

Q1 2025 SUPPLIER RELIABILITY INDEX

OVERVIEW

The Supplier Reliability Index measures supplier performance and reliability based on factors like on-time delivery, responsiveness, and price or quantity changes. Using SourceDay's Al-powered purchase order (PO) data (see *Methodology*), it helps manufacturers and distributors understand supplier relationship health trends in the global supply chain and react accordingly.



Key Observations

Despite notable macroeconomic headwinds, North American sectors largely demonstrate moderate reliability improvements from Q1 2023 through Q1 2025.

Overall reliability saw moderate improvement over the two-year period, notably in on-time delivery and responsiveness, though interrupted by minor downturns in late 2024 due to commodity volatility and geopolitical disruptions. This reflects supply chains' continued focus on reliability and resiliency through fostering new, stronger relationships with suppliers. However, this hard-won reliability is at risk of disruption due to dramatic increases in volatility in 2025. Continued vigilance and strategic adjustments in supplier management and technological investment remain crucial to managing persistent volatility risks.

FINDINGS & PATTERNS

OVERALL INDEX PERFORMANCE

- Moderate net increase from 62.46 (Q1 2023) to 63.39 (Q1 2025).
- Temporary downturns aligned with commodity price volatility and geopolitical factors (Q4 2023, Q4 2024).

SECTOR-SPECIFIC INSIGHTS

- Oil & Gas: High volatility tied to fluctuating crude prices and geopolitical tensions; notable dip in OTD due to logistics constraints.
- Aerospace & Defense: Gradual improvement in OTD, offset by significant date changes (Q4 2024), reflecting contract volatility.
- **Medical Devices:** Steady upward trends across sub-scores, minimal price fluctuations, robust demand consistency.
- **High-Tech & Electronics:** Recovery from early semiconductor supply disruptions, improving reliability but still exposed to global supply chain risks.
- Machinery & Fabricated Metals: Mid-2024 improvements tempered by sensitivity to metal commodity price fluctuations.
- Furniture & Fixtures was more susceptible to consumer-driven fluctuations, with responsiveness occasionally lagging amid labor constraints.

CLUSTERING ANALYSIS

- Consistent Growth Cluster: Health & Beauty, Medical Devices, High Tech Electronics. Exhibited stable improvement.
- Mid-term Surge then Plateau Cluster: Packaging & Plastics, Machinery, Miscellaneous Retail. Saw rapid initial improvements that leveled off by late 2024.
- Volatile Cluster: Oil & Gas, Aerospace & Defense, Fabricated Metals.
 Characterized by frequent substantial shifts driven by external market forces.

External & Economic Drivers

INFLATION AND INTEREST RATES

Elevated financing costs in late 2023 drove renegotiation pressures, impacting supplier pricing and delivery schedules.

LABOR MARKET TIGHTNESS

Mid-2024 peak labor shortages notably lowered OTD scores in skilled-labordependent sectors.

GEOPOLITICAL DYNAMICS

Trade restrictions and regulatory uncertainty notably affected Oil & Gas, Aerospace & Defense, and Fabricated Metals sectors.

CONSUMER DEMAND FLUCTUATIONS

Interest rate increases curtailed consumer spending on durable goods, significantly affecting Furniture & Fixtures responsiveness scores.

FORWARD OUTLOOK

SUPPLIER STABILITY AT RISK IN 2025

The Supplier Reliability Index has gains from significant investments in supply chain resilience now baked-in. Supplier reliability will be tested as organizations respond to risks from tariff and regulatory uncertainty and increasing price volatility. If organizations respond by seeking alternative sourcing, supplier collaboration systems and software will be critical to limiting the impact of switching suppliers. If instead they look to their existing supplier base to partner through external pressures, supplier reliability process will be critical, but thoroughly tested.

On-time delivery (OTD) and supplier responsiveness trends are currently strong, but headwinds from trade restrictions and price risk may result in weakness in both OTD and responsiveness. This weakness may be mitigated by a combination of loosening labor markets and increased adoption of advanced supply chain technologies, including Al-driven solutions and real-time logistics visibility tools.

