a super complicated and difficult thing to do. There's a process involved and it can take up to a year, maybe more, to do it.

First, you have to consider that this is a natural disaster that is impacting everywhere. Production stopped but it's outside of the supplier's control. You can't just lift and shift.

Lastly, it depends on the industry. If you manufacture electronics or you're in the

aerospace industry—that gets even more complicated. For aerospace, there are so many regulatory compliance certifications that are required for every part that goes into a final product. It's no joke and it's not quick.

So the short answer, diversifying your supply network is not easy and it isn't a realistic solution for managing the current situation.

Can you be both flexible and cost-effective?

In a purely intellectual discussion, everyone would agree that, yes, doing things like diversifying your supplier network to mitigate risk makes sense and it's what you should do. But unless you are looking that situation in the face and have to act on it, it will never happen. For real transformation to occur, you need an emergency.

What does supply chain resilience mean?

To be resilient, you must be able to react to various scenarios quickly. An example of supply chain resilience is the vertically integrated supply chain. When one company owns all the assets, it can respond quickly because it doesn't have to navigate partnerships or dynamics outside its own company—it has complete control. But, vertical integration is extremely expensive, making it economically unfeasible for most companies.

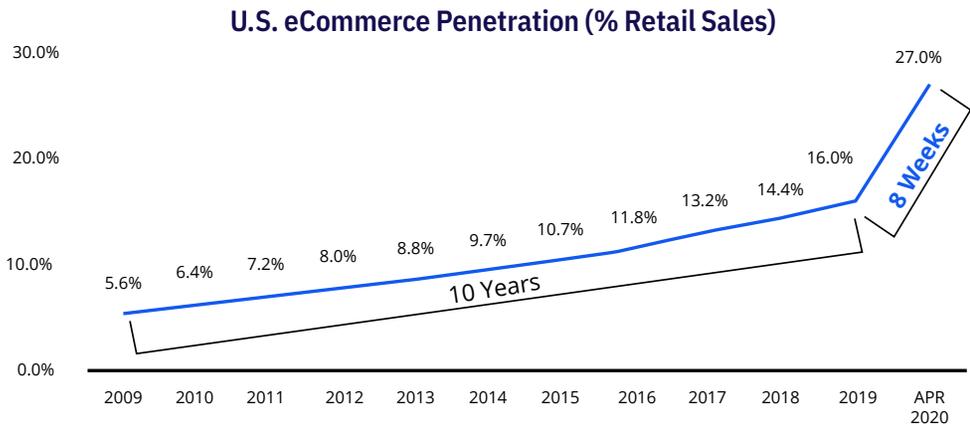
For real transformation to occur, you need an emergency.

The majority of the current global supply chain is based on collaborating with partners to offset the costs of owning everything. Under that model, the goals of partnerships tend to center around efficiency and cost-effectiveness, not resilience. Right now, we are currently seeing why that doesn't always work well.

For an organization to be resilient without vertically integrating, leaders must make a choice between optimizing for cost or optimizing for resilience. When the goal in a partnership is resilience, that looks very different than when the goal is to keep costs low.

eCommerce & strategy impacts

ECOMMERCE SALES ARE (WAY) UP



WHAT TO CUT & WHAT TO KEEP

60%

*of financial leaders say they will defer or cancel planned investments***

Topping the list of potential cuts

83%

Facilities and general capex

49%

workforce

53%

operations

60%*

INCREASE IN TOTAL ECOMMERCE ORDER VOLUMES

DIFFERENT CATEGORY, DIFFERENT IMPACT*

130+%

increase for FMCG

90+%

increase for baby products

50+%

increase for home goods

UNEXPECTED OPPORTUNITIES TO INNOVATE**

Business strategy & contingency planning

72% say COVID-19 will result in better resiliency and agility

New technology investments

49% say technology investments will make the company better in the long run

Better customer service

44% say they're finding new ways to serve customers

Your Best Insurance Is Flexibility (with a Side of Grit)

Matt Hertz, Co-Founder of Second Marathon, discusses what it would take for retailers and brands, of all sizes, to survive the supply chain disruptions from COVID-19.

What kind of impacts, trends, and developments have you seen from the pandemic?

Already, it feels as if the retail industry—specifically, eCommerce—has accelerated by two-to-three years. The types of volumes they're doing now, the scale that they're doing them at, is what they had forecasted or predicted to be years from now.

The environment has changed dramatically for literally every eCommerce brand I know, and anyone who says it hasn't is probably lying.

