



NAVIGATING SUPPLY CHAIN OPTIMIZATION

Unlocking Efficiency Through Visibility

How to Navigate Supply Chain Optimization

The COVID-19 pandemic and the resulting challenges coupled with chronic shortages changed supply chains forever. Vulnerabilities were exposed, weaknesses magnified, and some companies went belly-up while others struggled, and continue to struggle, to build an optimized supply chain.

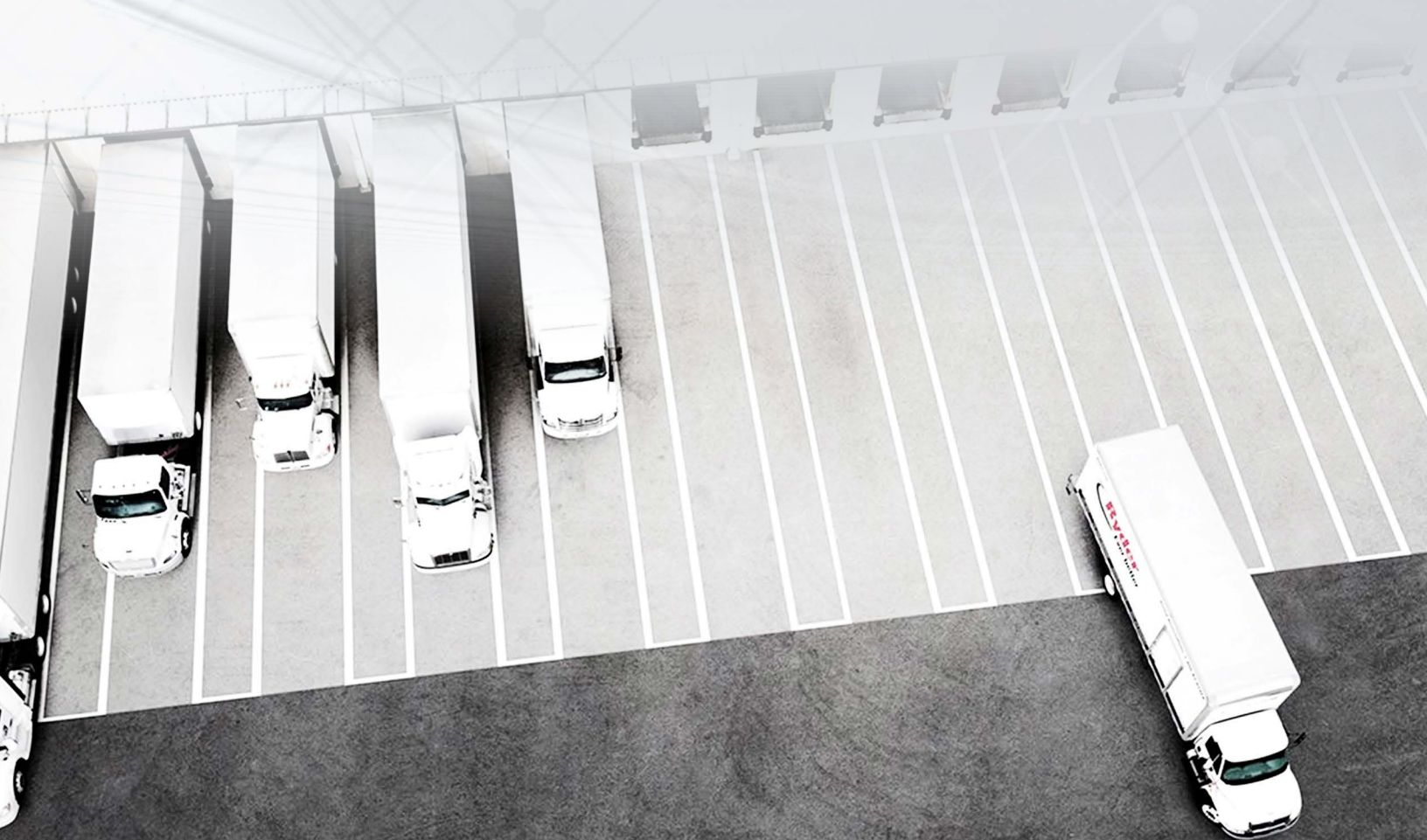
Supply chains are already vulnerable to disruptions in the best of times due to risks related to suppliers, production, transportation, and customer demand. As noted in the Ernst & Young survey data in the introduction, a disruptive event such as the COVID-19 pandemic can spell disaster for supply chains.

“72% of supply chain executives said the pandemic had a negative effect on their supply chain.” - 2023 Ernst & Young Survey

The pandemic bellowed a chaotic clarion call. It exposed the fragility of supply chains. Consumer demand patterns shifted, brand loyalty was disrupted, and per McKinsey, consumer demand will continue to change.

