

From Execution to Orchestration: Redefining Supply Chain Resilience through Logistics as a Service



1.0 | Executive Summary

Global supply chains were engineered for efficiency, not resilience. Over decades of globalization, networks optimized for scale, sourcing farther, producing faster, and shipping cheaper. Yet the same complexity that once created competitive advantage now exposes fragility.

In 2024, U.S. logistics costs climbed to **US \$2.3 trillion**, while global supply chain disruptions rose **38% year over year**, costing companies trillions in lost productivity. The challenge runs deeper than volatility, most supply chains remain fragmented by design. OEMs manage product development, manufacturers oversee production, and 3PLs move freight, each optimizing within their own boundaries. When conditions shift, these silos amplify risk, turning minor delays into cascading disruptions.

“Supply chain resilience is built across an entire network, not within a single organization,” said Priya Anand, Director of Logistics as a Service at Jabil. “By extending our risk assessment tools to suppliers and enabling them to share data through connected platforms, we can identify potential disruptions earlier and take action faster across the end-to-end supply chain.”

Priya Anand, Director of Logistics as a Service at Jabil

Logistics as a Service (LaaS) represents the next phase of evolution, from reactive logistics execution to proactive orchestration. Jabil’s LaaS model connects procurement, manufacturing and logistics through a TMS-led digital operations ecosystem, using vCommand and Power BI to turn network data into decision-ready insight. The result is not just faster delivery, but smarter, more resilient networks that anticipate change before it occurs.

KEY INSIGHTS

- **Rising Disruption and Cost Exposure:** Global logistics costs reached **US \$2.3 trillion in 2024**, yet **80% of organizations** faced at least one major disruption, costing companies trillions in lost productivity and exposing the fragility of global networks.
- **Operational Inefficiency from Siloed Execution:** Disconnected planning between procurement, manufacturing, and logistics continues to drive cost erosion and delayed decision-making across global networks.
- **Data-Driven Transformation Opportunity:** Enterprises adopting integrated orchestration have achieved up to **38% lower operating costs** through unified visibility and synchronized decision-making.
- **Predictive Advantage through Digital Twins:** Organizations leveraging supply chain network modeling and digital-twin simulation report **20–30% improvements in forecast accuracy**, strengthening resilience and agility.
- **Technology Gap Limiting Progress:** Only **23% of supply-chain leaders** have a defined AI strategy, highlighting the urgent need for data-driven orchestration and advanced analytics.
- **Unified Orchestration for Competitive Advantage:** Jabil’s Logistics as a Service (LaaS) model uses a global TMS backbone, vCommand and BI to integrate procurement, manufacturing and logistics into an intelligent ecosystem that reduces cost, increases visibility and builds measurable resilience.

1.1 Why Execution Fails Now

Global supply chains have never been more advanced, or more vulnerable. Years of expansion and outsourcing have created vast networks that can move anything, anywhere, but struggle to adapt when conditions change. The pursuit of scale and cost efficiency has left most systems optimized for yesterday's priorities, not tomorrow's volatility.

The result is siloed execution: OEMs manage design, manufacturers oversee production, and 3PLs move the freight, each optimizing within its own boundaries. When disruptions arise, these silos restrict coordination, turning small delays into cascading failures across the value chain.



PAIN POINTS AT A GLANCE:

- **Fragmented visibility:** decisions delayed by missing or inconsistent data.
- **Reactive management:** short-term fixes eroding long-term savings.
- **Technology gaps:** disconnected systems that can't predict or prevent disruption.
- **Complexity without control:** Expanding networks outpace governance.
- **Supplier dependency:** Single-source reliance increases disruption risk.
- **Resource strain:** Labor gaps and manual workflows limit scalability.



2.0 | What Logistics as a Service (LaaSS) Really Means

For years, logistics was defined by execution, moving goods faster, cheaper, and farther. But global complexity has redefined success. Today, disruptions ripple instantly across procurement, production, and delivery, exposing the limits of isolated operations.

Logistics as a Service (LaaS) replaces transactional logistics with a connected, technology-driven model that manages the entire flow of materials, data, and decisions. In Jabil's case, LaaS is delivered through a global TMS network, augmented by vCommand and BI, so orchestration decisions are grounded in real execution data, not stand-alone tools.

By integrating procurement, manufacturing, and fulfillment under one intelligent framework, LaaS turns logistics into a strategic engine for resilience, agility, and growth.



