

Unite Every Supply Chain System: Aggregate Data Insights for Digital Resilience



Everyone has felt the pain of supply chain disruption. Most of the time, it's an annoyance, like finding your favorite brand of cereal or toothpaste isn't available.

But sometimes the stakes are much higher. If parts don't arrive at a medical device plant, it can prevent patients from getting the care they need in a timely way. A delayed shipment of aircraft parts can result in grounded planes — and thousands of stranded passengers.

For manufacturers, supply chain disconnects can unleash a host of unwanted consequences, starting with a lack of insight into supplier quality that can impact finished products.

The path to supply chain resilience



CHALLENGE

See across internal systems and the supply chain to keep production lines running

Manufacturing production is intricate and includes dozens of dependencies. With a long list of things that can go wrong, downtime can cost hundreds of thousands of dollars an hour.

Our research from [The Hidden Costs of Downtime in Manufacturing](#) found that downtime costs for manufacturers averages £255 million annually — the highest of any industry. While downtime costs can vary by subvertical, for example, consumer packaged goods and aerospace manufacturers may see different numbers, the problem is substantial across the industry.

Even if production lines are running optimally, manufacturers depend on suppliers, logistics, and partners to keep the flow of products into customers' hands. To add to the complexity, supply chain environments are increasingly adding new technical capabilities, such as IoT devices, data aggregation and storage systems, and combinations of on-premises and legacy systems, that have disjointed compatibility.

Manufacturers want to see potential stressors before they impact production, both inside their own systems and across the supply chain. So, they benefit from visibility into both upstream (such as preproduction, sourcing, supply, transportation, management of raw materials, etc.) and downstream components (including order fulfillment, distribution/logistics, warehousing, and customer service).

When this occurs, manufacturers may not meet service level agreement (SLA) targets or regulatory compliance mandates, resulting in fines and reputational damage. Full traceability can prevent issues like these, but it's often elusive unless manufacturers have comprehensive visibility into their supply chains.

Recent years shined a spotlight on just how vital manufacturing supply chains are. Macro uncertainties like inflation, trade competition, and the geopolitical climate have put pressure on manufacturers to rethink their supply chain footprint. The industry has responded — but there's more work to do.

SOLUTION

Splunk for manufacturing

Splunk delivers comprehensive capabilities for manufacturers to get a real-time view into their internal operations and supply chains. The same core capabilities that make Splunk the ideal choice for extracting insights from data also apply to the business transaction data of a supply chain.

And just as the concept of observability has moved from IT to manufacturing operations, it has extended again to supply chains. With Splunk, manufacturers gain the data aggregation and analysis to get an operational view and actionable insights across manufacturing operations (such as order processing and strategic planning) and associated functional departments (like procurement, HR, and finance).

Splunk gives manufacturers the ability to analyze data for end-to-end visibility and analytics across the core elements of supply chain management: planning, sourcing, manufacturing, transportation, and delivery. With Splunk, manufacturers can take action to maximize operational effectiveness.

Manufacturers can also rely on Splunk to advance sustainability and [net zero goals](#) by tracking carbon emissions, waste generation, and supplier ethics. With supply chains typically comprising [70% of manufacturers' greenhouse gas emissions](#), visibility into Scope 3 CO₂ emissions is vital, both for reporting and accelerating the path to net zero.

Improve orchestration across all tools from the enterprise to the factory floor

Manufacturing production only works if every supporting system operates at peak performance — and if manufacturers have a window into the supply chain. Siloed systems and processes block success, spawning cumbersome manual workarounds that make it hard to find and fix potential disruptors.

Bringing data from all the systems that touch the supply chain process together into a common platform gives teams a real-time view. Teams can monitor assets and systems to discover potential supply chain slowdowns, technological faults, or cybersecurity threats and address them proactively to prevent outages.

Gain visibility across every system to optimize supply chain operations and KPIs

Supply chain efficiency depends on a web of systems working together, but it's hard to corral all the elements into a cohesive whole. Any disconnects in data limit access to insights that teams can use to rectify today's supply chain issues and anticipate tomorrow's disruptions.

Manufacturers can empower teams to access fragmented data across disparate sources, helping them discover insights and act fast to minimize issues and boost KPIs, like fill rate, on-time delivery, customer order cycle time, and inventory turnover. This **data-first approach** to answering questions keeps supply chains resilient, profitable, and moving forward.



We're struggling to identify supply chain issues that could cause production downtime.

Splunk pulls in data from wherever it's generated — factory floor assets, third-party tools, enterprise systems, custom apps and services, on-premises data centers, private/public clouds, or other systems — and aggregates, collates, and contextualizes it for better decision making. Manufacturers use Splunk to extract meaningful insights from this data to streamline supply chain operations and prevent production stoppages.