Companies must look at supply chains differently, according to Forbes. To optimize, supply chain vulnerabilities must be assessed and strengthened in the face of global economic interdependence, and relationships with supply chain partners must evolve.

Read on for compelling reasons to optimize your supply chain, what an optimized supply chain looks like, and recommend strategies. We'll also discuss why shifting your supply chain headaches to a third-party logistics (3PL) provider might present your ideal supply optimization strategy without a huge technological investment.



How does an Optimized Supply Chain Work?

An optimized supply chain is futureproofed. It's resilient, flexible, agile, timely, consistent, and minimizes cost. It requires real-time data, predictive analytics, efficient inventory management, seamless collaboration, communication, coordination, and, most importantly, end-to-end transparency.

Real-Time Data-Driven Decision Making

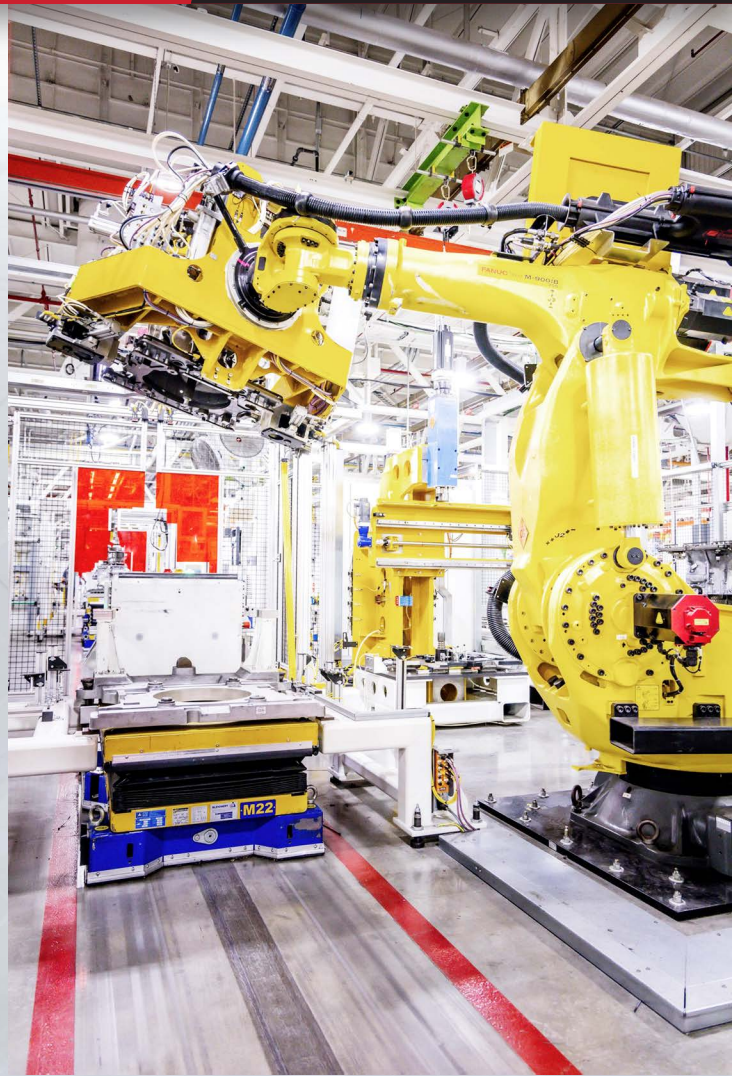
Supply chain disruptions can happen anywhere within a workflow. Real-time analytics increase efficiency and profitability by helping avoid stockouts, protect drivers, and solve supply and demand issues. Real-time data enables monitoring products' route and location in real time. This gives you an understanding of what is happening, under what conditions, and any relevant issues.

Real-time supply chain visibility allows better decision making because you can detect and fix issues before they wreak havoc on your entire supply chain.

Flexibility and Adaptability

With an optimized and transparent supply chain, you can respond quickly to changes in demand, supply, and market conditions by adjusting production, distribution, and sourcing strategies to supply chain conditions without guesswork.

Traditionally, supply chains aimed to achieve stability and minimize costs. Today's consumer-centric world requires a different supply chain strategy that is dynamic: able to predict, prepare, and respond to continually changing demand and product and channel mix. Agility creates resilient supply chains.



Inventory Management Efficiency

Supply chain optimization doesn't just involve your products in transit. Optimization focuses on overall efficiency, which includes inventory management. The goal is reducing excess inventory while maintaining adequate stock to meet customer demand.

Higher inventory levels became the norm since pandemic shortages. But inventory optimization is an essential part of your supply chain strategy. Optimizing inventory means you can meet demand while at reducing the financial hit of backorders, overstocks, and outages.