Businesses, especially the high-growth D2C businesses, are seeing tremendous growth. We've all seen the charts; it looks like a hockey stick. From 2009 to 2019, eCommerce sales grew from 5.6% of total retail sales to 16%. In the last 8 weeks, it's gone from 16% to 26%. This is totally unprecedented.

As COVID-19 progresses, and the impact it's having on the industry evolves, I wouldn't be surprised if eCommerce hits 30-35% of total retail.

What about delivery promises? Will those change?

My absolute thinking is that fast delivery will become even more important, in even higher demand. That may seem somewhat ironic given the slow ship times we're all seeing right now, but as both essential and non-essential goods get back to normal operational levels, delivery promises will only continue to accelerate.

But, in terms of slower delivery times right now, most consumers have a level of compassion. We all know what's going on, and in a lot of cases we realize how lucky we are that we can even get the goods we need online.

Every step in the supply chain is overwhelmed right now. In some cases, it's the brand

and the products that are in high demand, or it's third-party logistics providers who are also seeing spikes in order volumes and having to prioritize certain goods over others, or it's the last-mile carriers like UPS, FedEx, and the Postal Service with the volumes of goods needing to be delivered. So there's a lot of different areas that are creating delays.

Fast delivery will become even more important, in even higher demand.

That said, Amazon is only getting even stronger than it was pre-COVID. Once its supply chains are back to normal, it is going to continue to press on the gas and get to one-day and even same-day Prime on the majority of goods. Simultaneously, with Amazon continuing to lead the way, the rest of its competitors must catch up.

What will the new world look like?

eCommerce will continue to be stronger than ever. And, those that have a sincere mission and strong brand appeal will be the clear winners. The pandemic as a supply chain disruption is creating a lot of transparency for consumers. Some transparency is great and strengthens a brand, some of the news we're hearing was obviously meant to get swept under the rug.

Moving forward, eCommerce will be even more of a beast than it was, right? It's everywhere now. If you're anything like myself—or the millions that have contributed to the 62% increase in retail growth—then your eCommerce uptick has been considerable in the last couple of months.

Everything is going to level out as more businesses reopen, but the growth will maintain itself to a pretty high degree. Even when stores, restaurants, and travel really come back online, eCommerce will sit at a 17-20% share of retail.

[You can read the full article here >>](#)

SUPPLY CHAIN DISRUPTION Q&A

A Bias for Action

This week, Rodney Manzo, Founder and CEO of Anvyl, talked to us about why contingency planning may be more important than ever—even as society reopens—and what preparedness means for businesses and the supply chains that support them.

Is there something about COVID-19 as a supply chain disruption that has surprised you?

Supply chain is being taken way more seriously now because people understand what it is. As a supply chain practitioner, that's fascinating.

For many consumers, whatever supply chain processes are in place, have failed them—goods aren't getting to where they're needed. So for the first time, the world is paying attention.

Businesses are trying to understand everything they can to fast-track and improve what they're doing. "What's

always worked" isn't working anymore for many brands; more businesses are cutting through the inertia and looking for ways to create new energy and movement within their businesses.

Before the pandemic, innovation was slow—there wasn't a forcing function to look at new ways of doing things. Now, a lot of businesses are looking for tech-forward solutions and ways to be flexible (a concept not usually associated with supply chains). It's amazing how quickly that change happened.

“What's always worked” isn't working anymore.

Society is reopening. Are supply chains ready?

Companies are still being hit. China shutting down was unnerving for a lot of businesses and there's still so much uncertainty ahead. Things are improving as the economy reopens, but until we have a vaccine, there are so many risks.

Consider distribution. What if someone at a fulfillment center tests positive and that location has to shut down? What if that's your only fulfillment center? That's still a major concern for supply chain leaders.

We aren't through the woods yet and I think that's what's causing a lot of these companies to truly think about contingency planning so they can be successful no matter what. And, many businesses are figuring out how to build the plane while flying. We can't afford to wait until this is all over to assess and make plans. It must be iterative.

In contingency planning, there are four critical aspects to consider. The first is understanding your supply chain. The second is looking at the components for which you can create redundancies (suppliers, warehouse providers, carriers) and have them ready and prepped. The third is assessing what you can do now

to increase your safety stock—holding more inventory and allocating it across different locations. And the fourth is implementing iterative technology that unlocks visibility and enables you to be nimbler. All of these things can happen now.

Why is planning so critical—especially now?

Because anything can happen. What if there is a second wave? If you're a retailer, what if a second wave hits during your busiest time of the year and all of your sales move online or not at all because you weren't prepared ... again?

The only way to improve your supply chain is to plan, replan, plan, and replan. If you aren't doing that constantly, you're failing.

