BlueYonder

Modernizing the Supply Chain

Achieve maximum certainty and resilient operations (plus keep silos)

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The risks of an outdated supply chain

Around the world, CEO are recognizing that their supply chains need to adapt to an increasingly dynamic world. When everything goes to plan, their company successfully balances efficiency, customer expectations and revenue goals. However, even a single disruption can upset this balance, leading to challenges in meeting their goals.

Despite the remarkable technological advancements over the past few decades, many industries run into the same challenges. Supply chain leaders often find it difficult to identify where to focus to most effectively enhance their core business objectives, especially as disruptions become more frequent.

In a survey published in 2024, the most popular change among CEOs (22%) was adding better performance tracking with artificial intelligence (AI). But no matter what they were investing in, most CEOs planned to alter their supply chains in the near future. Most everyone recognizes the supply chain needs modernizing.

Adopting AI solutions helps tremendously with building a resilient supply chain. But only if the solutions are integrated throughout the entire supply chain. Not only does that mean buy-in from all teams and departments. It also means creating a single source of truth for all teams to work from.

To make that happen, teams cannot exist in closed silos.





Yes, to talk about a modernized supply chain, we also have to talk about silos. But, unlike other resources, this e-book will tell you to forget the phrase "break down silos" and reimagine what you can improve using your existing framework. We will explain what we mean when we say silos, how they impede resiliency in supply chains, and what it means to overcome them. In other words, this is a resource that will teach you how to make changes, rather than simply telling you that you need to.

Resilient, agile supply chains should be built with the whole picture in mind. Small updates based solely on performance will miss the larger opportunities to scale. Making meaningful updates to your supply chain operations can happen quickly. And you can take the first step by scrolling to the next page.

What's holding today's supply chain back?

Resiliency consistently tops the list of priorities for companies. Year after year, companies allocate resources to making their operations flexible and sustainable. In fact, 51% of business leaders say resiliency is their top concern driving adoption of automation solutions.

Despite their efforts, new disruptions block much of the progress. New tariffs levied by new governments, labor strikes and once-in-a-lifetime weather events can render any plans or strategies useless. Resiliency relies on too many factors for teams to keep up with, particularly if they can't leverage AI and automation. The teams that do make decisions with AI solutions find itcumbersome to communicate those updates across the supply chain. Any optimized processes stay confined to the teams using the same solutions. Every other team is forced to wait to receive updated plans and schedules before making their next decision. The result is supply chains that function linearly rather than as a collaborative network. And everyone, from CEOs to customers, feel the frustration.

The path to building resilient supply chains can't end at adopting AI solutions asynchronously. Companies need implementation strategies that address the entire supply chain as a single entity. Even if innovation is added in phases, it must be done with a single end goal in mind. Additionally, instead of thinking about each stage as a self-contained operation, each team must build processes for their specialty and the whole supply chain simultaneously.

When technology companies encourage their customers to break down silos, this transformation of philosophy is what they're referring to.

What are silos, anyway?

Simply put, silos are the boundaries around each team's expertise. Silos can exist around departments, where teams don't communicate until they're ready to pass off to the next step. They can also exist around data, where teams work across different systems that don't connect or update universally (more on that in our e-book "Modernizing the Supply Chain: Data transparency vs. data visibility").



Silos are not always bad, however. They are useful to keep employees focused on their responsibilities and help teams define clear, achievable goals for each person. The issue occurs when those boundaries are opaque and rigid rather than transparent and permeable.

In 2024, 43% of supply chain executives said that supply chain visibility is the most sought-after technology (coming in second to generative AI). They want to overcome the challenges of silos but still hesitate to make the change. A common fear is the impact the change will have on current production, especially when considering 46% of executives claimed to have earned lower profit margins than the previous year.

This is a simple misunderstanding (that you can blame on tech marketers). Breaking down silos is not about rebuilding what works for your teams. Instead, it urges companies to start reinforcing what works today with what will work tomorrow.

Supply chains need modernizing. If companies want to be sustainable, agile and profitable, they have to reexamine what they're changing and how. If you're all in and need no further explanation, there's a step-by-step modernization guide that starts in the next section. But if you need more clarity on what that means in non-marketing speak, here's a chart:

What's said	What's heard	What's meant
"Break down silos."	"Cause chaos for my team and our processes."	"Build an infrastructure of transparency and communication between all stages of the supply chain."
"More collaboration!"	"Add more meetings to my calendar that stop me from doing real work."	"Put the entire supply chain on a single solution so communication is instant and automatic, not laborious and disconnected."
"Double down on AI."	"Job insecurity because of a technology I don't really understand."	"Make faster decisions using more data to ensure accuracy, efficiency and productivity. Do it without adding more work for employees."
"Changes need to happen now!"	"Make expensive, complex changes that might disrupt everything for an undetermined amount of time."	"Don't think of change as a single instance. Change what you can right now and build a plan for the least disruptive schedule. A composable modernization journey is a successful one."