2.1 3PL vs. 4PL vs. LaaS:

MODEL	CORE FOCUS	DATA VISIBILITY	STRATEGIC ROLE	OUTCOME
3PL	Executes discrete logistics tasks (transportation, warehousing)	Limited to shipment status	Tactical vendor	Operational efficiency
4PL	Integrates multiple 3PLs on behalf of the customer	End-to-end shipment visibility	Strategic coordinator	Process optimization
LaaS	Orchestrates the full supply-chain ecosystem, from sourcing to final delivery, via a TMS-led digital operations layer and network optimization tools (SCNO)	Unified, near real-time visibility across procurement, manufacturing and logistics through TMS, vCommand and BI	Trusted partner and digital integrator	Scenario-based resilience and continuous improvement

For additional information, visit pscs.jabil.com

3.0 | The Jabil Orchestration Model: From Execution to Insight

3.1 Why Integrated Orchestration Is Needed

Most companies already have the right tools, but few have the right connections between them. Jabil's LaaS solutions transforms disconnected systems into a synchronized network powered by shared data, advanced analytics, and real-time control.

At the center is a unified orchestration layer that links procurement, manufacturing, and logistics into a single operating model. Through this digital backbone, Jabil enables end-to-end visibility, predictive insight, and rapid decision-making, turning supply chains from reactive systems into intelligent ecosystems.

3.2 The LaaS Solution: Unified Architecture

Jabil's Logistics as a Service (LaaS) provides this orchestration layer, an intelligent backbone that unites procurement, manufacturing, and logistics under one ecosystem. Instead of sequential workflows managed by separate partners, Jabil's LaaS model synchronizes Jabil's LaaS model synchronizes all operations through a shared data fabric and global TMS-based digital operations, surfaced through vCommand and BI.

This unified architecture enables:

- **End-to-end visibility** across sourcing, production, and delivery networks.
- **Predictive planning** through advanced analytics and supply chain network optimization (SCNO) models.
- **Scenario simulation** using SCNO and digital modeling to test 'what-if' situations before they occur.
- **Collaborative execution** that aligns OEMs, suppliers, and carriers in a single decision framework.

The 4PL market is projected to grow at **7.6% CAGR through 2030**, underscoring a global shift toward integrated orchestration as manufacturers seek partners that can manage multiple suppliers, sites, and logistics channels seamlessly.

3.3 Technology Ecosystem

True orchestration requires intelligence that can predict, adapt, and act in real time. Through a global TMS backbone, vCommand, BI and supply chain network optimization (SCNO), Jabil synchronizes every layer of the supply chain, turning complexity into clarity and insight into action.



Global TMS Operations: Jabil's global TMS network is the execution backbone for LaaS, managing transportation planning, carrier selection, routing and freight settlement across modes and regions.



vCommand & BI: vCommand and BI dashboards provide ecosystem-wide visibility into orders, lanes, providers and performance, giving both Jabil practitioners and customers a single place to monitor activity, share documents and act on exceptions.



Supply Chain Network Optimization (SCNO): SCNO tools enable network modeling and 'what-if' analysis—testing alternate routes, modes or stocking strategies before changes are implemented.



Data-Driven Orchestrated Execution: Data from TMS and partner systems feeds into vCommand and BI for monitoring and analysis, while SCNO informs design decisions. This closed loop ensures that every decision across sourcing, production and logistics is coordinated, data-driven and adaptive.

4 | Orchestrating Impact Across Industries

Across industries, the challenges differ, but the results are remarkably consistent. From utilities and healthcare to data infrastructure and beyond, Jabil's LaaS model turns complex supply chains into connected ecosystems that deliver measurable impact.

4.1 Smart Utilities: Building Resilient Infrastructure

The smart grid market is entering a period of rapid expansion, growing from \$61.05 billion in 2025 to \$246.72 billion by 2032, a **22.1% CAGR**. At the same time, global electricity demand is expected to rise 26% by 2035, driven by data center growth, electrification, and renewable integration. This unprecedented scale requires orchestration that can manage manufacturing, bonded warehousing, and last-mile distribution with precision and transparency.

CUSTOMER IMPACT

For one global smart utilities customer, Jabil implemented an integrated orchestration framework spanning manufacturing, bonded warehousing, and transportation management.

- **US \$1.3 million in annual freight savings** and **two-day faster delivery** through route optimization and carrier consolidation.
- **Accelerated customs clearance** and improved **on-time, in-full (OTIF)** performance through digital bonded workflows.

4.2 Healthcare: Cold-Chain Precision at Scale

The healthcare logistics market is projected to grow from US \$3.93 billion in 2025 to US **\$9.53 billion by 2032**, reflecting rising demand for secure, compliant, and temperature-controlled distribution. As biologics, diagnostics, and advanced therapies expand globally, logistics networks must balance speed with precision to protect product integrity and patient safety.