End-To-End Visibility and Transparency

Supply chain optimization is only possible with a complete supply chain view that allows stakeholders to track and trace products, anticipate bottlenecks, and proactively manage risk. This transparency allows managing exceptions and developing essential real-time analytics.

This requires technology that allows the whole supply chain - manufacturers, shippers, and you - to efficiently automate workflows, increase productivity, and reduce costs.

Seamless Coordination and Collaboration

Optimized operations run in sync. Efficient supply chains advance effective communication and collaboration among all stakeholders. The benefits can't be overemphasized. When you collaborate with a supply chain partner, you can increase transparency, promote higher ethical standards, and adjust lagging parts of your supply chain.

In a 2020 report, McKinsey showed that companies that collaborated with vendors had higher growth, lower operating costs and greater profitability than their competitors. And the Oxford College of Procurement and Supply posits that communication among internal and external stakeholders offers ideas for improvements based on experience rather than theory, which contributes to better processes.





Strategies for Optimization

Optimization comprises many parts: demand forecast and planning, network optimization, process automation and digitization, supplier relationship management, and the application of LEAN principles and continuous improvement.

Demand Forecasting and Planning

Data analytics and artificial intelligence (AI) enabled by technology can be leveraged to improve demand forecasting accuracy, which results in efficient inventory management and reduced stockouts, and increased efficiency and resiliency.

This requires technology; per McKinsey, about 75% of supply chain functions are still documented on spreadsheets. Some companies plan to adopt advanced technology in the next five years, which might be too late.

With technology and transparency, you can obtain initial forecasts based on advanced analytics that can be reviewed and adapted for a single forecast for all downstream actions. To improve demand planning, Gartner recommends these three actions:

- **Business objectives should drive planning outcomes:** Monetize bottom-up demand forecasts using your revenue budget as a top-down target for demand.
- **Focus on the gap:** Create an action plan acknowledging the gap, and that a forecast error caused it, and the risk. Actions shape demand; use robust data analytics to predict outcomes.
- **Scenario analysis:** Use advanced technology to build scenarios based on assumptions agreed upon by all stakeholders, then prioritize them based on likelihood and potential impact. Develop scenarios around supply chain constraints, and build action plans for each scenario.

Your action plans require detail for fast execution and include metrics to assess changes in the market environment. Stakeholders should agree on the thresholds that would trigger changing plans.

You can use AI to improve predictions, improve short-term forecasts, and analyze multiple market variables simultaneously. This provides better intel than mere historical analysis.

Network Optimization

Supply networks are complex and globalized. However, McKinsey reports that after the pandemic, while respondents to a survey wanted to diversify their supplier base and increase their in-region sourcing, they merely increased inventory.

Network optimization creates the optimal combination of facilities and warehouses and the flows between them. To improve your network, analyze the current supply chain network design, identify opportunities for consolidation, improved transportation routes, and strategic supplier relationships. The only way to achieve this is with historical and real-time data.

Process Automation and Digitization

When you implement technology to automate manual tasks, everyone wins, including your supply chain. Automation reduces errors, enhances communications, and streamlines operations. Warehouse automation, with robotics, sensors, and automatic identification tools, plus wearables, drones, and mobile technology, is a real game changer.

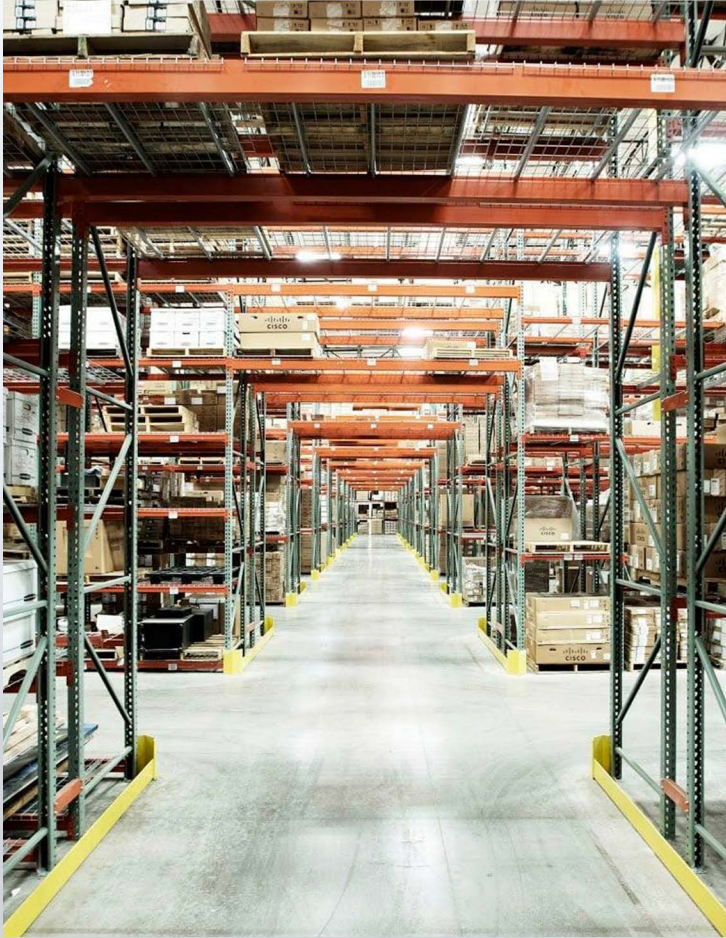
Inventory management will improve, processing time will decrease, and productivity and employee efficiency will increase. You'll also realize lower operating costs.