Four steps to modernizing the supply chain

Now that everyone is on the same page about what these suggestions mean, the real work begins. Every supply chain will require a customized timeline and implementation strategy to modernize their operations. But these four steps will be universal for a successful transformation. Align stakeholders around these four philosophies and your modernization process will be much less complicated.



End-to-end transparency for everyone

Visibility into the rest of the supply chain allows everyone to make more informed decisions. Not only is the data updated in real time, but it also includes:

What it looks like:

- A single source of truth across teams
- · Standard data organization, updating and reporting
- Automatic communication of decisions based on shared,up-to-date information
- Decisions made together, with potential impacts accounted for
- Processes that prioritize efficiency over individual tasks

What it isn't:

- Cumbersome collaboration
- Stale data driving important decisions
- Unnecessary collaboration that slows down important work
- Disparate reporting that makes optimization impossible
- Extra risks assumed by slow communication

- Invest in a solution with end-to-end support
- Lean on solutions partners to identify where AI and machine learning can help right now
- Rework communication protocols and data entry standards to algin all teams







Make a plan for disruption

Faster decisions based on more comprehensive data will improve day-to-day efficiency. But any supply chain professional knows there is always a new problem you've never faced before right around the corner. Agile supply chains require plans set in place to mitigate the risks associated with an unprecedented event.

What it looks like:

- Use historical data to model what-if scenarios and identify most likely disruptions
- Leverage AI agents to identify potential risks for each stage
- Build reaction strategies that all teams can access simultaneously for most likely disruptions
- Unified, proactive plans to build trust, agility and efficiency throughout the supply chain

What it isn't:

- Time wasted building a plan in real time
- Miscommunication exacerbating the initial disruption throughout the supply chain
- Repeating mistakes or inefficiencies on similar disruptions
- Extra money spent to fix issues

- Aggregate data on most expensive and/or long-term disruptions to understand how and why your supply chain is vulnerable
- Collaborate with all teams to discuss possible solutions and impacts
- Implement step-by-step instructions on single solution everyone can access
- Regularly evaluate plans with new data and new processes



Use what you know to your advantage

How many processes do your employees follow simply because they always have? It's a common practice that silently stops efficiency and innovation. Instead of accepting what is, use technology to investigate historical choices to show you where you can optimize the entire supply chain. Go beyond individual teams and address the issues that affect multiple teams.

What it looks like:

- Standardized reporting to highlight consistent obstacles
- Universal data to keep everyone aligned on the truth
- Small changes with immediate impact
- Increased buy-in from workforce on innovation and process updates

What it isn't:

- Long hours spent deciphering multiple reporting structures
- Sweeping changes that create fear and confusion in workforce
- Decisions without context or understanding
- Redundant or unhelpful processes

- Identify most rigid or bulky processes
- Use solutions to learn from historical data and suggest improved strategies
- Agile sprints for improved processes for clear visibility into what works and what doesn't







Start now, improve as you go

The instinct when dealing with something as complex as supply chain operations is to give innovation time to be perfect. The risk of adopting a buggy, expensive technology was too great. But today's market, including customer expectations and supply, requires small, consistent changes. Companies can no longer wait for a perfect solution. They must pick the right one for them and make updates as they go.

What it looks like:

- Manageable changes consistently rather than all at once
- Partnerships with experts who can help beyond onboarding
- Diligent data management to do more of what works

What it isn't:

- Change for change's sake
- Disruptions to efficient processes
- Blindly adopting anything new

- Align on what you want to change immediately, in the next six months, and the next two years
- Evaluate available technology to understand product capabilities and professional services offered
- Commit to consistency

Give your supply chain maximum certainty – modernize today

Modernizing your supply chain for maximum certainty will require investments of time and money. It won't be simple, but it doesn't have to be overwhelming. In fact, remembering that changes happen one day at a time will make the entire process easier.

So will a partnership with proven experts who can create a plan to fit your company's needs.

If you want to talk to an expert to learn what's possible for your team, contact Blue Yonder today.



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