I need visibility across the supply chain to improve operational efficiency.

Splunk makes it possible to monitor business performance across every system, internally and across the supply chain. With Splunk, manufacturers can spot disruptions anywhere — from a supply chain slow down to an industrial control system (ICS) failure to a third-party ERP system going down. Teams can discover and remedy disconnects like these fast, elevating KPIs and preventing impacts on end customers.

Improve supply chain performance at scale

Today's supply chains generate mountains of data that often reside in siloed systems. Costly attempts to tame this chaos by weaving together tools usually do little to bridge supply chain functions and only add complexity, cost, and time. When disconnects persist, teams often waste time reacting to issues and tracking down problems instead of proactively preventing incidents before they happen.

By uniting data from internal and external supply chain systems and applying AI and machine learning (ML), manufacturers can identify supply chain trends and patterns. They can optimize the supply chain for materials and finished products to maximize production performance and more quickly deliver to customers.



I need to gain more insight into my supply chain, while reducing time spent analyzing data.

Splunk unites data across supply chain systems and features AI/ML capabilities that help manufacturers gain forecasting advantages. When manufacturers take predictive analysis into the supply chain by integrating with suppliers and vendors, they can speed up decision-making and get products into customers' hands even faster.

Discover and address supply chain risks

As supply chains become more interconnected, risks climb. Hundreds, sometimes thousands, of suppliers can contribute to a single product. If supply base transparency is lacking, manufacturers may find it hard to know which suppliers the raw materials that go into the final, assembled product come from. What's more, manufacturers encounter a wide array of risks such as supplier delays, logistics issues, demand fluctuations, unstable suppliers, and external disruptions (e.g., geopolitical events or pandemics), along with constantly evolving cyber threats.

Intelligent analytic tools can model different scenarios by analyzing historical data and predicting potential supply chain risks. By linking supply chain systems and integrating data, manufacturers can identify risks, manage them more effectively, and respond faster when the unexpected happens.



We need to manage supply chain risks to prevent production delays.

By integrating data from multiple sources, including external partners, Splunk can help manufacturers mitigate risks like supply chain disruptions, raw material shortages, or unexpected demand spikes. With Splunk, manufacturers gain immediate, actionable insights to improve decision-making and prevent supply chain breakdowns.

Real results from real customers

CHALLENGE

Medtronic, a leading global healthcare technology company, needed better insight into its supply chain to accelerate distribution of its products, which treat 70 health conditions.

RESULTS

Medtronic uses Splunk in distribution centers to forecast and balance labor needs. This helps them streamline product delivery and get the right products to the right medical teams at the right time.

OUTCOMES



Delivers an interactive dashboard that tracks real-time distribution status and performance metrics



Empowers a nimble, collaborative distribution approach that allows factory floor teams to adjust activities on-the-fly to keep shipments moving out the door



Provides tools that deliver business value in additional areas, including security operations



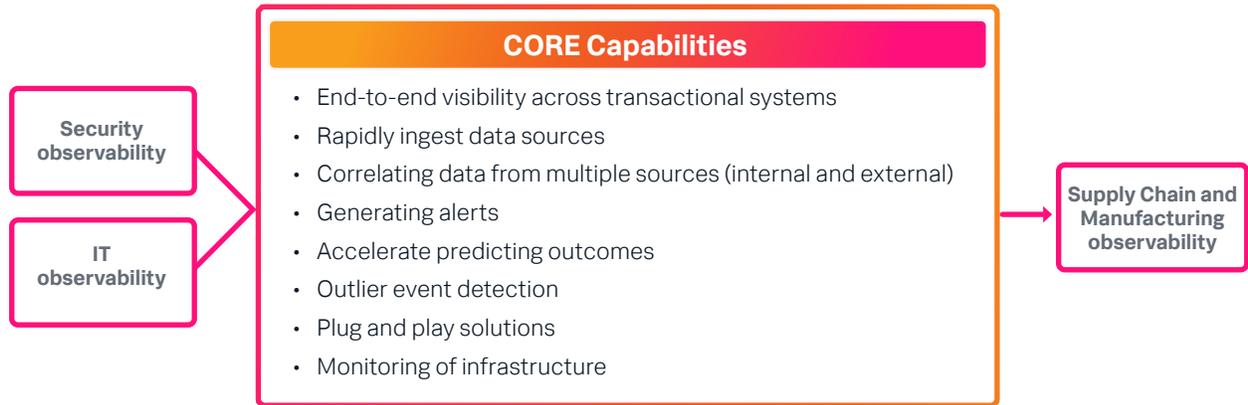
Splunk has been an amazing partner for us at Medtronic for a very long time in many ways. On the security side, we use them as part of our security operations to parse through data to get to the right threats at the right time, but the business as a whole also uses Splunk. We have distribution centers that use Splunk to understand our global supply chain, rebalance labor, and deliver our life-saving products.