Supplier Relationship Management

Technology provides tools to develop strategic partnerships, foster collaboration, and implement joint planning and risk-management initiatives that boost both businesses. A McKinsey survey showed that organizations that collaborate regularly with suppliers have higher growth and higher profitability, with lower operating costs.

How does this optimize your supply chain? A good supplier relationship involves sharing ideas, which creates a shared perspective, building trust and strategic alignment. It also builds cross-functional engagement necessary for full collaboration.





Optimization is only Possible with Visibility and Transparency

Without visibility and transparency, you're operating blind. With it, your supply chain can be a competitive advantage that includes:

- **Real-time tracking and monitoring**
With visibility, you can track inventory, shipments, and transportation, and gain data that creates better demand planning and network optimization, while analyzing various scenarios to fine-tune your supply chain.
- **Identify and address bottlenecks**
Without a transparent supply chain, bottlenecks are invisible until you get a phone call or email. You can't be proactive, and can only react when it's too late. With transparency, you can identify bottlenecks, delays, and inefficiencies, often before they happen, and address them before they become problems.
- **Manage and mitigate risk**
A proactive approach to risk management and mitigation allows companies to anticipate potential disruptions and implement contingency plans that minimize their impact.
- **Build trust and relationships**
When facts are accessible, trust is built. Transparency makes that possible, fostering collaboration and coordination, and shared problem-solving.

Apply LEAN Principles and Continuous Improvement

The application of LEAN principles like waste reduction and continuous improvement models such as Kaizen eliminates inefficiencies and increases productivity. LEAN supply chain management concentrates on waste elimination to reduce cost and develop efficient, streamlined processes. In practice, LEAN methodology eliminates any part of a process that doesn't add value. This can include excessive travel and wait times, unnecessary double handling of products, and outdated inventory systems.

Reducing waste creates shorter lead times and more efficient distribution networks. LEAN management can be used to identify where supply chains need improvement.

In addition to end-to-end supply chain visibility, you need context-based communication and sharing to act on the entire shipment lifecycle, automated workflows that reduce redundant communication loops and tasks, intelligent operational analytics, and other tools that increase productivity and save money.

The Easiest Path to Optimization: A 3PL Partnership

Supply chain optimization is likely not a core competency for your company. Technological savvy is another hurdle as supply chains become more digitized and embrace advanced technology. Wrestling with today's current and potential supply chain disruptions demands a high level of competency. That's why 90% of Fortune 500 companies use 3PLs to manage their supply chains, according to Supply Chain Dive.

Chain Store Age reported that during the pandemic, companies relied on their 3PL partnerships for stable operations and meeting demand. Demand remains strong because 3PLs handle supply chain as a core competency.

3PLs readily adapt and use the technology needed to provide real-time data and predictive analytics. Because they do it daily, their finger is on the pulse of the supply chain landscape.

Ryder works with companies across more than 20 industries and has developed industry-leading best practices that optimize supply chains for ultimate success. Our people, processes, and technology ensure nimble operations that can pivot when necessary to meet any challenge.

No one knows what tomorrow will bring. Another pandemic? A major disaster? Geopolitical tensions? The success of your business relies on the ability to cope with whatever happens. Otherwise, your bottom line suffers.

The best strategy for any project or challenge is the path of least resistance. That means developing strong partnerships to withstand supply chain disruptions. It's the smart way to achieve optimization.

Among its many other impacts, the pandemic served as a wake-up call for companies to optimize supply chains with visibility and transparency. The call must be answered. An optimized supply chain offers flexibility, collaboration, and data-driven decision making. By implementing strategies such as demand forecasting, network optimization, automation, and continuous improvement, businesses can create efficiencies and reduce costs.

Disruptions, large or small, happen daily. Keep your company strong and your supply chain flowing with Ryder.

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