You must have contingencies in place at every single stage of the supply chain. If a second wave hits, it shouldn't matter. If you have demand for your product, you should have a plan to meet that demand. Again, way easier said than done and there are a lot of complexities to consider, but as a supply chain professional, your job is to never have a shortage of product.

The biggest risk right now is doing nothing. For a lot of businesses, there hasn't been that immediate need to change how things have been done—going back to that point on inertia.

In [Anyvyl's] world, our number one competitor is an Excel spreadsheet. Those can't scale. They don't unlock silos. But, a lot of businesses have managed well enough using that level of technology, until now.

As a supply chain professional, your job is to never have a shortage of product.

When I was an operator, I remember being able to only do so much and only see so many things. Eventually you log off for the day or it's the weekend, but technology doesn't sleep. It can continually compute and analyze and provide data that no human could ever—in a million years—be able to do.

If you're relying on manual processes to manage your supply chain, it isn't going to work—especially as business gets more and more complex. To thrive in a hyper-competitive environment, you have to realize where to augment the process and the human component with technology.

[You can read the full article here >>](#)

Riding the Black Swan: It's Not Too Late to Make Your Supply Chain More Flexible

Over the last several decades, companies have embraced globalization and modern supply chain management practices to reduce excess inventory, improve cost structures, and increase fulfillment velocity. Firms that invested in just-in-time production and inventory management saw profit margins widen and, 11 years into the longest-running bull market in history, few could have imagined a demand or supply shock great enough to threaten the global supply chain ... let alone both at the same time.

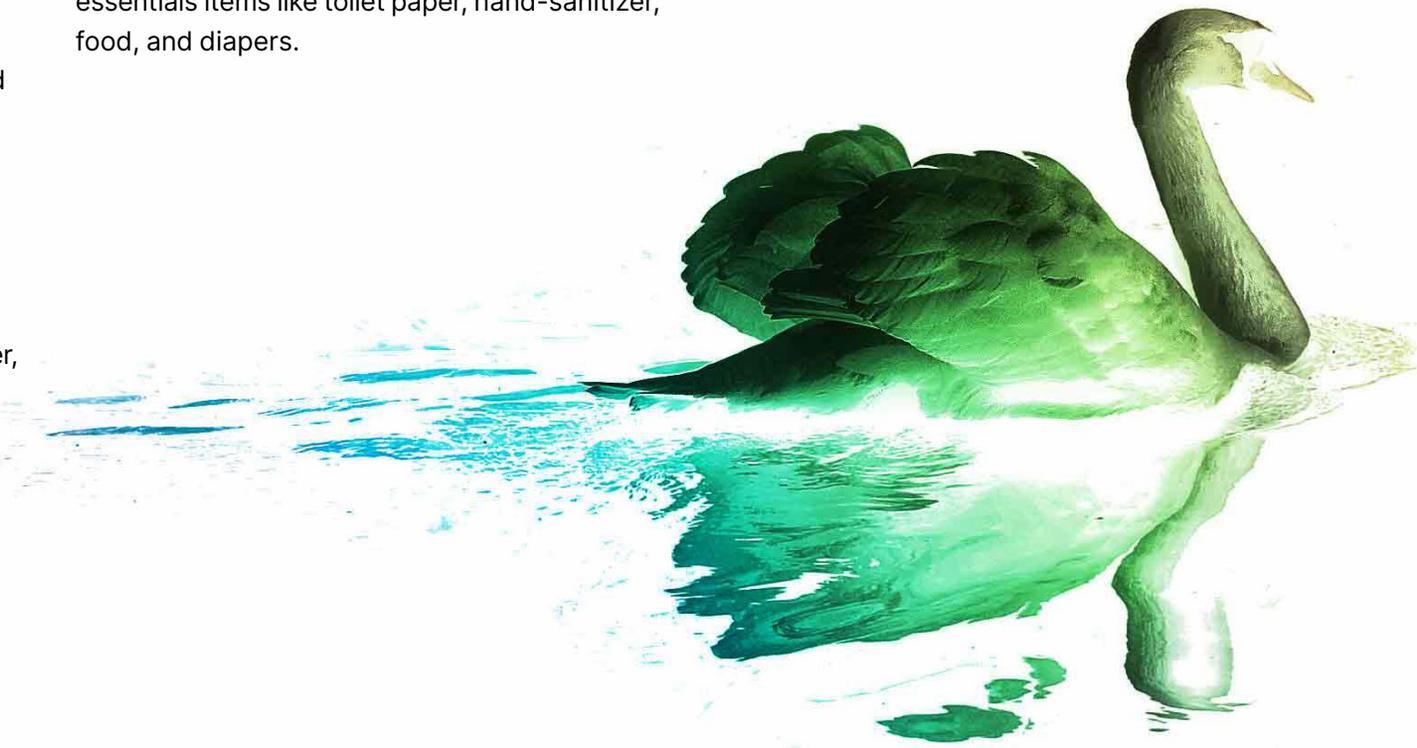
Many argue that the scale and far-reaching impact of COVID-19 makes it a "black swan". Nassim Nicholas Taleb, a finance professor, writer, and former Wall Street trader, first wrote about the concept in his 2007 book, *The Black Swan: The Impact of the Highly Improbable*. A black swan event is "characterized by their extreme rarity, their severe impact, and the widespread insistence they were obvious in hindsight."