Strategic Considerations for 2025

To maintain or improve supplier reliability, organizations should consider several proactive strategies:

1. Supplier Diversification

Reducing dependency on single suppliers can minimize the impact of disruptions that cause price or date fluctuations. A more diverse supplier base increases resilience across key supply chain nodes.

2. Invest in Supply Chain Technology

Investments in real-time track-and-trace systems and AI forecasting tools can significantly improve a company's ability to respond to shifts in supply or demand. These tools enhance visibility and help procurement and operations teams make faster, data-driven decisions.

3. Monitor Early Warning Indicators

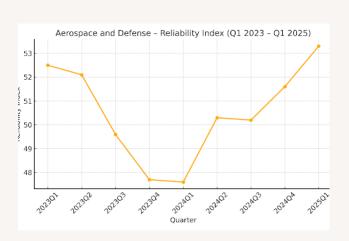
Historical trends show that changes in Supplier Date Changes and Supplier Quantity Changes often precede broader reliability issues. By closely monitoring these metrics, companies can spot emerging risks early and act before disruptions escalate.

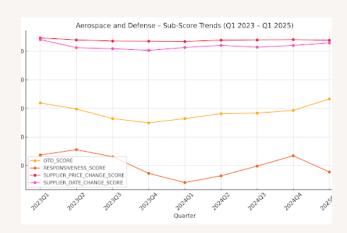
RECOMMENDED STRATEGIC ACTIONS

- Expand/diversify supplier networks to reduce reliance on any single source.
- Use Supplier Quantity and Date Change scores as early warning indicators for reliability issues.
- **Implement real-time monitoring** of key supplier metrics to enable proactive risk management.
- **Prioritize digital transformation**, focusing on Al-driven forecasting and enhanced supply chain visibility.