Stephanie Franklin-Thomas,
CISO, Medtronic

Medtronic

Technology for supply chain resilience

Modern enterprises need technology that supports supply chain resilience — with the ability to optimize outcomes, orders, inventory, and shipments and remediate supply chain disruptions quickly. Splunk is a true end-to-end data and analytics platform that delivers custom analytics outcomes at unprecedented speed, scale, and cost.



Expertise from partners, powered by Splunk

Splunk’s extensive data platform attracts leading partner organizations that help extend our core capabilities to support an expansive set of use cases. Partners extend Splunk capabilities to enable visualization and monitoring of current and historical SAP data to deliver more efficient supply chain processes.

Five benefits of observing and securing SAP data



Security

- Login access monitoring
- Insider threat detection
- User behavior analytics
- Correlation to other events



Compliance

- Track change requests
- User activity reporting
- Firefighter correlation



Performance

- Root cause analysis
- End user experience
- Key statistics
- Correlation to infrastructure



Business

- End-to-end process monitoring and validation
- Cross-system data correlation
- Supply chain and customer analytics



Migration

- Track key areas before, during, and after migration
- Accelerate projections through fast mean time to repair (MTTR)



Addressing the challenges of a modern supply chain

Through a strategic partnership, Accenture leverages Splunk technology to create a **supply chain visibility solution** that improves the data-to-insights cycle at its foundation.

CHALLENGE

- Balancing operational goals and costs
- Streamlining data management across a diverse supply chain ecosystem
- Enhancing the analytics infrastructure to deliver insights for fast decision-making

RESULTS

- **Supply chain full control tower solution** provides end-to-end visibility of business transactions (such as orders, inventory, and shipments) rather than technology transactions to balance desired outcomes and cost.
- **Our data fabric** approach bridges data silos by weaving fragmented data from disparate sources together to speed data collection and shorten the value realization lifecycle.

OUTCOMES



~50% cost reduction of supply chain architecture



40% acceleration in time to market



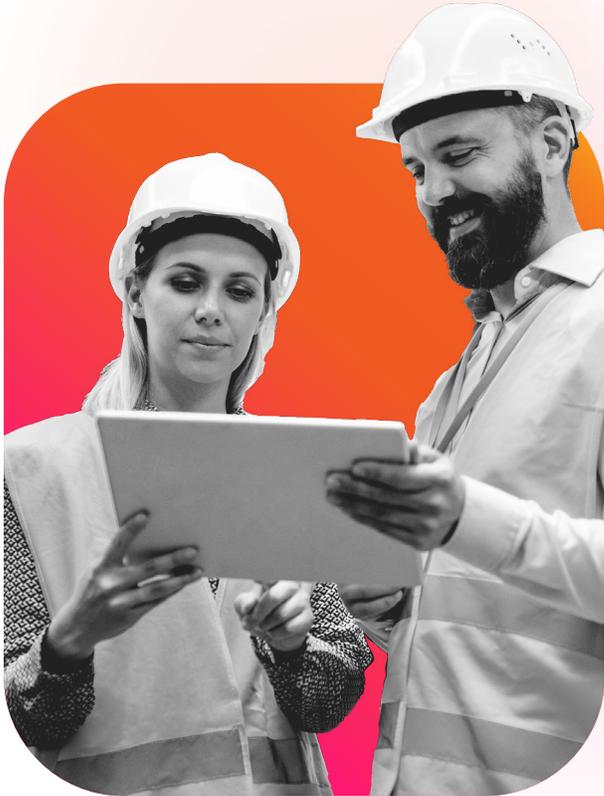
Real-time information and forecasting



Ability to scale and change easily



Improved data quality





Building supply chain resilience with edge-to-enterprise visibility

Splunk bridges traditional silos so manufacturers can get ahead of supply chain stressors and propel production and logistics operations forward. With Splunk, manufacturers gain comprehensive visibility across digital systems to respond faster to security threats, keep operations up and running, integrate IT and OT systems, and unlock innovation. Teams can act swiftly to detect issues and prevent supply chain disruptions proactively, allowing manufacturers to improve resilience, scalability, and customer satisfaction.

Visit splunk.com/manufacturing for more information or contact Splunk to arrange an in-depth review of your goals and challenges.