When news of the virus started to trickle out of China, it was distant news. Very few realized or recognized how quickly it would become front and center across the globe. The impact of the spread of the virus happened slowly and then very quickly.

Social distancing, the only proven method to prevent the spread of the virus, quickly impacted the economy. Foot traffic came to a halt as retail stores, bars, and restaurants closed their doors. Retail leaders like Apple, Nike, and Nordstrom, proactively closed to set an example, while like Walmart, Target, and Walgreens—normally competitors—banded together to provide communities with essential goods. Even Amazon announced that it was suspending Prime-level delivery promises for nonessential goods to increase the throughput of essentials items like toilet paper, hand-sanitizer, food, and diapers.

The last black swan was the 2008 financial crisis; COVID-19 is the latest. More than three months into most shelter-in-place orders, many have settled into a life of social distancing and working from home. Meanwhile, the news continues to change every day, and as some states reopen their economy, many businesses face a fast-approaching new normal. Unfortunately, the uncertainty makes it difficult to define what "new normal" actually means.

Like never before, the world's eyes are on the supply chain, but there is still a lot that can be accomplished in spite of uncertainty. Fortunately, flexible solutions exist so that companies can respond more nimbly to disruptions without making the steep capital investments that a lot of traditional supply chain solutions require.



Building flexibility into your supply chain to avoid disruptions

During “normal” times, supply chain managers typically prefer to keep inventory levels low. Unfortunately, when a crisis like the one that we are currently facing hits, this drive for efficiency may leave companies facing shortages. Even if firms have sufficient inventory in their warehouses, they may have trouble getting it to their retail and distribution partners. This is exactly what many supermarkets have dealt with as customers rush to purchase supplies in bulk.

Compounding the situation is the fact that adding new warehouses and fulfillment centers to your distribution network isn’t fast or easy. This is true during the best of times, but, when a crisis hits and everyone is struggling to find room for excess inventory, finding reliable partners can feel impossible. Not only do most public warehouses and 3PL providers require multi-year contracts, but the simple act of negotiating terms and filling out paperwork can waste valuable time and energy—which is only multiplied if you have to source providers in various regions.

Fortunately, modern on-demand warehousing networks make it easy to dynamically add or remove warehouses from your network. So, if demand shifts, geographically or otherwise, you can quickly adjust your supply chain strategy accordingly. For example, with FLEXE, there are no long-term contracts—you pay for the capacity and services you use at any given time. And, all of the warehouses in the FLEXE network use the same software and reporting platform—even across disconnected providers, which provides fast, actionable data.

As with so many things in business and life, we cannot control everything that happens to us and, unfortunately, we cannot even plan for every eventuality. The best we can do is to build flexible plans and systems that allow us to respond to uncertainty with confidence.

Some digital logistics solutions include:

- **Supplier management:** Anvyl provides supplier relationship management tools for real-time visibility, automation, and collaboration.
- **Freight forwarding:** Flexport delivers “visibility and control, low and predictable supply chain costs, with faster and more reliable transit times. All from a powerful technology platform.”
- **FTL and LTL trucking:** Convoy provides shippers with a digital freight network to reduce transportation costs, while enabling carriers to keep trucks full.
- **Post-purchase communication:** Convey’s delivery experience management platform enables retailers and brands to better communicate delivery status on eCommerce orders.

About FLEXE

FLEXE is reinventing warehousing and fulfillment to optimize the global delivery of goods. As the leader in on-demand warehousing, FLEXE helps forward-looking brands create dynamic eCommerce fulfillment networks and resolve warehouse capacity constraints. Based in Seattle, the FLEXE team is dedicated to transforming the logistics industry and helping customers create agility in their businesses. For more information, please visit <http://www.flexe.com/> and connect with us on LinkedIn, Facebook, Twitter, and Medium.