CUSTOMER IMPACT

For a U.S.-based healthcare manufacturer, Jabil integrated analytics-driven routing and exception monitoring across domestic and international lanes using its TMS and BI tools.

- **30% reduction in trucking costs** while maintaining strict on-time delivery performance.
- **Zero temperature excursions** through continuous monitoring and automated contingency routing.

4.3 Intelligent Data Infrastructure: Securing the Digital Economy

Global data center power demand is projected to surge from 33 GW in 2024 to **176 GW by 2035**, driven largely by artificial intelligence. In the U.S. alone, AI data center demand could grow thirtyfold, from 4 GW to 123 GW, requiring exponentially greater infrastructure capacity, equipment flow, and supply chain precision. As this growth accelerates, orchestration becomes critical to ensure secure, agile, and energy-efficient operations across the digital economy.

CUSTOMER IMPACT

For a global data infrastructure provider, Jabil implemented an orchestration framework tailored for high-value, time-sensitive shipments.

- **99.8% on-time performance** and **zero loss events** across multimodal routes.
- **IoT-enabled traceability** and predictive exception management providing full shipment visibility and risk mitigation in real time.

4.4 Indirect Kitting: Accelerating Site Readiness

Across industries, from telecommunications to large-scale industrial installations, new site deployments often stall due to fragmented procurement, delayed shipments, and inconsistent material readiness. Jabil's indirect-material kitting service streamlines this process by consolidating sourcing, assembly, and fulfillment into a single, coordinated workflow.

CUSTOMER IMPACT

For a global infrastructure client, Jabil implemented a standardized kitting solution that consolidated hundreds of indirect materials into preassembled, ready-to-deploy kits.

- **Faster site stand-up** through synchronized material delivery and staging.
- **Reduced field workload and administrative time** via vendor-managed inventory and standardized bill-of-material kits.



5.0 | Build vs. Buy: Selecting the Right LaaS Partner

For many organizations, the choice between building in-house logistics capabilities or partnering with an experienced orchestrator defines the pace of transformation. While internal solutions can offer control, they rarely match the scalability, visibility, and expertise of an established Logistics as a Service (LaaS) provider.

Selecting the right partner is about more than outsourcing, it's about integrating strategy, technology, and execution under one ecosystem. **The most effective LaaS partners act as extensions of your supply chain, not intermediaries within it.**

The cost of getting it wrong is high:

- **Supply-chain cyberattacks** can cost up to **17x more to remediate** than direct breaches.
- The **average data breach now exceeds \$4.4 million**, underscoring the value of unified visibility and data governance.



5.1 What to Look For in a LaaS Partner

Choosing a Logistics as a Service (LaaS) partner is one of the most consequential supply chain decisions a business can make. Beyond cost or scale, it's about finding a partner capable of unifying data, technology, and execution across the entire value chain.

The table below outlines the key evaluation criteria, and how a mature LaaS provider like Jabil delivers on each:

EVALUATION CRITERIA	WHAT TO LOOK FOR / WHY IT MATTERS	HOW JABIL DELIVERS AS A LAAS PARTNER
END-TO-END INTEGRATION	Seek a provider that connects procurement, manufacturing, and logistics through a single operating model. Integration enables shared visibility, faster decision-making, and synchronized execution.	Jabil unites all supply chain functions under a single digital orchestration layer , aligning data, teams, and suppliers across every tier for seamless continuity.
TECHNOLOGY MATURITY	Look for a provider with a mature digital operations stack—global TMS, integrated visibility platforms, strong BI and supply chain network optimization (SCNO). These capabilities enable proactive risk management, scenario testing and continuous improvement, rather than just after-the-fact reporting.	Jabil's LaaS ecosystem uses a TMS-led digital operations layer, vCommand and BI dashboards, and supply chain network optimization (SCNO) to model risk, improve decisions and optimize performance before changes are rolled out.
STRATEGIC PARTNERSHIP APPROACH	A true LaaS partner functions as an extension of your team , not a transactional vendor, sharing KPIs and driving continuous improvement.	Jabil embeds dedicated orchestration teams within each engagement, ensuring transparency, agility, and measurable outcomes through joint performance governance .
GLOBAL REACH AND EXPERTISE	Global operations demand a network with cross-border logistics, bonded-warehouse capabilities, and regional compliance fluency .	With operations in 30+ countries , Jabil delivers consistent visibility and control through multi-modal transport, bonded facilities, and regional logistics expertise.
SUSTAINABILITY INTEGRATION	Sustainability must be built into logistics, not added after the fact. Partners should enable measurable emissions tracking and load optimization.	Jabil integrates green logistics practices, from optimized routing to carbon tracking, helping customers meet ESG goals while improving efficiency.
DATA QUALITY AND GOVERNANCE	Unified, high-quality data is essential for trust, compliance, and predictive intelligence across the supply chain.	Jabil's data fabric architecture ensures accuracy, traceability, and security across all data sources, forming the foundation for real-time decision-making .