SECTOR-SPECIFIC RELIABILITY AND COMPONENT RESULTS

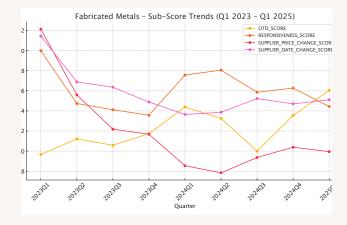
Aerospace & Defense



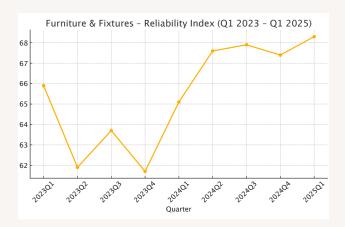


Fabricated Metals





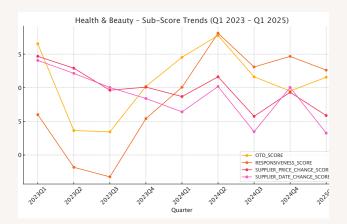
Furniture & Fixtures



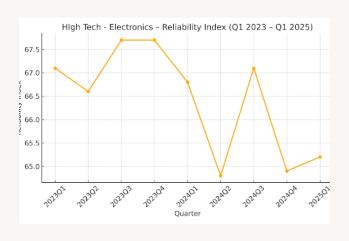


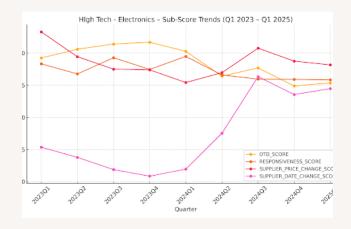
Heath & Beauty





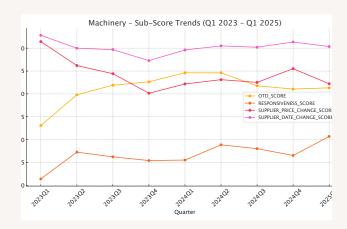
High-Tech & Electronics



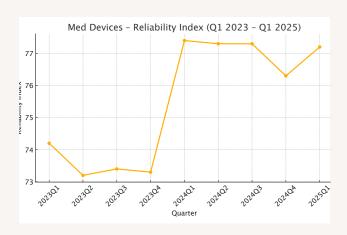


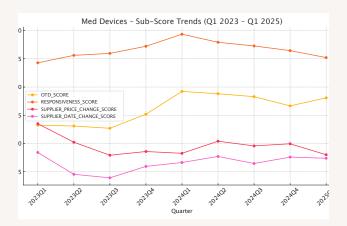
Machinery





Medical Devices



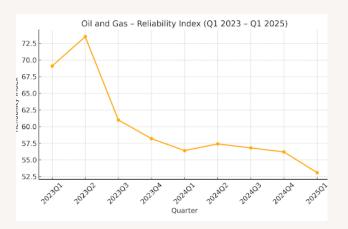


Miscellaneous Retail



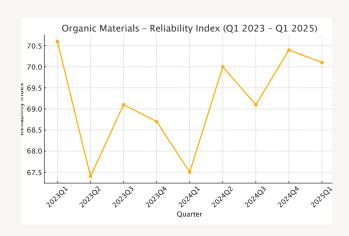


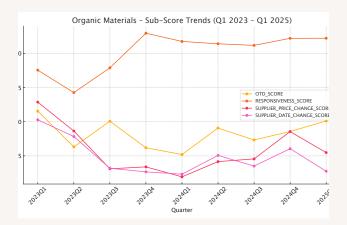
Oil & Gas



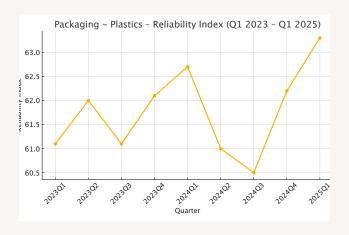


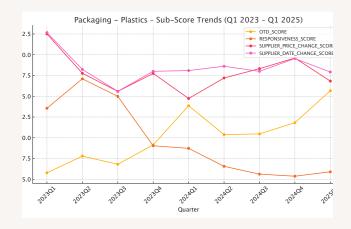
Organic Materials



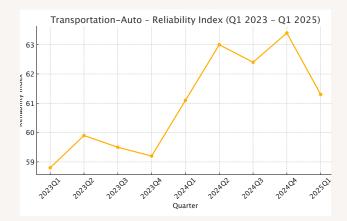


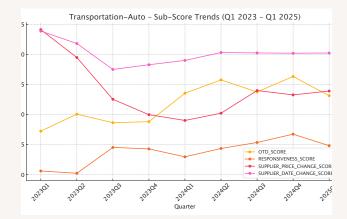
Packaging & Plastics





Transportation & Auto





METHODOLOGY

Over the past two years (Q1 2023 through Q1 2025), North American manufacturers and distributors have experienced notable swings in reliability metrics. The Supplier Reliability Index consolidates seven critical components—OTD, responsiveness, accommodation, supplier date change, supplier price change, supplier quantity change, and supplier change—weighted to reflect an overall "reliability" measure.

The Supplier Reliability Index uses SourceDay's proprietary dataset across the purchase order (PO) Lifecycle to provide manufacturers and distributors with insights into critical supply chain risk factors. The dataset contains insights from SourceDay's network of more than 101,000 suppliers, tracking 100 million annual PO updates, 5 million mastered items, 75 million supplier messages, and \$70 billion in direct materials spending. The data in this report reflects activity between January 2023 and March 2025.

This analysis leverages both quantitative and qualitative methods:

- Quarter-over-quarter (QoQ) changes and year-over-year (YoY) trends
- Head-to-head sector comparisons and benchmarking against the overall index
- Clustering of sectors by reliability performance patterns
- Macro, socio-economic, and geopolitical context to highlight likely drivers of supply chain reliability shifts



ABOUT SOURCEDAY

SourceDay is a cloud-based direct procurement risk management platform used by manufacturers to streamline buyer-supplier engagement and collaboration. By automating purchase order workflows and syncing with your ERP, SourceDay helps you eliminate on-time delivery risk, increase supplier reliability, reduce labor and inventory costs, and operate with 100% accurate PO data; and with AI and machine learning, it predicts and addresses potential issues before they happen.

With over 101,000 suppliers using our system worldwide, SourceDay strengthens supply chains with visibility, transparency, and improved relationships.