6.0 | Implementation Roadmap & KPIs

Transitioning from traditional logistics management to a fully orchestrated model requires deliberate sequencing. Companies adopting data-driven orchestration have reported **50–80% reductions in delays** and **20–30% improvements in forecast accuracy**, demonstrating the transformative impact of connected, data-driven supply chains.

The following phased approach outlines how organizations can implement orchestration systematically, building visibility first, then automation, and ultimately, self-optimizing resilience across the network.

PHASE 1 (0–90 DAYS): PILOT AND CONNECT

The orchestration journey begins with visibility. During the first 90 days, Jabil establishes secure data connections across procurement, manufacturing, and logistics systems, enabling end-to-end tracking of material and information flow. Digital twin simulations identify potential bottlenecks, helping teams validate scenarios and quantify expected improvements before full deployment.

Objectives:

- Consolidate data feeds into a unified orchestration layer.
- Map dependencies and baseline current KPIs.
- Model “what-if” disruptions using SCNA and network modeling to design risk mitigation strategies.

PHASE 2 (3–6 MONTHS): SCALE AND AUTOMATE

With data integration complete, orchestration moves into active management. Jabil connects suppliers and carriers into the global TMS environment, providing near real-time visibility across regions. BI and vCommand dashboards highlight exceptions and performance trends so teams can act before they impact customers.

Objectives:

- Deploy TMS/vCommand dashboards and alerting workflows.
- Integrate supplier performance data into vCommand and BI for trend analysis and risk flagging.
- Begin continuous scenario planning for network optimization.

PHASE 3 (6–12 MONTHS): OPTIMIZE AND EXPAND

In the final stage, the orchestration model becomes self-sustaining. Jabil refines cost models, expands routing capabilities globally, and aligns operations around continuous improvement metrics. This phase embeds orchestration into business governance, ensuring that visibility and efficiency gains are sustained over time.

Objectives:

- Institutionalize KPI tracking and data-driven governance.
- Identify secondary savings through network reconfiguration.
- Expand orchestration coverage to additional geographies and business units.

6.1 Key Performance Indicators (KPIs)

Measuring the success of orchestration requires more than traditional logistics metrics. The right indicators must capture how well a supply chain anticipates risk, adapts to change, and sustains performance over time. LaaS providers should evaluate performance through a balanced set of cost, service, agility, accuracy, and sustainability metrics that reflect both operational efficiency and strategic resilience.

CATEGORY	METRIC	PURPOSE
COST EFFICIENCY	Freight cost per unit	Measures logistics cost reduction from route optimization and consolidation.
SERVICE PERFORMANCE	On-Time-In-Full (OTIF) rate	Tracks delivery reliability and customer satisfaction.
AGILITY	Lead time reduction	Captures responsiveness and speed-to-market improvements.
EFFICIENCY	Expediting ratio	Indicates reduction in unplanned shipments and last-minute orders.
ACCURACY	Forecast accuracy (MAPE)	Quantifies predictive planning and demand alignment.
QUALITY	Perfect order rate	Evaluates error-free, damage-free, and on-time deliveries.
SAFETY & RELIABILITY	Incident-free shipments	Measures risk reduction and secure transport.
SUSTAINABILITY	Carbon emissions per shipment	Aligns logistics performance with ESG objectives.

7.0 | The Path Forward: Building Tomorrow's Supply Chains

"A resilient supply chain is one that can adapt quickly when conditions change," said Priya Anand, Director of Logistics as a Service at Jabil. "That adaptability may include shifting transportation strategies or sourcing components closer to where products are made and delivered, based on risk, lead time, and continuity of supply."

Priya Anand, Director of Logistics as a Service at Jabil

Supply chains are entering a new era, one defined not by linear movement, but by intelligent adaptation. As digital operations and advanced analytics converge, logistics is evolving from a transactional function into an insight-driven ecosystem that continuously learns, optimizes and scales.

As modern supply chain strategies continue to evolve, orchestration is no longer optional, it's structural. The organizations that orchestrate, not just operate, will define the next decade of supply chain leadership.

Experience Orchestration in Action

Jabil's Logistics as a Service (LaaS) model unites procurement, manufacturing, and logistics through a single, intelligent ecosystem, helping global enterprises increase visibility, reduce costs, and achieve measurable resilience.



For additional information, visit pscs.jabil.com